The Stages of Building Public-Private Partnerships in
Public Health:
Factors Influencing the Engagement Process in the Context of
Healthy Eating in Restaurants in Ontario

by

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A thesis submitted in conformity with the requirements for the degree of

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Abstract

Public-private partnerships (PPPs) in public health are powerful tools to promote collaboration among organizations that cannot achieve their specific goals alone. Although there are frameworks that explain important aspects of multisectoral partnerships, they lack detailed descriptions of the stages and related factors to enable organizations progress along the path of PPP development, particularly in relation to obesity prevention or diet-related chronic diseases.

This dissertation focuses on advancing the knowledge and understanding of factors that influence the process of building PPPs in public health, using healthy eating in restaurants in Ontario as the context for the study. A sequential explanatory mixed-methods research design was used to survey high-level representatives of organizations from the public and private sectors, non-governmental organizations and academia. Follow-up interviews were conducted to complement and expand the findings of previous survey, as well as to discover new perspectives from research participants.

The integration of the findings, complemented by relevant literature, yielded the first theory-driven, empirically-based framework, which highlights 8 stages of building PPPs in public health: *Awareness, Recognition, Contemplation, Dialogue, Negotiation, Deliberation, Engagement Decision, and Preparation*. The Framework is a transparent tool that details the expected stages involved in PPP development, and uncovers associated factors that could enable or hinder collaboration, while enabling organizations to discuss, negotiate, and eventually deliberate and prepare openly for the successful creation of PPPs in public health, and possibly beyond.

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Chapter 1

Introduction

1.0 Background

In the last two decades, public-private partnerships (PPPs) in public health have gained great attention in the global health literature due to an increase in the number of PPP initiatives designed to address infectious and parasitic diseases affecting the very poor in developing countries (Barr, 2007; Buse & Walt, 2000b; Frost, Reich, & Fujisaki, 2002; Kickbusch & Lister, 2006; Meredith & Ziemba, 2007; Reich, 2000; Widdus, 2005).

Limited financial resources, rapid disease transmission across national boundaries, reduced governmental responsibilities to respond to complex social and behavioural challenges were deemed to be conducive to the establishment of PPPs in public health (Reich, 2000; Widdus, 2001, 2005). It is argued that PPPs might offer viable options to overcome barriers that otherwise neither the public nor the private sector could address on their own (Reich, Hershey, Hardy, Childress, & Bernheim, 2003; Widdus, 2005).

Until recently, public health was primarily a government responsibility. Nowadays, government agents seem to recognize that it is necessary to involve multiple stakeholders in the pursuit of a healthy and sustainable society. The public health agenda for the 21st century has shown an increased level of engagement by non-governmental partners such as community agencies, grassroots leaders, businesses, media, and academic organizations (Rowitz, 2006). Simultaneously, major private for-profit corporations have realized *the importance of public health goals for their immediate and long-term objectives* and have accepted *a broader view of social responsibility as part of the corporate mandate* (Reich, 2000)p.617.

Potential benefits of PPPs in public health have been recognized (Lucas, 2002; Newell, Pande, Baral, Bam, & Malla, 2004; Olukayode Oyediran et al., 2002; Widdus, 2005). However, inherent in these collaborations are challenging issues related to the complexity associated with bringing together partners with differing agendas and accountability systems, as well as concerns about conflicting interests (Lucas, 2002).

Scholars have noted that creating effective PPPs is *hard work* and *more complicated than initially anticipated* (Reich, 2002)p. 9. Although limited, lessons learned from existing PPP initiatives have underscored the need to assuring value creation for society as well as for all core partners by re-configuring the partnership as long-term investments rather than short-term grants (Barrett, Austin,

& McCarthy, 2002). The literature also highlights the importance of deciding on shared goals, building a relationship of trust and creating a new entity to operate the partnership (Frost et al., 2002). In addition, problems such as high level of distrust between the public and the private sectors and competition among international agencies have shown to lead to partnership demise (Muraskin, 2002).

Scholars argue that up to half of partnerships that are formed do not survive their first year; and that of those that do, many struggle in the development and implementation phases (Lasker, Weiss, & Miller, 2001). More understanding about existing models of PPPs, their characteristics, and critical elements that explain the process of PPP engagement are thus required.

This dissertation focuses on advancing the knowledge and understanding of factors that influence the process of building PPPs in public health using healthy eating in restaurants in Ontario as the context for the study. For this purpose, healthy eating means increasing the availability and consumption of healthy food and beverages in restaurants.

1.1 Dietary Risk Factor for Obesity and Chronic Diseases

Increased energy intake that exceeds energy expenditure appears to be the main driver to explain weight gain (Shea, Diamandis, Sharma, Despres, & Greenway, 2012; Swinburn, Sacks, & Ravussin, 2009), making diet a major risk factor for obesity and other diet-related chronic diseases (Asfaw, 2011; Cecchini et al., 2010; Nestle & Jacobson, 2000; Nishida, Uauy, Kumanyika, & Shetty, 2004; Padwal & Sharma, 2010; Popkin, 2006; Swinburn et al., 2011; Swinburn, Caterson, Seidell, & James, 2004).

Despite the complex, multifaceted nature of obesity, which goes beyond the simple imbalance of food intake and energy expenditure, this dissertation concentrates exclusively on the dynamics of the food industry, more precisely, restaurant and fast-food chains as important settings to influence healthy eating behaviours. In this dissertation, the terms *restaurants*, *fast-food chains*, *fast-food outlets* and *the restaurant sector* are used interchangeably.

Canada has experienced an increased proportion of obesity and overweight since 1978/79, when the obesity rate was 13.8% (Tjepkema, 2005). In 2013, 53.6% of adult Canadians or 13.9 million people

aged 18 or older were overweight or obese (self-reported) (Statistics Canada, 2013). The provincial figures for Ontario are similar to those from national estimates with 53.2%, or 5.3 million Ontarians aged 18 or older, overweight or obese (Statistics Canada, 2013).

Excessive weight and obesity are not restricted to adults. Of special concern is the increasing prevalence of overweight or obesity in youth as 22.1% Ontarians aged 12-17 are already overweight or obese (Statistics Canada, 2013). Furthermore, evidence has showed that childhood overweight and obesity increases the likelihood of becoming obese adults (Singh, Mulder, Twisk, Van Mechelen, & Chinapaw, 2008).

Over the past three decades, North American's consumption of sugar-sweetened beverages has increased, and a growing body of research has shown clear associations of sugar-sweetened beverages intake with obesity and other health conditions (Canadian Obesity Network, 2014).

In Canada, almost 30% of adults aged 31-50 years consumed more than the recommended calories from fat. The main contributor of fat intake includes pizzas, sandwiches, hamburgers and hot dogs (Garriguet, 2007). Sodium consumption also exceeded the adequate intake among Canadians over age of 19, whereas 78% had sodium intakes in excess of the maximum recommended (i.e. 2,300 mg per day)(Health Canada, 2009).

In 2007, less than half of individuals aged 12 years and older reported consuming fruits and vegetables five or more times per day (Ministry of Health and Long-Term Care, 2009). Studies have shown that diets containing substantial and varied amounts of vegetables and fruit may prevent certain types of cancer (World Cancer Research Fund & American Institute for Cancer Research, 2007), are associated with reduced risk of cardiovascular disease (Hung et al., 2004) and with healthy weights and decreased risk of obesity (Cancer Care Ontario, 2005; Cancer Care Ontario & Public Health Ontario, 2012).

In sum, human diets have changed over the years toward a diet dominated by high energy-dense food and beverages (Asfaw, 2011; Nishida et al., 2004; Popkin, 2006; Swinburn et al., 2004). In addition, with improvements in the standard of living, overnutrition and sedentary lifestyle have supplanted physical labour and regular physical or recreational activities (Lau et al., 2007). The consequence of these changes has resulted in high rates of obesity and other diet-related chronic

diseases. Policy and programs to prevent the adverse consequences of this dietary shift is required to enable people to make healthier food choices (World Health Organization, 2007).

1.2 Restaurants as the Setting for Healthy Eating Interventions

Scholars concur that environmental conditions play a fundamental role in enabling or preventing individuals to make healthier food choices (Huybrechts, Bourdeaudhuij, & Henaux, 2011; Lau et al., 2007; Story, Kaphingst, Robinson-O'Brien, & Glanz, 2008; Swinburn, Eggar, & Raza, 1999; White, 2007). Settings where food is provided, prepared, sold, or served have been considered especially appropriate to create opportunities for influencing eating practices and to remove barriers for healthy options (Glanz & Mullis, 1988; Sacks, Swinburn, & Lawrence, 2008).

Restaurants are considered as prominent venues for healthy food policies and programs (Glanz & Hoelscher, 2004). On a typical day, 17.7 million Canadians visit 80,800 foodservice establishments (Holroyd, 2010). In Ontario, 28% of the total food expenditure was spent in restaurants with an average household food expenditure of \$2,075 dollars in 2012 (Statistics Canada, 2012).

Restaurants Canada reported that 43% of Canadians choose going out to a restaurant or bar as their preferred way to “indulge/treat” themselves (Holroyd, 2010). In addition, a similar proportion (40%) reported that they choose to eat out because they are “on the go”, while 34% choose going out to restaurants because it “saves time from having to cook” or they “don’t want to cook” (Holroyd, 2010).

The increasing availability of high-energy dense food, great use of restaurants and fast-food outlets, and larger portion size of food have been associated with weight gain (French, Harnack, & Jeffery, 2000; World Health Organization, 2007; Young & Nestle, 2002, 2007). Food prepared away from home is higher in total calories and sodium, and overall has poorer nutrition quality than home-cooked meals (Swinburn et al., 2004).

A study conducted in restaurants and fast-food chains across Canada in 2010 showed that in all food categories examined, restaurants (sit-down) had higher calorie counts compared to fast-food restaurants; both serving size and caloric density were positively correlated with calories, and that all establishments had items exceeding 1,000 calories per serving (Scourboutakos & L'Abbe, 2012).

Eating away from home often means encountering a large variety of low-cost, energy-dense food in large portions (Diliberti, Bordi, Conklin, Roe, & Rolls, 2004). Portion size, offered by fast-food restaurants is often two to five times larger than when fast-food was introduced 20 years ago (Young & Nestle, 2003). Besides containing more calories, large portions encourage people to eat more without realizing the number of calories they are consuming (Young & Nestle, 2007). A study in Ontario found a positive relationship between supply of fast-food restaurants and the prevalence of cardiovascular disease and deaths across communities (Alter & Eny, 2005).

In sum, the growing popularity of eating away-from-home over the past two decades has raised the proportion of calories obtained away-from-home (Glanz & Hoelscher, 2004), while obesity rates have risen simultaneously (Scourboutakos & L'Abbe, 2012).

1.3. Interventions in Restaurants and Fast-Food Chains

Effective action for healthy eating requires broad based engagement of the public and private sectors, working together toward a shared understanding and goals (Glanz & Hoelscher, 2004). Government, food producers, food manufactures, food retailers (i.e. restaurant and fast-food chains) can create important opportunities for informing customers about the nutrition content of food; increasing knowledge about the benefits and importance of healthy eating; creating social marketing strategies to make healthy eating more attractive; making affordable healthy food options in restaurants and fast-food chains easily available; promoting 'default' healthy food options to customers, and creating a public demand for smaller portion sizes (Glanz & Mullis, 1988; Huybrechts et al., 2011).

Policies in restaurants and fast-food settings are common to ensure the safety of the products and not necessarily their healthfulness (Glanz & Mullis, 1988). More recently, government-led policy interventions to improve healthy eating refer to zoning bylaws, menu labelling, or elimination of trans fats in restaurant foods (Centers for Disease Control and Prevention, 2010; Eisenberg, Atallah, Grandi, Windle, & Berry, 2011; McMahon & Dufresne, 2014; Ministry of Health, 2012; Nestle & Jacobson, 2000; Resnick, 2010; Yang & Nichols, 2011).

Zoning bylaws, which are linked to physical environment interventions, intend to regulate the number and density of fast-food restaurants and their distance from schools and hospitals, or completely ban them from specific areas or neighbourhoods (Eisenberg et al., 2011). This type of

policy intervention has been implemented primarily in cities in the United States (U.S.) such as Detroit, Michigan and Berkeley (Mair, Pierce, & Teret, 2005).

Menu labelling regulations have been proposed to alter food choices by requiring full-service restaurants and fast-food outlets to provide nutrition information of foods on menus, menu boards and item tags at the point of purchase (Centers for Disease Control and Prevention, 2010; Eisenberg et al., 2011; Nestle & Jacobson, 2000; Yang & Nichols, 2011). Several States in the U.S., including California, Massachusetts, Maine and Oregon have laws that mandate restaurant chains to disclose caloric contents of food on the menu list or menu boards. At the local level, cities such as New York, Seattle, Philadelphia and San Francisco have menu labelling provisions implemented (Yang & Nichols, 2011).

In Ontario, the government introduced Bill 162, the *Making Healthier Choices Act, 2014* (McMahon & Dufresne, 2014), aiming at increasing nutrition awareness by posting the calorie content of food or beverage on menus or menu boards. Bill 162 requires restaurants that have more than 20 locations in the province and generate more than \$5 million of business annually to post such information (Ministry of Health and Long-Term Care, 2013b). The Bill has yet to pass the second reading to be implemented in the province (McMahon & Dufresne, 2014).

Besides policy interventions, some restaurants and fast-food outlets have made voluntary attempts to introduce or reformulate some food items to promote healthier choices as well as to disclose nutritional information of menu items to their customers. The primary motivation might not be to promote better nutrition or to reduce dietary risks. It may simply reflect the recognition that nutrition and dietary issues will continue to be of concern to critical groups that could influence their business, including governments, research teams, international agencies, professional organizations, advocacy groups, and some prominent individuals (Popkin, 2009).

Evidence of restaurant programs that offer and promote healthier food choices is emerging in the literature. Seymour and colleagues conducted a review of restaurant interventions and reported that most of the studies revealed some significant increase of sales of healthful targeted menu items (Seymour, Yaroch, Serdula, Blank, & Khan, 2004). These studies promoted different types of food (e.g., low-calorie, low-fat or low-cholesterol menus; salads), and used different signage to explain that the menu was low-in-fat and low-in-cholesterol. The authors concluded that simply providing

information in the restaurant setting appears to be associated with increased purchase of targeted items (Seymour et al., 2004).

Other initiatives have proposed restaurants to modify recipes or cooking techniques, to add healthier food or to offer reduced portion sizes (Centers for Disease Control and Prevention, 2010). In the U.S., Michelle Obama's *Let's Move* campaign has influenced several large American restaurant chains to roll out healthier kids' menus through Partnership for a Healthier America, a nonprofit organization that works with the private sector to ensure industry's commitment to end childhood obesity (Partnership for a Healthier America, 2012).

In Ontario, various restaurant chains such as McDonald's and Pickle Barrel have created healthier menu options. Pickle Barrel, for example, created the *Super Healthy Kids Menu*, in which all kids menu items come with fresh veggie sticks and fresh fruit for dessert (The Pickle Barrel Restaurant, 2012). McDonald's has changed its menu to include a lower-sodium grilled chicken into its child-oriented Happy Meals (Weeks, 2010). This measure has had a cascade effect on sodium levels in a dozen other McDonald's menu items (Weeks, 2010).

Another initiative is Informed Dining, a voluntary nutrition information program developed by the Ministry of Health in British Columbia in collaboration with Restaurants Canada (Ministry of Health, 2012; Restaurants Canada, 2012). Participating restaurants provide their customers with nutrition information, highlighting calories and sodium contents in all standard menu items before or at the point of purchase (upon request). Restaurants display the program logo and a statement on the menu or menu board, using different formats to display the nutrition information, including menu insert/appendix, supplemental nutrition menu, nutrition brochure, posters, among others (Ministry of Health, 2012).

Evidence, however, suggests that voluntary approaches to menu labelling fall short of prioritizing population health goals, largely because they do not include key nutrition information right on menus, or because nutrition information is not provided clearly and consistently (Mah, 2013), creating confusion for individuals, particular those with diabetes, who must accurately count grams of carbohydrate to achieve glycemic control (Freeman & Hayes, 2004).

Despite the importance of these voluntary measures, it could be argued that sustained progress and benefits to the population will only occur when all competitors make changes in the same direction at the same time (Popkin, 2009). Otherwise, some players could take advantage to persuade consumers to change brands, or to launch cheap, high-energy dense food in order to increase market share (Popkin, 2009).

1.4 Problem Statement

There is consistent evidence suggesting that environmental conditions play a fundamental role in enabling or preventing individuals to make healthier food choices (Huybrechts et al., 2011; Story et al., 2008; Swinburn et al., 1999; White, 2007). Restaurants are considered one of the most prominent venues for promoting healthy food policies and programs (Glanz & Hoelscher, 2004). However, public health cannot succeed alone in increasing the consumption and availability of healthy food in restaurants. As private for-profit sector, restaurants seek maximum return of investments, and tend to resist government interventions by lobbying against regulation (Swinburn et al., 2011).

The restaurant sector represents an important economic engine for governments. Besides a multi-billion dollar industry, restaurants are the second-largest job creator in Canada, with 1.1 million people directly employed in the sector (Holroyd, 2010). This market pressure is compounded by the neo-liberal argument against government interventions, which has focused on the reduction of what is perceived already as excessive regulatory burden on business (Lang, 2006).

Although there is a body of evidence suggesting that PPPs in public health could contribute to mitigating complex health problems (Axelsson & Axelsson, 2006; Easton, 2009; Frost et al., 2002; Mays & Scutchfield, 2010; Ramiah & Reich, 2005; Roussos & Fawcett, 2000; Widdus, 2001), there are important concerns about joint efforts involving public health and the private sector (Brownell, 2012; Stuckler & Nestle, 2012), and very little limited knowledge about specific conditions in which PPPs between the government and restaurants can be developed successfully.

1.5 Purpose and Research Questions

The purpose of this dissertation is to examine factors that influence the process of building PPPs in public health using healthy eating in restaurants in Ontario as the research context.

Sequential explanatory mixed-methods design is used to study the field, which is informed by three research questions. The quantitative phase addresses two questions:

- What factors do stakeholders consider important in facilitating the process of building PPPs in public health?
- To what extent do opinions of leaders of the government and the restaurant sector differ with respect to building PPPs for healthy eating in restaurants in Ontario?

The qualitative phase attempts to answer the following question:

- How would stakeholders respond to the challenges and opportunities associated with building PPPs in public health?

1.6 Organization of the Dissertation

Seven Chapters follow this introduction. The next Chapter (2) reviews the literature and outlines the characteristics, types, and critical elements of PPPs in public health. It does so by summarizing a broad literature on PPPs in public health, which includes a systematic review on PPPs in relation to neglected diseases (the main source of research in public health), and a review of PPPs for obesity prevention.

Chapter 3 provides an overview of interorganizational collaboration theories used to illuminate the understanding of factors that trigger the formation of PPPs. This Chapter explores the potential contributions of three theories to study PPPs in public health: resource-dependency theory (Pfeffer & Salancik, 1978), new institutional theory (Peters, 1998a, 1998b; Scott, 2005), and stakeholder theory (Freeman, Harrison, Wicks, Parmar, & De Colle, 2010). These were chosen because they collectively contribute to explaining the factors that influence decisions to create collaborative arrangements.

Chapter 4 describes the research design and methods used in this dissertation. It presents the process undertaken to select and recruit research participants. It describes in detail the quantitative

and qualitative phases separately, including instrument development, data collection and analysis, and the strategies used to achieve maximum level of methodological rigour. Chapters 5 and 6 present the findings of the quantitative and qualitative phases, which are integrated, in Chapter 7, into a theoretical framework

The final Chapter (8) puts the framework in context, emphasizing its potential value during the process of building PPPs to promote healthy eating in restaurants, and outlining strengths and limitations of the work, and suggestions for future research and practice.

Chapter 2

Literature Review

2.0 Introduction

The literature search was undertaken in three stages (April 2009, March 2010 and January 2012) and for three different purposes. The first stage focused on PPPs in public health in general to understand what constitutes a PPP and the types and characteristics of PPPs in public health.

Guided by this initial review, the second stage included a systematic review of evidence on PPPs for product development tackling neglected diseases. The review was focused on this area because it contains the majority of empirical examples that discuss critical elements in the formation of PPPs in public health. This systematic review aimed to analyze empirical studies with evidence on how to improve planning, design and management of existing or new forms of PPPs in public health (De Pinho Campos, Norman, & Jadad, 2011).

The third stage sought to identify empirical examples and conceptual papers related to PPPs for obesity prevention, with emphasis on food and diet as a means to gain a better understanding of critical elements that could facilitate or hinder partnerships between the government and the food industry, particularly in relation to the restaurant sector.

2.1 Search Strategy

The first stage (April 2009) consisted of a computerized search of peer-review journals indexed by key databases including MEDLINE, EMBASE and eight other databases through Scholars Portal and a manual search of the reference list of key articles (Appendix 2_a). Articles were considered eligible for final review if they were published in a peer-reviewed journal (in English), described conceptual aspects of PPPs in public health, included narrative descriptions, qualitative, quantitative or mixed data, and involved at least one for-profit partner (private donors such as foundations or philanthropists were considered as part of the private sector). This review was not restricted to location or country, demographic group, or health condition. A total of 632 citations were screened by title and abstract, and 38 articles met the inclusion criteria (Figure 2.1).

Figure 2.1 Flow chart of the summary of study selection and exclusion process, first stage (April 2009)

The second stage (March 2010) was an updated of previous search to account for additional articles that appeared in the first stage, and used 12 computerized major databases (e.g. Medline, Embase, and 10 databases through Scholars Portal) (Appendix 2_b). Articles were considered eligible if they: (a) had been published in a peer-reviewed journal, in English, between 1990 and 2010; (b) included descriptions about the development and management stages of PPPs for drug or vaccine development for human use; (c) included narrative descriptions, qualitative, quantitative or mixed data indicators; and (d) involved at least one for-profit partner (private donors such as foundations or philanthropists were considered as part of the private sector). This review was also not restricted to location/country, demographic group, age group or health condition.

Outcomes of interest were aspects described as critical, challenging and/or important in the development and management stages of PPPs. The search strategy yielded 212 references. The articles selected for full-text review ($n=50$) were assessed using a checklist tool designed to verify the consistency in the eligibility criteria and richness of the content (Appendix 2_c). The checklist was pre-tested in pilot searches with 100 full-text articles. The final synthesis included 10 papers (Figure 2.2). All the publications selected were not primary studies rather commentaries, expert opinion, case studies based on anecdotal understanding of the author regarding PPPs.

Figure 2.2 Flow chart of the summary of study selection and exclusion process, second stage (March 2010)

The third stage (January 2012) consisted of a computerized search of peer-review journals indexed by key databases (i.e., Medline and CAB), a manual search of the reference list of key articles, and a Google search of pdf documents to identify any relevant unpublished literature that might have been missed in preceding steps (Appendix 2_d). An article was considered eligible if it described a partnership between the government and the food industry for obesity prevention or other diet-related chronic diseases, had descriptions about or examples of those PPPs; and involved the food industry or any association representing the industry. This review too was not restricted to location or country, demographic group, or health condition. A total of 188 documents from peer-review journal and Google search were screened and 20 articles were included in this review (Figure 2.3).

Figure 2.3 Flow chart of the summary of study selection and exclusion process, third stage (January 2012)

2.2 Public-Private Partnerships in Public Health

In the last two decades, PPPs in public health have gained great attention in the literature (Barr, 2007; Meredith & Ziemba, 2007; Widdus, 2005). This new interest is argued to be the result of viable options that PPPs offer to overcome barriers that otherwise neither sector could respond on its own (Reich et al., 2003; Widdus, 2005).

Partnerships as a pluralist approach of working together entail that instead of strong (or exclusive) presence of state in responding to social matters, the focus is now towards a strong society in which the private sector (i.e. corporations, private entities, civil societies) is part of that response (Glasbergen, Mol, & Biermann, 2008). Scholars have argued that the traditional organizational model is not capable of dealing with and adapting to fast-paced changes occurring in our society due to technological innovation, economic challenges, and societal trends (Klein, 1987). Thus organizations are expected to be flexible to adapt to institutional arrangements that enable cross-sectoral work (Klein, 1987).

2.2.1 Definition of PPPs

The literature on PPPs in public health lacks a well-grounded conceptualization of the term public-private partnership. Scholars have argued that the literature does not adequately define the term partnership and that the term is loosely used with no consensus around its definition (Field & Peck, 2003), that it is loaded with ambiguities (Asante & Zwi, 2007), and that it has become a buzzword in the field (Van Huijstee, Francken, & Leroy, 2007). Huxham and colleagues noted that it is often difficult to distinguish in the literature the meaning of partnerships from other forms of cross-organizational working such as alliance, collaboration, cooperation, networking and joint working (Huxham, Vangen, Huxham, & Eden, 2000). Even in the field of public health (as it is seen later in this section), PPPs are described as any form of engagement or interaction between the public and the private sectors¹ (Hawkes, 2008). Thus whether an initiative that involves the private sector is defined as PPPs will depend on who is defining it.

¹ Some terms such as private sector engagement or private sector interaction or multi-stakeholder partnership are used widely to cover all forms of engagement with the private sector (Hawkes, 2008)

Table 2.1 describes different definitions of PPPs. Common elements were identified, including the presence of multiple actors, shared goals, agreed commitments and roles, mutually agreed division of attributes (resources and expertise), and labour and decision-making negotiated among members for the creation of social value (e.g. improved health) (Kickbusch & Lister, 2006). These elements should be seen as part of a working-in-progress definition, in which at least one representative from the government and one from the private-for profit sector come together to achieve a shared goal based on some degree of shared decision-making.

Another difficulty with the term PPPs is what constitutes the public and the private sectors (Buse & Walt, 2000b; Hawkes, 2008; Kickbusch & Lister, 2006; Reich, 2000). For the purpose of this dissertation, the *public sector* refers to any level of government (federal, provincial and local), governmental agency or organizations funded by the government (e.g. community health centres). The *private sector* refers to for-profit organizations, not-for profit associations representing the interest of the for-profit organizations, or private foundations (e.g. the Bill and Melinda Gates Foundation). Non-governmental or charity organizations and academia, are considered the third party within PPPs. These differences may appear to be matters of interpretation, but some differences might be fundamental, as they have implications for governance, accountability, values and ethical considerations.

Table 2.1 Definitions of public-private partnerships

Author	Definition
Ridley, 2001, p694	"It implies a commitment to a common goal through the joint provision of complementary resources and expertise, and the joint sharing of the risks involved".
Buse and Walt, 2001, p699	"...collaborative relationships which transcend national boundaries. Each partnership brings together at least two parties, among them a corporation (and/or industry association) and an intergovernmental organization, to achieve a shared health-creating goal on the basis of a mutually agreed division of labour".
Widdus, 2005, pS4	"Most PPPs comprise partners from three distinct spheres. These are (a) the public sector, essentially governmental agencies and those institutions at the international level that are controlled by governments, such as WHO, (b) the for-profit sector, which includes the pharmaceutical and biotech companies; and (c) the civil society sector, which includes academia, non-profit making organizations such as NGOs and philanthropic institutions. Public-private partnerships are not legally joint ventures in the business sense. Rather, they are joint ventures sharing a set of attributes, the most important of which is a shared objective".
Reich, 2000, p618	"...these partnerships involve at least one private for-profit organization with at least one non-for-profit organization"... "the core partners provide a joint sharing of efforts and of benefits"... "(PPP for public health) are committed to the creation of social value (improved health) especially for disadvantaged populations".
The Canadian Council for Public-Private Partnerships	"A cooperative venture between the public and private sectors, built on the expertise of each partner, that best meets clearly defined public needs through the appropriate allocation of resources, risks and rewards".
Peters, 1998, p12-13	"... [PPPs] involve two or more actors, at least one of which is public" ... "each participant is a principal...or must have a good deal of latitude for action" ... "there is a continuing relationship, the parameters of which are negotiated among the members from the outset"... "each of the participants bring something to the partnership [material resources, authority and any symbolic values]" ... "and finally a partnership implies some shared responsibility for outcomes of their activities".

2.2.2 Types of PPPs

Several types of PPPs in public health have emerged since early 2000s, and attempts have been made to classify them. Some authors have used type of membership (e.g., donor, recipient) (Buse & Walt, 2000a), organizational forms (NGO model, quasi-public authority model) (Mitchell-Weaver & Manning, 1991), or the nature of the activity (consultation, policy, or operational function) (Buse & Walt, 2000a) to classify PPPs in public health. Others have used ‘disease focus’ to characterize PPPs such as PPPs for infectious diseases (Kickbusch & Lister, 2006).

What appears to be the predominant form of classification in the literature is the one based on the goals or objectives of the partnership (Reich, 2002). Using this classification, the majority of PPPs tend to cluster into partnerships for disease control, which in turn is split into two sub-categories: PPPs for product development (e.g. research and development of drugs, vaccines and new diagnostics) and PPPs for access to drug and vaccines (e.g. provision of discounted or donated drugs and vaccines) (Widdus, 2005).

Within this goal-oriented classification, there are also PPPs for strengthening health services (e.g. delivery of tuberculosis treatment, skilled birth attendance, etc.) (Balasubramanian et al., 2006; Boyle, Gardner, & Callaway, 1998; Dewan et al., 2006; Lonnroth et al., 2004; Newell, Pande, Baral, Bam, & Malla, 2005), partnerships for improving advocacy and education (e.g. resource mobilization) (Bravo, 2007; Clasen, 2002; Meredith & Ziemba, 2007; Yerby, 1998), partnerships for improving regulation, quality and standards (e.g. international counterfeit drug problem) (The Partnership for Safe Medicine, 2011) and partnerships for global financing coordination (e.g. the provision of funds for specific disease programmes) (Hardon, 2001; Levine, Cherian, Shah, & Batson, 2004).

Nearly half of all PPPs for disease control focus on infectious diseases, while only approximately 10% of them refer to chronic disease, reproductive health and health-system development (Kickbusch & Lister, 2006). PPPs for obesity prevention concerned with food and diet did not appear within this classification.

PPPs also differ in their organizational structure. A number of PPPs are legally independent, not-for-profit organizations, for example, Medicine for Malaria Ventures (MMV), Global Alliance for Vaccines and Immunization (GAVI), and Drugs for Neglected Diseases Initiative (DNDi) (De Pinho Campos et al., 2011). Some are hosted within other organizations, either in the public sector

(e.g. national and inter-governmental institutions), or in the commercial sector (e.g. pharmaceutical, private medical, or non-health related for-profit company), or in the non-profit sector (e.g. NGO, educational and research institutes) (Kickbusch & Lister, 2006). Lastly, a small group of PPPs for health services and public health have been articulated in the form of social-marketing activities, vouchers, pre-packaging, contracting-out, franchising, and training between the public and private for-profit health providers (Patouillard, Goodman, Hanson, & Mills, 2007). Caution should be exercised when interpreting these as PPPs because they might not fulfill the definition of PPPs discussed previously.

2.2.3 Reasons for engaging in PPPs

Until recently, the role of the private for-profit sector in public health has been viewed with “antagonism, suspicion, confrontation” (Lucas, 2002)(p.19) by many actors in the field. Governments and inter-governmental organizations are now recognizing that it is necessary to involve multiple stakeholders, including the private sector in the pursuit of a healthy and sustainable society (Rowitz, 2006; World Health Organization, 2004b). This recognition has been accompanied with a reassessment of the roles, strengths and limitations of the public sector (government), the private sector (commercial enterprises) and the civil society in responding to health problems (Widdus, 2001).

Proponents of PPPs for public health argue that this form of collaboration has become compelling in an environment of complex health problems (Widdus, 2001), tremendous community needs, limited resources and extreme competition for limited resources (Reich et al., 2003); an environment in which neither side can on its own achieve its specific goals (Lucas, 2002). According to Widdus, partnerships seem to be most justifiable when traditional ways of working independently have a limited impact on a problem domain; the specific desired goals can be agreed by the collaborating players; relevant complementary expertise is interchanged between both sectors; the long-term interests of each sector are fulfilled (i.e. there are benefits to all players involved), and the contributions of expertise and resources are reasonably balanced (Widdus, 2001).

In the case of PPPs for product development, the need to foster such arrangement is motivated by the fact that those PPPs might, by offering an alternative model for investment, be able to overcome the unattractive commercial return on the investments of companies in low and middle-income countries (Reid & Pearse, 2003; Widdus, 2001, 2005). On the other hand, PPPs for strengthening

health services might fill gaps that have been left by health system because, on its own, lack of resources, competing priorities and management issues render it incapable of providing public goods in an effectively and efficiently way (Meredith & Ziemba, 2007; Nishtar, 2004).

In addition, scholars have found that one of the most significant motivators in PPPs for drug donation and health service delivery was gaining access to those hard-to-reach populations (Peters & Phillips, 2004; Rummery, 2009).

The literature has also shown that gaining access to a global diabetes coalition, and understanding members' unique talents, resources and perspectives, were pivotal to initiative PPPs for disease awareness (Siegel & Venkat Narayan, 2008). The findings also suggest that organizations seek collaboration to strengthen their capacity to meet performance goals, and increased exposure to and appreciation by other groups in the community (Buse & Waxman, 2001; Lasker et al., 2001; Van Huijstee et al., 2007).

Furthermore, in PPPs for sustainable development, according to a literature review, organizations are motivated to engage in partnerships to understand the views of others, stimulate creativity and generate a wider range of solutions (Van Huijstee et al., 2007).

2.2.4 Contentious issues in PPPs

Considerable skepticism exists about the motives of the private sector in partnering with the public sector (Reich, 2000). Much of the criticism is concerned with motives of private firms using the partnership as a mechanism to achieve profits, or influencing the agenda of inter-governmental organizations (i.e., influencing tax reduction for financial reasons), or even obtaining subsidized public funds for new products (Reich, 2000; Richter, 2004).

Scholars have raised concerns that PPPs could undermine the roles and responsibilities of public institutions in society, leading to distortion of national policies and public health funding (Buse & Walt, 2000b). Criticism also refers to the fact that PPPs may create a parallel drug-supply system or a fragmented health system, thus promoting short-term vertical programs and increasing health inequities between rich and poor populations (Field & Peck, 2003; Meredith & Ziemba, 2007; Nishtar, 2004; Reid & Pearse, 2003; Widdus, 2001).

Some scholars have suggested restricting PPPs in normative functions (e.g. policy-making), affirming that the regulatory decision making process should remain independent and not undertaken in partnership with the for-profit sector (Ridley, 2001; Widdus, 2001). Other scholars have cautioned that PPPs are still social experiments, and that there is no single formula to constructing them, and that it is unlikely that a universally applicable model will be found (Widdus, 2001).

In short, there may be some danger in engaging the private sector with the purpose of achieving broad public health goals (Peters, 1998b). One of the most important roles for the public health officials is to ensure that public interests remain at the core of partnership, protecting the public trust and confidence (Reich et al., 2003; Richter, 2004).

The premise of PPPs for public health is different from that for PPPs not related to health. First, partnerships for public health must commit to social values as the fundamental guiding pillar. Second, PPPs for public health must aim at improving the health and well-being of the population (Reich et al., 2003; Reich, 2000). The question though is whether PPPs for public health have the ability to operate in the public's interests.

2.3 Critical Elements of PPPs for Product Development (PD PPPs)

The systematic review followed qualitative content analysis approach to synthesize findings across included studies (Barnett-Page & Thomas, 2009; Graneheim & Lundman, 2004). This analysis resulted in seven major themes that yielded valuable insights on operational aspects of PD PPPs. Appendix 2_e describes the process used to conduct the analysis.

Win-win agreements

Various articles (Croft, 2005; Gutteridge, 2006; Levine et al., 2004; Nwaka, 2005; Nwaka & Ridley, 2003; Wheeler & Berkley, 2001) discussed the importance of securing allocation of resources by each partner organization as part of initial conversation. In each of these articles, partner organizations took into account the scope of their decision in terms of financial and human resources as well as time committed when deciding to be involved in the partnership. Nearly all authors (Bottazzi & Brown, 2008; Croft, 2005; Gutteridge, 2006; Hanlin, Chataway, & Smith, 2007; Lang & Greenwood, 2003; Levine et al., 2004; Nwaka, 2005; Nwaka & Ridley, 2003; Wheeler & Berkley, 2001) draw attention to the importance of defining goals, responsibilities, intellectual property (IP) rights and

project management aspects. This typically happened in the initial phase of the negotiation and took considerable time (Gutteridge, 2006), particularly in relation to goals and IP rights, as they were central for a win-win agreement.

The PPP initiatives in this systematic review used different forms of agreement, from a legal standpoint (Gutteridge, 2006; Nwaka, 2005; Nwaka & Ridley, 2003) to a memorandum of understanding (Bottazzi & Brown, 2008; Lang & Greenwood, 2003).

Benefits and risks

Benefits of being part of a PD PPP were often discussed under the topic of IP rights, with special reference to royalty for sales in non-endemic countries, preferential pricing of products for developing countries, the right to a license to continue the project with another company if a partner terminated the agreement, profit margins for small biotechnology firms, break-even targets for large pharmaceutical companies, and public relations.

There were frequent acknowledgments about risks of PD PPPs as most drug candidates (70%) fail in the exploratory phase (i.e., basic science) and only one in every five drugs that are accepted for clinical trial reaches the market (Nwaka & Ridley, 2003). In addition, PD PPPs were described as high-risk and high-cost projects (Wheeler & Berkley, 2001), because supply vs. demand of products for neglected diseases are uncertain (Levine et al., 2004), affected by poor regulatory infrastructure in many disease-endemic countries (Nwaka & Ridley, 2003).

In this review, PD PPPs demonstrated that all players alike recognized that they would obtain as much value as they would produce (Wheeler & Berkley, 2001), and that the project would meet their needs and objectives accordingly (Lang & Greenwood, 2003).

The balance between risks and benefits was noted in many papers (Bottazzi & Brown, 2008; Croft, 2005; Lang & Greenwood, 2003; Levine et al., 2004; Nwaka, 2005; Nwaka & Ridley, 2003; Wheeler & Berkley, 2001) as a means of satisfying partners' interests.

Synergy of expertise

This theme emerged from the discussion about fundamental aspects of combining multiple areas of expertise for carrying out PD PPPs. The majority of authors (Bottazzi & Brown, 2008; Croft, 2005;

Gutteridge, 2006; Hanlin et al., 2007; Lang & Greenwood, 2003; Levine et al., 2004; Nwaka & Ridley, 2003; Ridley, 2003; Wheeler & Berkley, 2001) identified the importance of creating synergies between partner organizations and members of the core team to succeed with the project. Overall these synergies referred to knowledge about the public and private sectors' practices, skills in management and communication, expertise in basic, industrial and clinical researches, and knowledge of local context. In addition, the selection of partner organizations and the core team was essential to achieving project goals.

Stakeholder engagement

This theme describes the importance of involving key stakeholders at an early stage of the partnership as a means of gaining acceptance among partner organizations, build a strong sense of ownership and get a clear understanding of the expectations of different partners.

Various authors (Hanlin et al., 2007; Levine et al., 2004; Ridley, 2003) argued that involving stakeholders at the beginning of the partnership contributed to the efforts of building local ownership of the project. In this review, partner organizations, in particular pharmaceutical companies and intergovernmental organizations, provided opportunities for many scientists from low- and middle-income countries to propose new research approaches and funding strategies (Hanlin et al., 2007), and to acquire expertise in conducting clinical trials that would eventually enable them to lead their own studies (Levine et al., 2004; Nwaka & Ridley, 2003).

The involvement of key stakeholders, including policy leaders at the beginning of the project proved to be beneficial for building up understanding and support during the regulatory process (Hanlin et al., 2007), and contributing to long-term sustainability of projects (Levine et al., 2004; Nwaka, 2005; Nwaka & Ridley, 2003; Ridley, 2003; Wheeler & Berkley, 2001).

In addition, engagement with local partners through a flexible and bottom-up dialogue provided the organization with a better understanding of the local culture and needs, resulting in strong support for legal and ethical issues surrounding vaccine trials (Hanlin et al., 2007).

Local health capacity and infrastructure

This theme illustrates the importance of conducting assessment of the local health capacity and infrastructure of the recipient country in the initial phase of the partnership. Authors have alluded to

the weak health systems in developing countries (Gutteridge, 2006; Levine et al., 2004; Nwaka, 2005; Nwaka & Ridley, 2003; Ridley, 2003; Wheeler & Berkley, 2001) and the need for capacity building (Hanlin et al., 2007) in areas such as regulatory infrastructure for delivering drugs and vaccines, surveillance system and technical capacity for conducting clinical researches.

The articles in this review emphasized that initial assessments can anticipate problems that otherwise could affect operational aspects of PD PPPs (Bottazzi & Brown, 2008; Nwaka, 2005). Others identified the need for capacity building on the conduct of clinical trials (most of the studies took place in developing countries) (Hanlin et al., 2007; Nwaka, 2005). In other cases, local assessment resulted in building evaluative capacity at the technical and operational levels (Bottazzi & Brown, 2008) and assistance in how to build strong regulatory infrastructure to support the introduction of new products into the market (Nwaka, 2005; Nwaka & Ridley, 2003).

The public and private sectors' perceptions regarding each other

This theme emerged from a discourse about the public and private sectors' perceptions of each other. Often this perception was described as mistrust of each sector towards the others in terms of their modus operandi (Gutteridge, 2006; Hanlin et al., 2007; Lang & Greenwood, 2003; Levine et al., 2004).

One article illustrated how the public sector was suspicious of the perceived motives, methods, and high profit margins of the research-based pharmaceutical companies (Gutteridge, 2006). On the other hand, the industry was concerned about the bureaucracy and inefficiency of the public sector in supporting its operations effectively (Gutteridge, 2006).

Authors in this reviewed noted that difficulties arose because of different attitudes among academic and company members (Lang & Greenwood, 2003) and the public sector (Hanlin et al., 2007).

Those difficulties essentially disappeared when members from both sectors learned to recognize each partner's value (Levine et al., 2004).

Communication and knowledge exchange

This theme became apparent in this review since most articles (Bottazzi & Brown, 2008; Croft, 2005; Gutteridge, 2006; Hanlin et al., 2007; Lang & Greenwood, 2003; Levine et al., 2004; Nwaka, 2005; Nwaka & Ridley, 2003; Wheeler & Berkley, 2001) elucidated the importance of communication as

strategy to achieve public credibility, exchange knowledge, and foster motivation and strong relationship among partner organizations.

Transparency in the operations was seen as fundamental to building public credibility because in PD PPPs the nature of the interface between the public sector and the industry was subjected to greater public scrutiny (Wheeler & Berkley, 2001). In another case, the PPP initiative adopted a technology transfer process model to make available the knowledge gained to the broader scientific community and to scale-up the production process (Bottazzi & Brown, 2008).

Various authors (Croft, 2005; Gutteridge, 2006; Hanlin et al., 2007; Lang & Greenwood, 2003; Nwaka & Ridley, 2003) highlighted that PD PPP spent a great amount of time and effort communicating with stakeholders to foster commitment and enjoyment of working together, particularly because much of virtual drug development was operated in distance (i.e., virtual team). Communication was also used as advocacy tool to strength the relationship with local communities particularly around issues related to legal and ethical rights of clinical trials (Hanlin et al., 2007).

Participatory management and organizational skills

This theme emerged from the elements concerning the involvement of staff from partner organizations in decision-making in various aspects of project development, and the skills needed for managing PD PPPs.

The review found that in the majority of the PD PPPs (Gutteridge, 2006; Lang & Greenwood, 2003; Levine et al., 2004; Nwaka, 2005; Nwaka & Ridley, 2003; Wheeler & Berkley, 2001) the decision-making process was participatory, openly discussed and inclusive (bottom-up). The decision-making process was typically shared in a co-operative manner involving local stakeholders and communities (Hanlin et al., 2007), and the ultimate full responsibility for decision making rested on the partnership management team, who had a retroactive accountability to the board of directors (Levine et al., 2004; Wheeler & Berkley, 2001).

Variations in the management arrangement were observed among the various studies (Levine et al., 2004; Nwaka, 2005; Nwaka & Ridley, 2003; Wheeler & Berkley, 2001). Classical organizational skills such as those related to project planning, monitoring and evaluation were discussed in the articles, particularly in relation to criteria for process review at key decision stages (Nwaka & Ridley, 2003).

In the case of PD PPPs, the application of such organizational skills proved more challenging than expected because of the participation of multiple partners with different management approaches (Nwaka & Ridley, 2003).

In terms of organizational skills, this review showed that within virtual business models with multiple stakeholders from the public and private sectors, a strong management team with strong organizational skills is required to promote effective participation of people with a full range of expertise, and to boost decisions and reassure collaboration (Bottazzi & Brown, 2008; Lang & Greenwood, 2003; Nwaka, 2005; Nwaka & Ridley, 2003; Wheeler & Berkley, 2001).

2.4 PPPs for Obesity Prevention Concerned with Food and Diet

The literature on PPPs concerned with food and diet, hereafter as to PPPs for obesity prevention, is very limited and refers to a whole mix of interactions (not necessary partnerships as explained previously), and a great variation in the form of engagement, as well as their purpose and types of activities. Any attempt to understand the field results in more questions rather than answers.

Hawkes and Buse examined existing European examples of partnerships between the government and the food industry and found that the term ‘partnership’ was used very imprecisely and was overly generic, thus creating misleading expectations of the partnerships, and that a shared decision-making power among partner organizations was not evident in the partnership (Hawkes & Buse, 2011a).

2.4.1 Types of PPPs for obesity prevention

Examples of initiatives involving the food industry and the government to promote healthy lifestyles are emerging in the literature (Kraak & Story, 2010), although key information related to shared decision-making, resources and expertise are not provided. This limits the understanding of whether those initiatives are “real” PPPs or another form of engagement.

Examples of PPPs for obesity prevention were mostly from Europe; few were from the U.S., and one was from Chile (Appendix 2). These collaborative initiatives involved some form of participation of the government and the food industry through the provision of funding, technical expertise, management or leadership, or a combination of these. Some were funded by the

government; others by the industry, and others jointly. Some were initiated by the government; others by the industry. Some were led by public sector, others by the food industry; and some involved large multinational companies (Hawkes & Buse, 2011a).

These partnerships also differ in their purpose and activities, both of which fall into five broad categories: public education and information, product reformulation, research, access to healthy foods, and platform for discussion (Hawkes, 2008; Hawkes & Buse, 2011a).

Public education and information includes partnerships for diet and nutrition skills, training, healthy-eating messages and nutrition labelling. *Product reformulation* often refers to partnerships for sodium reduction in food products, when the PPPs are public-led, or expansion to healthier products, when the PPPs are private-led. PPPs for *research* bring together food or beverage companies, academia, and public research-funding agencies to support research in the areas of food and health. Partnerships for *access to healthy foods* refer to access of fruit, vegetables and other healthy food products often in underserved communities. In addition, partnerships as a *platform for enabling discussions* between the government and the industry is a mechanism for developing recommendations, guidelines, and advice or strategies related to food, diet and health (e.g. marketing of food to children) (Agurto, Rodriguez, & Zacarias, 2011; Hawkes, 2008). Although not explicitly framed as a public-private partnership, the Canadian government's Sodium Working Group has been cited as an example of a platform for discussion (between the public and private sectors) whose aim was to facilitate a voluntary reduction of sodium levels in processed food products and foods sold in foodservices establishments (Sodium Working Group, 2010).

Hawkes and Buse found that the dominant characteristics of PPPs for obesity prevention were funding arrangements (e.g. funding flowing from one organization to another), platform for discussions among partners (e.g. the development of the food and nutrition strategy), and organizational structures involving representatives of the public and the private sectors to manage cooperation between these two sectors (Hawkes & Buse, 2011b).

Scholars have argued that PPPs should prioritize policies with a broader population-based approach rather than those policies focused on individual behavioral approaches. Others go further in claiming that if properly designed, PPPs for obesity prevention can expedite the adoption of new rules that apply to a wide range of competing companies (Huang & Yaroch, 2009).

2.4.2 Barriers in PPPs for obesity prevention

The public health goal of promoting healthy food has faced innumerable barriers, particularly when solutions threaten the sales of food and beverage companies (Hawkes & Buse, 2011b). The question of how to make the most of the food-industry's role and expertise to prevent obesity presents innumerable challenges.

Skepticism exists about the motives of food companies in partnering with the government, and this can undermine any attempt to overcome mistrust in order to create an environment for collaboration. For some, public health should not perceive the food industry as the enemy, but instead should try to identify alternative ways to capitalize on the industry's need for a positive image and long-term sustainability (Huang & Yaroch, 2009). For others, decisions on PPPs for obesity prevention should occur only after the public sector's objectives on healthy eating are clearly defined by policy makers (Hawkes & Buse, 2011b).

The alignment of the interests of consumers, public health and the food companies with respect to food, nutrition and health is also problematic. In behaviour and preference, consumers are influenced not only by cultural aspects but also by what is convenient to them and what food companies produce and make available. Researches have shown that consumers choose their food based primarily on taste and cost rather than on health benefits (Canadian Council of Food & Nutrition, 2008; Wansink & Huckabee, 2005). Most palatable foods (red meat, candy, snacks, fried foods, condiments, soft drinks, bakery foods, cheese and ice creams, etc.) are considered high energy-dense foods and have been linked to obesity risks.

Food companies have not yet publicly conveyed a transparent and effective strategy to respond to consumers' health and obesity issues (Kraak, Kumanyika, & Story, 2009). In many cases, the ethics of the food industry have been highly criticized in regard to misleading advertising to children, de-emphasizing the role of food quality and portion size in reducing obesity risk, and in some cases (when companies sponsor their own studies) altering research results that show potential adverse health-effects (Freedhoff & Herbet, 2011; Kraak et al., 2009; Lewin, Lindstrom, & Nestle, 2006).

Scholars have suggested that partner organizations adopt systematic and transparent accountability processes in order to maximize the benefits and reduce the risks of partnerships (Hawkes & Buse, 2011b). Kraak and colleagues state that partner organizations should balance commercial interests

with public health goals, manage conflict of interest and bias in decision making, ensure that co-branded activities support healthy products and healthy eating, comply with ethical codes of conduct, undertake due diligence to assess partnership, and monitor and evaluate partnership outcomes (Kraak, Swinburn, Lawrence, & Harrison, 2011).

In sum, substantial risks and efforts are involved in such collaboration, particularly when the two sectors differ in values, interests, views and accountability mechanisms. PPPs for obesity prevention may offer a way to advance population health outcomes while creating streams of innovation based on ethical principles that can yield future social and financial dividends in enhancing the public's health more widely. Caution is required as PPPs can also produce risks to all partners.

2.5 Limited Research on PPPs in Public Health

This review has shown a scarcity of original studies (both qualitative and quantitative research) examining PPPs in public health. One of the most striking findings was the lack of empirical examination using a theoretical perspective, rigorous description of the methodology, and validated or published instruments to examine PPPs in public health.

The review also uncovered some research gaps. Studies to understand the underlying dynamics that influence the formation of PPPs in public health were not found. The majority of studies aimed to inform either the context of or the process for successful PPPs. Success in the context of these PPPs was neither defined nor studied, perhaps due to a lack of sufficient time to develop, implement and assess the impact of PPPs for public health. Experts argue, however, that PPPs for public health are context-specific and that no single model exists (Reich, 2000). Knowledge produced about PPPs for public health in other contexts may not necessarily apply to the current political and economic reality of Ontario.

Regarding PPPs for obesity prevention in Ontario, there was limited evidence in the literature that this form of collaboration has existed or currently exists in the province. In addition, this topic has been under-researched in Ontario and, possibly beyond, which might limit the knowledge available about PPPs for public health.

Furthermore, PPPs for public health do not represent a simple intervention that can be developed in a controlled environment for the sole purpose of investigation. There are innumerable ethical aspects embedded in the creation of PPPs that may hinder any attempt to develop one. This might explain the limited researches conducted in the field.

In summary, the lack of research guiding this area, particularly in the context of Ontario, suggests the need to generate a better understanding of the factors that influence the process of building PPPs in public health. This dissertation has attempted to fill this gap.

Chapter 3

Theoretical Perspectives

3.0 Introduction

A review of the literature has shown that there is not one grand, unifying theory that explains collaborations between organizations. The majority of theoretical work pertains to the field of interorganizational relations (IOR), which are rooted in the overarching organizational theories influenced by the fields of management, economics, sociology and psychology.

IORs occur when organizations face complex problems or societal problems that are large enough and multidimensional in scope that one single organization cannot, alone, cope with them (Trist, 1983). Thus collaboration is necessary to manage those turbulent contexts (Emery & Trist, 1965). IORs place a special focus on the exchanges that occur between organizations and their environments (Warren, 1967). The IOR shifts the perspective of analysis from an individual domain (an organization) to a new interorganizational domain (organization and its external environment) (Wood & Gray, 1991).

Schermerhorn conducted a review of relevant theories and empirical researches to offer insights into potential determinants of interorganizational cooperation (Schermerhorn, 1975). He explains that there are two substantial commonalities in the literature for cooperation between organizations: a set of important motivational factors (resource-scarcity, value-expectancy and coercive pressure) that individually influence organizations to engage in cooperative activities, and a set of “costs” (loss of decision-making autonomy, unfavorable ramifications for organization-image, and resource-requirements for implementation) that may be incurred by participating organizations.

Under the overarching banner of IOR, I employed, for the purpose of this dissertation, theories that could provide insight to explain what factors trigger the formation of partnerships between the public and the private sectors for public health. It is worth mentioning that the review of the literature has indicated a dearth of empirical examination of PPPs for public health using interorganizational theories. This chapter explores the potential contributions of three organizational theories to study PPPs in public health. They are: resource-dependency theory (Pfeffer & Salancik, 1978), new institutional theory (Peters, 1998b; Scott, 2005), and stakeholder theory (Freeman et al., 2010). These three theories were chosen because they collectively provide a set of concepts that help explain the factors that influence organizations to enter into collaborations; they complement each other by offering a multi-level conceptual scheme for examining IOR, and they are adaptive to shifting the problem-domain from individual organizations to multiple organizations.

Other theories, including the social-exchange theory (Emerson, 1976; Gergen, Willis, & Greenberg, 1980; Smith, Carroll, & Ashford, 1995), the negotiated-order theory (Nathan & Mitroff, 1991), and the agency theory (Fleisher, 1991) were also reviewed to assess their significance to study the formation of PPPs in public health (Appendix 3_a). These were deemed to be too narrow in scope for the study of partnerships between two different sectors. In the social-exchange theory, the driver for IOR comes from a mutual desire to cooperate on the basis of equitable contributions, which might not always be the case for PPPs for obesity prevention. Negotiated-order theory focuses on micro and middle-range contexts to explain a negotiated process but fails to demonstrate how external forces are incorporated into the negotiated process. Agency theory primarily focuses on maximization of individuals' and organizations' self-interest to induce the desired behaviour, which seems too narrow to explain why PPPs occur.

3.1 Resource Dependency Theory

Jeffrey Pfeffer and Gerald R. Salancik were the proponents of the resource dependency theory (RDT) (Pfeffer & Salancik, 1978). RDT is perhaps the most comprehensive organizational theory, combining an explanation of power and dependence and how organizations manage the external environments for their own interests (Davis & Cobb, 2010). RDT's central claim is that organizational survival depends on the ability of organizations to deal with uncertainty in the environment, which environmental uncertainty is produced by scarcity of resources, lack of knowledge about environmental fluctuations, and deficiency in exchanges in an interorganizational field (Oliver, 1990). This claim would be less challenged if organizations were in absolute control of all elements necessary for their operation. Organizations are, however, embedded in an environment that consists of and is influenced by other sectors, organizations and individuals; they depend on those other forces for resources and support, and this holds true for public and private, small or large organizations (Pfeffer & Salancik, 1978). According to this argument, central to organizational survival is the concept of power over external resources as organizations seek to reduce others' power over them and often strive to increase control over others (Hillman, Withers, & Collins, 2009).

RDT came to challenge the view that organization outcomes are derived exclusively from the function of the organization, its structure, its leadership, its procedure, or its goals. Studies have shown that only 10% of the variance in organizational performance is explained by effects of administrators or individual efforts (Pfeffer & Salancik, 1978). The political environment (i.e. law,

social norms, values and political outcomes) is an important channel by which organizations connect themselves with the social system from which organizations continually seek support and legitimacy (Pfeffer & Salancik, 1978). Thus, the political environment is a place where organizations act to reduce uncertainties so that access to the resources needed is guaranteed.

In order to cope with environmental uncertainties and increase capacity to attract resources, organizations undertake strategic actions to minimize environmental dependences or to manage interdependence (Pfeffer & Salancik, 1978). Some strategic actions require more or less coordinated efforts (Provan & Milward, 1991), are based mostly on voluntary interactions (Oliver, 1990), and require different levels of information and resources exchanges (Pfeffer, 2005).

Political mechanisms (i.e. lobby, cooperation, co-optation and contributions to political campaigns) are examples of strategic actions that organizations undertake to reduce uncertainties and interdependence in order to create an environment that is better for their interests (Hillman et al., 2009; Pfeffer & Salancik, 1978). In doing so, organizations try to shape government regulations to produce more favorable conditions in the external environment to build political power in their favor (Hillman et al., 2009).

Pfeffer & Salancik argue that if organizations attempt to obtain advantages from the government regulators, it is probably because the political system is a greater source of inter-dependence (Pfeffer, 2005). In other words, when the political or social system becomes relevant to the organization, it is because the system affects the organizational outcomes (i.e. survival, growth, legitimacy and enhancement) (Pfeffer & Salancik, 1978). On one hand, organizations have interests and make demands on governments to obtain political advantages from decision-making. On the other hand, organizations are part of a large social system on whose support and legitimacy they depend for their existence. The next section provides a more detailed explanation of two core elements that may help understand PPPs for public health.

3.1.1 Conceptual elements

RDT distinguishes two key conceptual elements that offer a basis to examine why organizations create an environment to obtain support from the large social system and shape government regulations to yield a favorable environment for their own interest: *organizational legitimacy* and *control over resources*.

The improvement of *organizational legitimacy* is considered an important motivator for organizations to interconnect with others (Oliver, 1990). Legitimacy is defined as the process by which an organization has accountability to a peer or a system, which process reinforces its rights to exist (Pfeffer & Salancik, 1978). The concept refers to how well an organization is meeting the demands of the various groups that are concerned with its activities. Organizational theorists explain that since organizations use or consume society's resources, the society itself should assess the usefulness and legitimacy of the organizations' activities (Oliver, 1990; Peters, 1998b; Pfeffer & Salancik, 1978). Thus the external environment imposes pressures on organizations to justify their internal activities or outcomes to the social system (Oliver, 1990).

Pfeffer & Salancik state that managing social legitimacy is an important aspect of organizational management (Pfeffer & Salancik, 1978). Peter explains that legitimation alludes to the members of the business community as well as other political actors, and it is relevant to ensure that the initiatives undertaken by organizations are indeed appropriate and represent the values of their members (Peters, 1998b). An organization may undertake changes or redefine its operations to conform to a new concept of social value in order to attain legitimacy from other organizations and individuals (Pfeffer & Salancik, 1978).

The response of restaurants and fast-food chains to obesity prevention might be an example of organizations seeking social legitimacy. As mentioned early in this dissertation, restaurants and fast-food chains are undertaking actions to improve their products to offer healthier food and beverage choices to consumers (e.g. reformulation of existing products to promote healthier choices). The primary reason might not be to provide better nutrition to reduce risks of overweight and obesity; rather these organizations might be facing pressures by key social players (consumers, government, intergovernmental organization, media, etc.) to adjust to the problem of obesity.

Organizational legitimacy is not a given status; rather, it is a consequence of the interpretation of actions by those outside an organization. For example, external organizations such as Ontario Medical Association, Ontario Heart and Stroke Foundation, Consumers' Association of Canada, universities, and the media may question the effectiveness of the food industry in producing food products that do not impose health risks to consumers. If consumers, governments, and health professional organizations come to question the role of the restaurants in promoting or not healthy eating, this might be a matter of organizational legitimacy.

Control over resource or the capacity of an organization to determine the allocation or use of resources is another concept useful for understanding power and dependence (Pfeffer, 2005; Pfeffer & Salancik, 1978). This attribute gives an organization the ability and freedom to make decisions over resource allocation and use, this being a major source of power, particularly in situations when the resources are limited. According to RDT, there are four dimensions of control over resources: possession, access, use, and regulation and laws (Pfeffer & Salancik, 1978).

Possession refers to knowledge and information that may provide the basis of control over resources; for example, doctors, engineers and lawyers have power over knowledge and information with respect to their clients. Access can be regulated without owning it, as in the case of the Ontario government regulating access to tobacco products to anyone under the age of 19. This gives the government considerable power over tobacco companies. Another means of controlling a resource is to control its use; for example, the government may decide to control the level of sodium in processed food (which accounts for 77% of the sodium intake in a typical Canadian's diet) (Sodium Working Group, 2010). The final dimension of control over resource is the ability to make rules and to regulate the possession, access and use of resources through the legal system. Government has the power to make regulations and rules that can determine the external control of organizational behaviour, thus affecting organizations' self-interests. In sum, these four dimensions operate to limit the use of resources and determine the power that government may have over organizations due to their ability to make regulations and laws.

According to RDT, organizations facing this type of interdependence may seek to eliminate government dependence using political mechanisms (i.e. lobbying, self-regulation measures) to create an environment that is better for their interests. Hillman and colleagues found that organizations that heavily depend on the government are more likely to engage in political activity, using some form of co-optation (e.g. political campaign contributions and appointments to the board of directors) to reduce dependency (Hillman et al., 2009). Overall the research in this area suggests that the degree to which organizations are involved in political actions is associated with the level of environmental dependency that these organizations face. Additionally, the literature suggests that firms facing the same environmental constraints are more likely to choose the same forms of political action to reduce dependency (Hillman et al., 2009).

Conceptual Strengths

RDT locates its explanation for organizational collaboration on the external environment and considers the large social context of organizations to explain how power and dependence affect organizational choices. The theory helps identify where power and dependence come from and how interorganizational influences are used to manage power and dependence (Pfeffer, 2005).

RDT seems to be a suitable theory for examining and understanding restaurants' responses to obesity, for example the reformulation of existing food menus to offer healthier choices, and the lobbying against government policies that threaten industry' self-interest (e.g. menu labelling).

Legitimization provides guidance for examining PPPs for healthy eating as organizations might be driven not only by the need of reducing dependencies (e.g., government pressure), but also strengthening social performance. The theory may also provide a conceptual scheme to explain how organizations buffer themselves from the consequence of interdependence to obtain more autonomy, for example, through joint ventures or political actions. The enduring relationship between governments and private organizations make both predisposed to some form of cooperation through continuing interaction between their employees, relationship-building and the sharing of common interests (Pfeffer & Salancik, 1978). As such collaborations between political actors and the social environment may be seen as a mechanism to leverage resource and expertise.

Conceptual limitations

Critical reflections have been raised about the development and application of the RDT. Provan and colleagues found that the theory provides little guidance on how to identify the groups of organizations that are most relevant to explaining interorganizational relations (Provan, Beyer, & Kruijtbosch, 1980). Hillman and colleagues found that RDT fails to explain which dependencies take precedence over others in a potential scenario of multiple dependencies (Hillman et al., 2009). Zakus found that RDT falls short in advancing the analysis of community participation as the theory patronizes communities and views them as providers of resources rather than decision-makers (Zakus, 1998). Lastly, RDT limits its explanation with respect to innovative political mechanisms to overcome interdependences between the public and the private sectors. The theory only articulates regulation, lobbying, co-option as models to reduce external uncertainty or control power over resources and fails to explore collaborative options such as PPPs to deal with interdependencies between two different sectors.

3.2 The New Institutional Theory

Institutional theory has roots in sociology, political science and economics, and emphasize normative, cognitive and regulative pressures that shape organizational behaviour (Szyliowicz & Galvin, 2010). Such pressures may arise from the external environment (Meyer & Rowan, 1977; Scott, 2005) or from within organizations (Zucker, 1987). These pressures prompt organizations to seek and improve their legitimacy in order to respond to the prevailing norms, rules, beliefs or expectations of external constituents (Oliver, 1990).

Institutions, as explained by March and Olsen, have structures of meaning that are rooted in identities and belongings, for example, common purposes and accounts that provide direction and meaning to behaviour. These structures explain, justify and legitimate behavioral codes (March & Olsen, 2006).

There are two domains of work that differentiate the literature on institutional theory. The first is grounded on sociology and emphasizes how socially accepted norms and standardized practices (shared values, assumptions and organizing templates) shape organizational behaviour (Heikkilä & Isett, 2004; Scott, 2005). Scott argues that institutional pressures are influenced by three pillars: cultural-cognitive (which means shared perceptions of social life), normative (which is based on social obligation, expert belief and value judgments) and regulative and compliance (which refers to regulative rules and administrative guidelines that constitute the basic rules governing relationships within and between organizations) (Scott, 2008).

DiMaggio and Powell explain that organizations show a phenomenon called “isomorphism” (p. 149), which means that organizations in the same environment adopt similar structures, procedures and norms to cope with similar problems (DiMaggio & Powell, 1983). This phenomenon highlights the logic of appropriate behaviour of organizations, which gives rise to business norms (Skelcher & Sullivan, 2008). The business norms enable organizations to adapt to changes in the wider environment due to “mimetic isomorphism” or the tendency of organizations to imitate their successful peers due to uncertainty in the environment (DiMaggio & Powell, 1983).

The authors explain that institutional theory became primarily associated with the notion of explaining stability within and between organizations (David & Bitektine, 2009). Stability means that organizations often choose to undertake institutional activities in anticipation of acquiring or sustaining social approval (i.e. social legitimacy) (DiMaggio & Powell, 1983; Oliver, 1990).

The second domain is rooted in political science and economics, and is known as *new institutional theory*, which stresses organizational factors in political life and borrows from sociology the concept of norms and values that define how organizations should and would function (March & Olsen, 1984). This domain highlights that the most important element in defining institutions is the collection of values, which means that shared values tend to be the factors that define institutions (March & Olsen, 1984; Peters, 1998a). This new-institutional theorizing is a response against the micro-level, behavioural analysis in political science (Peters, 1998b) and concentrates on explaining institutions behaving as actors to limit or facilitate certain actions (Heikkilä & Isett, 2004; Zucker, 1987).

The new institutionalism shares the notion that structures play an important role in determining individual behaviour as well as outcome in political processes (Peters, 1998a; Raitio, 2012). The new institutionalism defines institutions as collection of rules and organized practices, implanted in the organizational structures, that prescribes appropriate behaviour or defines the “rule of the game” (Raitio, 2012)(p.310). Institutions as political actors give order to social relations and can provide codes of appropriate behaviour, affective ties, and a belief in a legitimate order (March & Olsen, 2006). The following section discusses the key conceptual elements of this approach, in the context of examining PPPs for healthy eating.

3.2.1 Conceptual elements

The new institutional theory draws attention to the importance of *normative institutionalism* in creating institutional pressures (i.e. norms and values) or prevailing views that influence an organization’s behaviour (e.g. collaboration) (Provan & Milward, 1991; Skelcher & Sullivan, 2008).

Institutional theorists studying these prevailing views refer to a normative belief system that shares socially constructed views of reality on the structure of organizational forms (Scott, 2008). Shared values are embodied within the institutions as the main predictor of the behaviour of individuals within organizations. These values create a “logic of appropriateness”, which is manifested in the individuals who are members of institutions and which determine how things are done (Peters, 1998b). In this context, there should be a common understanding among the members of institutions about what should be done by institutions, and actions that tend to fall outside their common value are not contemplated. This perspective seems to be useful in examining why collaborative relationships may be supported or resisted by different organizations and how

collaborations generate synergy that would otherwise not be available to the participants (Skelcher & Sullivan, 2008).

Scholars examining different community organizations across multiple cities found common normative belief systems (“logic of appropriateness”) in how problems are addressed and rules are created by organizations (Provan & Milward, 1991). Peters explains that value-basis of organizations stresses the importance of symbolic elements of institutions (values, beliefs, norms and rules), which elements represent mechanism of control. Those symbolic mechanisms might play an important role in PPPs because these depend heavily on the capacity to manipulate positive symbols to obtain commitments from both sectors (Peters, 1998b). Furthermore, these symbolic elements may help legitimate partnerships’ activities and can create a powerful internal logic to guide the behaviour of the members of the partnerships (Peters, 1998b).

Shared beliefs and norms that exist within an organizational field can become formalized into rules and regulations (Scott, 2005). Rules can “prescribe, censure or permit” actions by members of the organizations through common agreement and can provide greater internal control (Peters, 1998b). Thus rules identify preferences and cognitive abilities (e.g. incentives and normative choices) that lead to collective conformance with decisions (Heikkila & Isett, 2004).

Guy Peters, a political scientist who has written about new institutionalism and public-private partnerships, views partnerships as institutions, in a sense that they hold important institutional and structural properties such that individuals decide to create an organization, with solidified agreements and rules that provide the basis for exchanges within a set of mutually agreed rules (Peters, 1998b). Peters explains that values, beliefs, norms, and rules are key elements for studying public-private partnerships as they can create internal cohesion that eventually help legitimate PPPs (Peters, 1998b).

Furthermore, the context and conditions where the normative ideas are formed are crucial to understanding the formation of partnerships and its subsequent behaviour. The influence of context and conditions is called *historical institutionalism* and places attention on the social context (consisting of cultural, social and political processes) in which organizations operate (Peters, 1998b). For example, public-private partnerships for strengthening healthcare services in developing countries may serve as an illustration on that regard. The environment in which this type of collaboration has

occurred is characterized by resource-limitation and tremendous health-related needs. This social context might have influenced the beliefs, rules and processes of healthcare services, thus enabling the formation of a system in which the public and private healthcare providers collaborate to address similar health concerns.

Based on historical institutionalism, an assumption could be that in such cases the public sector is at least more open to or less skeptical about collaboration with the private health care sector, unlike the case in country such as Canada, where the system of rules (i.e. financing and delivering) of public health is essentially a public responsibility.

Raitio used the new institutionalism to examine the role of institutional factors in the design and outcome of collaborative forest planning (Raitio, 2012). She found that behaviour of organizational actors was path-dependent, which means the deterministic properties of historical experiences, which set the institutional patterns on organizational actors (Mahoney, 2000). The author explains that in order to be effective in collaborative planning, actors should have equal footing and that participation needs should be institutionalized from policy formation to regional and local-level planning (Raitio, 2012).

In sum, the normative and historical dimensions of new institutional analysis offers conceptual elements for understanding the formation of partnerships in the context of policy process. This can be done by identifying in advance a set of common values and beliefs influenced by historical assumptions and governed by a shared understanding of priorities that seek stability and institutionalization of mechanisms. According to Peters, stability and institutionalization can be seen as mechanisms for reducing pressures and facilitating decisions, through common perspectives, between the public and private sectors, on policy formation (Peters, 1998b).

Conceptual strengths

The new institutional theory pays great attention to the context, normative elements and structures that encourage or impede the formation of collaborations. It recognizes that the behaviour of an organization is inherently dependent on the types of actors involved, their shared beliefs, and cultural norms. These elements may explain why collaboration is a context-specific phenomenon that is difficult to replicate in the strict sense.

The normative elements described in the theory help explain how collective decisions are conceived and how actors accept and conform to them. Being able to identify the normative elements between the public and the private sectors may help explain how and why organizations develop and maintain interorganizational relationships. This is particular useful for studying public-private partnerships in which each sector varies in the purpose, level, and mechanisms used to address external pressures.

In addition, the theory has its strengths in the fact that it articulates partnerships as institutions, and reinforces the capacity of the normative constructs to shape the behaviour of individuals and decision-makers. Partnerships as institutions are also guided by symbolic elements, based on shared values, understanding and priorities among participants, as well as by common rules to guide the relationship. This approach highlights the importance of understanding the value-basis of organizations in order to gain better insights towards formation of PPPs.

Conceptual limitations

New institutionalism faces problems of ambiguity in the definitions of institutions and difficulties in relating individual to collective behaviour. Peters argues that one fundamental theoretical issue is how to identify when an institution exists or what one is. He explains that the theory falls short in explaining the point at which an institution comes to exist and when it ceases its existence (Peters, 1998b). Furthermore, institutionalism runs the risk of reductionism, as scholars tend to explain a political phenomenon exclusively through an institutional lens. Critics argue that in attempting to explain everything, institutional theory may explain nothing (David & Bitektine, 2009). Peters explains that the normative approach can explain formation of institutions or partnerships but that it is more suitable for explaining the perpetuation of these structures (Peters, 1998a). Considering the context of Ontario, where PPPs have limited history, the historical approach of new institutionalism may be less apparent in explaining contextual factors influencing the formation of PPPs.

3.3 Stakeholder Theory

Stakeholder theory (ST) emerged from a philosophical pragmatic perspective that underlines the moral dimension and ethics of creating value and trade for organizations. Its purpose is to address specific operational challenges related to the relationships between an organization and the many groups or individuals that might influence the creation of value and trade (Freeman et al., 2010). The

theory considers issues related to ethics, responsibilities and sustainability of business and how stakeholder relationship affects value-creation and trade. It holds that the aim of a corporation is not only to include the best interest of shareholders but also those of other stakeholders or constituencies of corporations (Freeman et al., 2010).

Freeman and colleagues explain that business entails a set of primary and secondary relationships among different groups, such as owners, customers, employees, shareholders, communities, and government among of which have a stake in the activities that constitute the value creation and trade of an organization (Freeman et al., 2010). The authors argue that if a group or individual could affect the organization (or be affected by it), independently of what senior-management people stand for, the organization should take into account that group and have an explicit strategy for dealing with it (Freeman, 2005).

Stakeholder theory discusses legitimacy based on the notion of morality which reflects the sense of purpose of organizations that goes beyond profitability, and concern for the well-being of stakeholders (Freeman et al., 2010).

The theory takes a libertarian and contemporary view of capitalism to explain how this view has influenced the relationship between the public and the private sectors. The proponents of the theory criticize the traditional narrative of capitalism, which narrative assumes that competition, limited resources, and a winner-takes-all mentality (p.268) are essential for the survival of business and economic activity (Freeman et al., 2010). As the authors argue, capitalism in the sense of “how the markets works” (p.267) has created a notorious divided between rich and poor as well as inequitable economic, social and environmental consequences around the globe (Freeman et al., 2010). They stress that this view lacks ethical consideration, takes a simplistic view of human beings, and is deficient in understanding the twenty-first-century world.

In addition, the traditional view of capitalism has created a role for the government to fix problems. For example, government may act as “referee” or may legislate the morality of business, delimitating boundaries to resolve problems caused by the dynamics of winners, losers, and limited resources (Freeman et al., 2010). This current government practice seems counterproductive, according to the libertarian view of ST: *If we set up rules governing the morality of individuals and organizations, we absolve those agents of their responsibility to conduct business according to community* (Freeman et al., 2010)(p.279).

Freeman and colleagues argue that if a society relies only on the government to resolve conflicts, the society would be restricted to develop different, mutually beneficial relationships (Freeman et al., 2010). In the light of this argument, ST tries to reframe the narrative, from one that competition and self-interest are pre-requisites to a capitalist society and that these necessitate the legislation of morality for business and individuals, to one that collaboration is necessary for survival and the creation of sustainable organizations (Freeman et al., 2010).

3.3.1 Conceptual elements

One of the main contributions of ST is to attempt to answer the questions of *stakeholder identification*. Mitchell and colleagues proposed a stakeholder-identification framework that both demarcates stakeholders and assesses their importance (Mitchell, Agle, & Wood, 1997). This framework contains three dimensions. The first dimension is *power* or the ability of stakeholders to resolve issues or to influence the organization. Mainardes and colleagues explain that power may be coercive (strength or threat), normative (legislative or the media), or utilitarian (holding resources or information) (Mainardes, Alves, & Raposo, 2011).

The second dimension is *legitimacy* or the socially perceived values of the stakeholder's relationships with the organization. And the third is *urgency* or the immediate need for action, which determines the organizational response to the apparent importance of stakeholder claims (Mitchell et al., 1997). This latter involves time-sensitivity (the need for speed in the organization's response) and the criticality (the importance of the response or the relationship between the organization and the stakeholder (Mainardes et al., 2011).

The proponents of this framework argue that the integration of the three attributes (i.e. power, legitimacy and urgency) is vital in stakeholder identification. The dynamics of these attributes over period of time or the variation in issues might influence differently a manager's ability to meet legitimate claims and protect legitimate interests (Mitchell et al., 1997).

The premise of stakeholder identification rests on organizations being able to identify and interpret the needs and interest of stakeholders in order to build relationships and manage the interests of various groups as they might differ significantly, requiring different strategies to create value and trade.

In health-care, ST has predominantly focused on understanding the forces within the health-care industry that improve organizational performance. Blair and colleagues conducted a study to examine the fit between diagnosis and strategies for managing key stakeholders in health-care delivery (Blair et al., 1996). The focus was on medical-practice groups as constituting an important part of an integrated delivery system. The authors used the stakeholder approach to develop a conceptual framework that shows how healthcare executives can diagnose their organization's stakeholders through a joint examination of both a stakeholder's potential for threat and potential for cooperation (Blair et al., 1996). The authors conclude that executives need to pay more attention to correctly categorize stakeholders and adapt the appropriate strategy to minimize pitfalls and maximize opportunities (Blair et al., 1996).

Another important conceptual element underlined in ST is *business ethics*. ST has been presented as a moral theory that elucidates the responsibilities that companies have to their stakeholders. ST emphasizes the principle of stakeholder cooperation, which underlines a social approach to creating value and trade. Rather than assuming that individuals, groups, or organizations are at the outset self-interested, the principle views cooperation as a voluntary agreement among stakeholders who can jointly satisfy their needs and desires (Freeman et al., 2010).

The proponents of this theory argue that stakeholders' interests should be seen as shared, rather than opposed practice to create value and that business should be positioned in the realm of humanity (Freeman et al., 2010). In the words of the authors, *Businesses are human institutions populated by real live complex human beings. Stakeholders have name and faces and children. They are not mere placeholders for social roles* (Freeman et al., 2010)(p.29). For Freeman and colleagues, business ethics should be part of the core activities of business, and the functions of the corporation should be based on moral values (Freeman et al., 2010).

Few research has delved into the normative aspects (i.e. business ethics and morality) of ST. Researchers have examined the controversial issue of healthcare being conceptualized as a business and argued that business and medicine conflict and the health-care system should advocate for the separation of healthcare and the influence of business (Gilmartin & Freeman, 2002).

From the perspective of ST, instead of separating or removing the concept of business from the health-care domain, the authors see business ethics from a stakeholder capitalism perspective that

delineates concepts such as continuous creation, cooperation, responsibility, and the complexity of human beings. Berman and colleagues, on the other hand, argue that companies will only respond to the concerns of stakeholders when “companies” believe that doing so will boost companies’ financial performance (Berman, Wicks, Kotha, & Jones, 1999).

In general, the moral aspect of business is usually suspected because of the profit-seeking goal of corporations. According to the normative justification of ST, the only way to make business acceptable is to identify practices (i.e. strategies, process and decision-making processes) that have value and are ethical at their core. Stakeholder theorists claim that organizations adopting stakeholder analysis should be able to better satisfy constituent needs (i.e. stakeholders), balance their claims and, therefore, be more likely to achieve their long-term goals than those organizations that do not (Freeman, 1984; Freeman et al., 2010).

Conceptual strengths

ST offers an overarching approach to the identification of legitimate stakeholders beyond those traditional groups of shareholders. The theory offers a pragmatic conceptualization of the relationships of organizations and their interested groups. This consists of a framework to identify and interpret stakeholder’s interests. ST recognizes local-community and professional organizations, consumer advocates, media, government, employees, academia among other groups as stakeholders who can affect or be affected by the firm. One of the strengths of the theory is that the identification of legitimated stakeholders is not based solely on their economic or political power but also on their values and directions in relation to the organization. Stakeholder identification may provide important insights in the selection of legitimate organizations that might have a stake in the development of PPPs for healthy eating in Ontario.

The business ethics concept is another important aspect of the theory. Organizations face pressure to respond to their stakeholders in relation to their ethical and legal behaviours. For this dissertation, ST may offer a basis for the exploration of the moral aspects of restaurants in relation to the negative health-consequences associated with certain type of food.

The principle of stakeholder cooperation views cooperation as a voluntary agreement among stakeholders who can jointly satisfy their needs and desires while creating value and trade for their organizations. This principle complements elements from theories discussed previously in this

dissertation, in that the concept of “value” is not based on just the external pressure of the market but is created in cooperation and through shared assumptions and beliefs in a community (Freeman et al., 2010).

Conceptual limitations

One of the critics of ST is that the definition of stakeholders does not support a common ground for theory building and practice. Mitchell and colleagues argue that the positive notion of comprehensiveness, observed in the definition proposed by Freeman (2010), can become counterproductive, as it might be too complex for managers or decision makers to apply (Mitchell et al., 1997). The definition entails the need to recognize and respond to a disparate, yet comprehensive list of constituencies that could present challenges in determining which group of stakeholders one should respond to. Other scholars argue that the actionable recommendations that ST provide are too managerial and might detract from working on the development of a sound methodology base (Frankenberger, 2006).

ST has been absent in the literature of PPPs for public health, and the examination of business ethics and collaboration between two distinctive sectors is, indeed, lacking. Opponents of the theory (e.g. those associated with neo-classical economics) have argued that ST undermines the property rights of the shareholders, compromises the mechanisms of free market, threatens the operations of government, and subverts the basis of capitalism (Phillips, Freeman, & Wicks, 2003). Others have argued that power is discussed in an overly simplistic way that can be negotiated between the organization and stakeholder groups (Stoney & Winstanley, 2001).

Another limitation of the theory is the determination of whose moral aspects the theory refers to: the organization or the managers from the organization. Some may argue that organizations have been treated as “individual actors” and, therefore, have moral responsibility; others assume that organizations have amoral status (i.e. are not equivalent of a person), so the behaviours and responsibilities of the organizations might be likely the same of their managers (Orts & Strudler, 2009; Stoney & Winstanley, 2001). This is an issue that seems to be overlooked by the theory and the assumption that moral aspects of the managers and the organization are equivalent might present critical debate.

3.4 Integration of Three Theories

The literature on IOR argues that it is unlikely that a single theory could fully explain the complexities of collaboration between organizations (Hillman et al., 2009; Oliver, 1990; Smith et al., 1995). Thus the integration of the three theories discussed in this dissertation can yield useful insights to study PPPs in public health.

The decision to initiate PPPs might be explained by RDT, in which organizations face pressure to respond to social demands in terms of how well they are meeting the expectations of the various groups that are concerned with their activities (i.e. organizational legitimacy). In addition, organizations may decide to create partnerships to reduce the power of *control over resources* of one organization over the other. These constructs may interact or occur concurrently with two important determinants of IOR: a set of important motivating factors (i.e. resource scarcity, value expectancy and coercive pressure) that individually influence organizations to engage in cooperative activities and a set of “costs” (i.e. loss of decision-making autonomy, unfavorable ramification for organizational image, and resource-requirements for implementation).

Institutional theory draws attention to the logic of appropriate behaviour of organizations, which gives rise to business norms (Skelcher & Sullivan, 2008). The business norms enable organizations to adapt to changes in the wider environment due to “mimetic isomorphism” or the tendency of organizations to imitate their successful peers due to uncertainty in the environment (DiMaggio & Powell, 1983). If more and more restaurants offer consumers nutritious, healthier safe food products, this practice may become a business norm among restaurants. The peer influence in the business sector can be as powerful as legislation and regulations to change business practices (Skelcher & Sullivan, 2008). The business norm approach perhaps could be fostered through a PPP.

Stakeholder theory then complements the other theories by providing a framework to identify “who really counts” in an organization’s environment, situating its argument in a moral side of business, in which organizations face pressure to respond to their stakeholders in relation to their ethical and legal behaviours.

In sum, the integration of these three theories may help gain a better understanding of why and how the public and the private sectors may form a PPP in public health while fulfilling individual organizational requirements.

Chapter 4

Methodology

4.0 Introduction

This PhD research has two main objectives: (a) to examine factors considered important for building public-private partnerships (PPPs) in public health, using healthy eating in restaurants in Ontario as the context for the study, and (b) to develop a theoretical framework that guides organizations in the process of PPP engagement.

Whetten proposes three steps to guide the development of a theoretical framework (Whetten, 1989). The first step consists of identifying a set of dimensions and their respective variables based on the literature and theories. This step identifies the “what” or the building blocks (i.e., dimensions, concepts, variables) that would be considered as part of the explanation of the issue of interest. The second step involves conducting the field research to test or validate the dimensions and variables identified in the previous step. This step represents the “how” in Whetten’s approach, which aims to determine the elements that are important to include in the framework and how they relate to each other. The third step, which represents the “why”, includes the organization of the validated dimensions and their respective variables into an integrated representation of the phenomenon. This final step requires a high level of conceptualization of step 2 using the available literature to clarify meaning and explain underlying assumptions based on fundamental views or theories (e.g., economic, social, organizational). It also includes a discussion of contextual limitations of the proposed framework, which may influence its generalizability due to temporal and contextual factors. The third step uses both narrative and graphic modalities to explain the theoretical framework (Walker & Avant, 1995).

Step 1 was completed as part of the thesis requirement and it is described in detail in Chapters 2 and 3 of this dissertation. The remaining discussion in this chapter focuses on explaining in detail steps 2 and 3, which discusses mixed-methods research design as the selected methodology to examine the field research and integrate the findings into a theoretical representation of the phenomenon.

4.1 Research Design and Rationale

Mixed-methods research (MMR) design is considered a creative form of research design that involves the use of quantitative and qualitative data and the mixing of both (Creswell, 2009; Johnson & Onwuegbuzie, 2004). MMR provides a comprehensive approach to examine a research problem,

allowing a range of confirmatory and exploratory questions with the quantitative and qualitative phases in one study (Teddlie & Tashakkori, 2009).

Greene and colleagues describes five purposes that tend to drive MMR in social science research: (a) triangulation (i.e., seeking corroboration of results); (b) complementarity (i.e., seeking elaboration, enhancement, illustration, or clarification of the results from one method with results from the other method); (c) development (i.e., using the results from one method to help inform the other method); (d) initiation (i.e., discovering paradoxes and contradictions), and (e) expansion (i.e., seeking to expand the breadth and range of inquiry) (Greene, Caracelli, & Graham, 1989). In this dissertation, MMR design was used to confirm the importance of factors in the formation of PPPs (purpose 'a'), gain complementary insights (purpose 'b'), explore divergence of opinions (purpose 'd') and discover new themes (purpose 'd') (Johnson, Onwuegbuzie, & Turner, 2007).

Sequential explanatory mixed-methods design was considered a well-suited methodology to conduct this PhD study. This design is characterized by three-phase approach (Figure 4.1), in which the quantitative data collection and analysis precedes the qualitative phase which builds on the findings of the quantitative phase (Creswell, 2009).

The research design in this dissertation started with the preparation phase - *pre-phase* - which involved identifying from a multidisciplinary literature, critical dimensions influencing the formation of PPPs. These dimensions were used to develop the survey instrument described later in this Chapter. The *first phase* consisted of collecting and analyzing quantitative data, followed by the *second phase*, which involved the collection and analysis of qualitative data (Creswell, 2009; Ivankova, Creswell, & Stick, 2006). The final phase (*third phase*) comprised the mixing or integration of both the quantitative and qualitative findings, substantiated by relevant literature and theories (Figure 4.1).

The term 'QUAN' in this dissertation indicates the quantitative approach (i.e., survey) and 'QUAL' indicates the qualitative approach (i.e., interviews).

Figure 4.1 - Sequential explanatory mixed-methods design for studying factors influencing the formation of PPPs in public health.

Source: Adapted from (Creswell, 2009; Whetten, 1989)

4.2 Setting and Research Participants

This study was conducted in Ontario. The selection of research participants was guided by stakeholder theory (Freeman et al., 2010) which acknowledges the importance of stakeholders' opinions, interests and political will in policy development (Brugha & Varvasovsky, 2000; Varvasovsky & Mckee, 1998). For the purpose of this PhD study, stakeholders were defined as follows:

Stakeholders are composed by leaders of organizations or associations from different sectors who have an interest in healthy eating, obesity prevention or other diet-related chronic diseases; who are (could be) affected directly or indirectly by those issues, or who - because of their position - have or could have an active or passive influence on the decision-making and implementation process related to those issues.

Adapted from (Varvasovsky & Brugha, 2010)

Understanding stakeholder opinions and attitudes towards the development of PPPs with focus on healthy eating in restaurants is useful in assessing future policy direction in this topic area, identifying factors facilitating the development of PPPs, and developing strategies for managing stakeholder reactions (Varvasovsky & Brugha, 2010).

Research participants were leaders from organizations that constitute stakeholders of the Ministry of Health and Long Term-Care (MOHLTC) on issues related to healthy eating, obesity or diet-related chronic disease prevention. The MOHLTC has a major leadership role in developing policies and programs for obesity prevention, particularly childhood obesity (Ministry of Health and Long-Term Care, 2013a). Scholars have argued that governments should be responsible for establishing partnerships, organizational relationships or networks to coordinate activities with different sectors, including the private sector for obesity prevention (Gortmaker et al., 2011).

To select stakeholder organizations, a stakeholder identification technique was employed to systematically guide the process of generating and validating a list of names (Mitchell et al., 1997) (Bryson, 2004). There is no single, standardized method for identifying stakeholders. Different procedures and tools have been proposed, including questionnaires, focus groups or other targeted information-gathering techniques (Bryson, 2004; Mainardes et al., 2011 {Bryson, 2004 #2268; Mitchell et al., 1997). The variation on the technique depends on the purpose of the stakeholder exercise as well as resources and time available.

Bryson has proposed fifteen stakeholder identification and analysis techniques (Bryson, 2004). They all seem to rely on two similar procedures: (a) brainstorming a list of potential stakeholder names, and (b) validating that list through deliberation, judgment or consensus.

There is always a question of whether to draw the line of too little or too much stakeholder representation. Bryson states that *...there are no hard and fast rules, [but] good empirical evidence* to guide the process (Bryson, 2004)p.27. He explains that using a sequence of choices can address this limitation, in which an individual or small group begins the effort of creating a list, and others are added in the process (Bryson, 2004).

This PhD adapted Bryson' approach and created a two-step process that yielded a list of research participants. The first step consisted of generating a preliminary list of organizations identified as key stakeholders of the MOHLTC in matters related to obesity or diet-related chronic disease prevention. This also included organizations that could potentially be affected by PPPs for healthy eating, or could influence decision-making and implementation of potential PPPs for healthy food. This step was undertaken based on the student investigator's knowledge of the field, guided by the literature and review of websites. Within each organization, the student investigator identified the

name, telephone and the business email address of each senior representative. This information was acquired through the student investigator's personal contacts, key informants, organization's websites and other public directories.

This initial identification process took into consideration organizations from the public and the private sectors, the non-governmental sector, and academia. Organizations were considered eligible to be included in the preliminary list if they fulfilled a set of criteria described in Table 4.1.

The preliminary list was produced and read through several times to obtain a sense of the types of organizations identified. Seven groups of stakeholders were created to represent the types of organizations. They were: (a) health professional group; (b) not-for profit or charity health group; (c) research group; (d) local health promotion providers group (i.e., public health units, community health centres and Aboriginal health access centres); (e) provincial government/agency group; (f) federal government/agency group, and (g) restaurant-related group. The student investigator reviewed each organization's website to assure that the allocation of the organization into the respective stakeholder group was consistent. This initial list of stakeholder organizations contained 207 stakeholder organizations.

The second step in the stakeholder identification technique sought to validate the preliminary list with the MOHLTC. The list was sent to the Assistant Deputy Ministry (ADM) in the Health Promotion Division of the MOHLTC. This Division was chosen due to its strategic and leadership role in developing policies and programs for obesity prevention, particularly for childhood obesity. The ADM kindly accepted to deliberate and validate the list of stakeholder organizations in collaboration with ministry staff. This validation resulted in 7 additional names, totaling 214 stakeholder organizations (Appendix 4_a). Table 4.2 presents the total number of organization by sector and group.

Table 4.1 - Criteria for eligibility to select organizations for the preliminary list of stakeholders.

Sector	Criteria
Public, NGO and Academia	<ul style="list-style-type: none"> • Have a mandate to, demonstrate interest in, or have been directly or indirectly involved in obesity or chronic disease prevention activities associated with diet and nutrition in Ontario. • Have a direct or indirect political influence on obesity or chronic disease prevention associated with diet and nutrition in Ontario. • Have provided funding to policies or programs, and research development in obesity or chronic disease prevention associated with diet and nutrition in Ontario. • Have been funded by the local, provincial or federal government to deliver policies or programs to prevent obesity and diet-related chronic diseases in Ontario.
Private	<ul style="list-style-type: none"> • Are associated with or serve the business interests of the agri-food business and restaurant sector in Ontario, including food suppliers or the restaurant advertising sector. • Can be affected by public policies regarding diet and nutrition.

Research participants were senior representatives of their respective organizations. They were individuals with high profile roles, holding positions such as board member, president, chief executive officer (CEO), executive director, manager or senior scholar. They were chosen because they have jurisdiction to influence important decisions not only in their own organizations, but also in the society as a whole (i.e., policy makers). They may also be identified as ‘elites’ or individuals who hold power and privilege in their organizations or in the society (Odendahl & Shaw, 2001).

Table 4.2 - Total number of stakeholder organizations by sector and group.

Sector:	Group	Number	% of Total
NGO	Health professional	15	7.0%
	Not-for-profit	25	11.7%
Academia	Research	13	6.1%
Private	Restaurant-related	30	14.0%
Public	Local health promotion providers	120	56.1%
	Provincial government/agency	8	3.7%
	Federal government/ agency	3	1.40%
Total	Count	214	100%

4.3 Quantitative (QUAN) Phase

The QUAN phase used a cross-sectional, online survey design to collect data at a single point in time and addressed two research questions:

- What factors do stakeholders consider important in facilitating the process of building PPPs in public health?
- To what extent do opinions of leaders of the government and the restaurant sector differ with respect to building PPPs for healthy eating in restaurants in Ontario?

4.3.1 Survey instrument and measures

A survey instrument was developed for this PhD dissertation (Appendix 4_b) following Dillman and colleagues guidance (Dillman, Smyth, & Christian, 2009). The review of the literature did not yield any validated or published instrument that could have been used or adapted for this thesis. The advantages of using surveys are that they can be mailed or e-mailed to potential respondents with a quick turnaround, and that they are relatively inexpensive when compared to other methods (e.g., in person and telephone interviews) (Bourque & Fielder, 2003; Teddlie & Tashakkori, 2009).

Survey development

The content of the survey was developed based on data/information obtained from the literature review and relevant theories (Chapters 2 and 3). The majority of the literature consisted of conceptual papers, commentaries, or expert opinion based on the authors' practical experience with PPPs in public health (Asante & Zwi, 2007; Buse & Harmer, 2007; Buse & Walt, 2000b; De Costa, Johansson, & Diwan, 2008; Hawkes & Buse, 2011a, 2011b; Kickbusch & Lister, 2006; Kraak & Story, 2010; Kraak, Swinburn, et al., 2011; Nishtar, 2004; Reich, 2002; Richter, 2004; Ridley et al., 2001; Widdus, 2001, 2005). These articles discuss a number of important elements in PPPs in public health such as type of partnerships, ethical issues, governance, trust, motivation and benefits.

Among conceptual papers, only a limited number of articles have discussed PPPs for healthy eating (Hawkes & Buse, 2011b; Kraak & Story, 2010; Kraak, Swinburn, et al., 2011). These papers describe characteristics and potential challenges for effective PPPs for global childhood obesity prevention (Kraak & Story, 2010); risks of engagement between the public and the private sectors (Hawkes & Buse, 2011b), and the role of the private sector in addressing global nutrition challenges (Kraak, Swinburn, et al., 2011). All these conceptual articles served as the main source for content development.

Interorganizational theories provided important insights for the content of the survey. Stakeholder theory (Freeman et al., 2010) and resource dependence theory (Pfeffer, 2005) offered constructs such as social legitimacy and social corporate responsibility. Institutional theory contributed to the idea of “mimetic isomorphism” or the tendency of organizations to imitate their successful peers due to uncertainty in the environment (DiMaggio & Powell, 1983). For example, the item *influencing food industry to promote healthy eating* emerged from this theoretical construct.

A small proportion of articles referred to some form of evaluation of PPPs initiatives with the focus on explaining the events or activities that occurred during the implementation of the partnership (Peters & Phillips, 2004; Rangan et al., 2004). These articles provided insights on benefits, costs, governance, and management issues related to PPPs in public health. The information obtained from these articles provided the basis of the content of the survey, which was divided into five sections described below.

Section 1 of the questionnaire included five factors that are deemed to influence the formation of PPPs in public health (i.e., motivation, enablers, governance, benefits and barriers). The development of section 1 (questions 1 to 5) was guided by qualitative content analysis techniques to synthesize findings across the literature (Barnett-Page & Thomas, 2009; Graneheim & Lundman, 2004). It used an inductive process of analysis, allowing the names of factors to flow from data rather than bringing preconceived categories (Hsieh, Clement, & Bazzoli, 2010). This process consisted of, first, identifying sentences or statements in the included articles that referred to critical aspects of PPP formation. Statements were underlined and then re-written into a spreadsheet in a condensed manner, preserving the core meaning of the text (Graneheim & Lundman, 2004). These were carefully read, compared and synthesized into short sentences keeping their meanings. Those sentences were further reviewed and assembled into groups with similar meaning. Overarching factors with their respective statements emerged from this process (Table 4.3).

Table 4.3 - Description of factors deemed to influence PPP formation.

Factors	Description
Motivation	It refers to factors that present positive opportunities to contribute to organizations' operation or function, which may motivate them to enter into PPPs.
Enablers	It refers to tangible or intangible factors that may equip organizations to consider PPP development.
Governance	It refers to processes, practices and rules required to define actions and accountability, grant power and verify performance in PPPs.
Benefits	It refers to potential PPP outcomes that may add tangible or intangible value to organizations.
Barriers	It refers to practices or sentiments that may hinder PPP engagement.

Section 2 focused on specific aspects related to a potential PPP for healthy eating in restaurants in Ontario (questions 6 and 7). It contained two dimensions. One referred to organizations from the public sector to partner with restaurants. These included several Ontario ministries, the federal government, and governmental agencies that might have been involved or have interest in obesity prevention or food-related matters. The other dimension included aspects related to roles and responsibilities of the government and restaurants in a potential PPP. Those roles emerged from the review of the literature and a general understanding of how government works.

Section 3 contained a single dimension (question 8), which consisted of potential healthy eating initiatives applicable to restaurants. Scholars have discussed several interventions that seem to influence healthy eating in restaurants. These include menu labelling; marketing strategies to make healthier food more attractive; economic incentives to make healthier food affordable; healthier menus to increase options and access to healthier food, and reduced portion sizes of high-energy dense foods.

The section 4 of the questionnaire (question 9) asked participants whether they would like to take part of a 30-minutes follow-up interview to gain additional insights into the survey results. Lastly, section 5 (questions 11 to 14) included questions related to participants' career level and type of organization affiliated with, and whether they have experience in developing PPPs.

Survey measure

Questions followed partially closed-ended formats, which include a set of pre-determined responses and 'other' response category (Dillman et al., 2009). Respondents who did not fit into the pre-determined response categories were able to describe an alternative, using their own language. In addition, most questions included a 'I don't know' or 'Not applicable' category to capture the

answers from respondents who were not familiar with the question being asked.

Although a five-point *Likert* scale is a commonly used scale in the literature, this dissertation used a three-point scale. There were three main reasons that led to this decision. First, there was no intention to capture a more discriminating variation from respondents (e.g., highly important vs. important). The main purpose of the survey was to identify important factors that influence the formation of PPPs, and a three-point scale was deemed reliable enough to serve this purpose. Research has demonstrated that five- and three-point Likert scales yield similar results (Jacoby & Matell, 1971). Second, research participants were individuals holding leadership positions. They were expected to have little time available to respond the questionnaire. A short version of the *Likert* scale avoided participants becoming frustrated when weighing the merit of each response category. Third, a greater number of categories may limit some statistical analyses when the sample size is relatively small. For example, the *Chi-Square* test was used to compare response distributions across groups (e.g. public vs. private sector). It requires, however, that no more than 20% of the expected counts are less than 5 and all individual expected counts are 1 or greater" (Yates, Moore, & McCabe, 1999)p. 734. The use of a three-point scale rather than a five-point scale helped maximize this condition.

Questions 1 to 3 used a three-point scale to measure the level of importance of the first three factors hypothesized to influence the formation of PPPs (i.e., motivation, enabling and governance). Response options included *important*, *somewhat important*, *I don't know*, *not at all important*, and *not applicable to my organization*. Similarly, questions 4, 6 and 7 used a three-point scale, where response options included *yes*, *maybe*, *no*, and *I don't know*. Factors covered in these questions were benefits, potential organizations from the public sector to partner with restaurants, and roles of the government and restaurants in PPPs. Question 5 measured barriers to PPP formation using the following three-point scale: *yes, it is a barrier*, *somewhat a barrier*, *not at all a barrier*, *I don't know*, and *not applicable to my organization*. Question 8 measured the level of agreement (i.e., *agree*, *undecided*, *disagree*, and *I don't know*) on potential organizations to healthy eating interventions to implement in restaurants. The remaining questions (i.e., Q10 to 13), which contained nominal data with no difference in magnitude among categories (Dillman et al., 2009), used multiple choices to select one choice from a given list. Table 4.4 describes the survey content and scales.

Table 4.4 - Content area and scale of the questionnaire.

Factor	Item/variable	Scale
Motivation	<ul style="list-style-type: none"> • Access to additional funding • Access to client or customer's perspectives • Access to expertise or specialized skills • Access to clients or customers who would not be reached by either sector alone 	Level of importance
Enablers	<ul style="list-style-type: none"> • Experience with public-private partnerships • Support from an individual champion • Compatibility of organizational values with PPP goals • Endorsement from credible institutions • Existence of guidelines on PPP development 	Level of importance
Governance	<ul style="list-style-type: none"> • Equal representation from partner organizations on board committees • Clarity and openness in decision making • Formal accountability system (e.g., goals, roles & responsibilities and performance measures) • Equal decision-making authority among partner organizations • Transparent process for monitoring and evaluation 	Level of importance
Benefits	<ul style="list-style-type: none"> • Improved image of your organization • Improved performance of your organization • Influence of food industry to promote healthy eating • Creation of differential advantage for your organization 	Yes/No
Barriers	<ul style="list-style-type: none"> • Potential conflict of interests (e.g., protect public's health vs. promote unhealthy food) • Potential for inappropriate use of marketing strategies by one of the partner organizations • Opposition or resistance from stakeholders not directly involved in the PPP • Lack of trust in the other partner organization • Potential for loss of legitimacy in the eyes of the general public or shareholders 	Extent of a barrier
Partner organization from the public sector	<ul style="list-style-type: none"> • Ontario Public Health Units • Ontario Ministry of Health and Long-Term Care • Ontario Ministry of Agricultural and Rural Affairs • Ontario Ministry of Economic Development, Trade and Employment • Ontario Ministry of Education • Ontario Ministry of Children and Youth Services • Health Canada • Public Health Agency of Canada • An independent organization established for the purpose of the partnership • Your own organization 	Yes/No
Roles of partner organizations	<ul style="list-style-type: none"> • Development of PPP guidelines • Participation in the design of the partnership • Coordination the implementation of the partnership • Monitoring of the partnership operation • Accountability for partnership performance • Contribution of funding to the partnership 	Yes/No
Type of restaurant interventions	<ul style="list-style-type: none"> • Menu labelling • Promotion and communication of healthy food • Economic incentives • Easy availability and access of healthy food • Smaller portion-size 	Level of agreement

4.3.2 Survey administration and pilot-testing

Self-administered surveys have traditionally involved ‘paper-and-pencil’ method and are usually sent by mail to the respondents (Teddlie & Tashakkori, 2009). With the proliferation of computers, Internet has become a popular medium for data collection (Teddlie & Tashakkori, 2009). Web-based or online survey offers several advantages over the traditional ‘paper-and-pencil’ method, including global reach, low collection and administration cost, rapid collection time, convenience, and easy data entry, among others (Atif, Richards, & Bilgin, 2012).

In this PhD study, an online method was used to collect quantitative data. Research participants were highly educated individuals with enough computer usage skills to respond to an online survey. The administration of the survey was done through *Survey Monkey*, an online tool used for survey design, collection, and analysis. Survey Monkey is user-friendly and navigates participants through a series of webpages, instructions, and individual questions/measures. In addition, Survey Monkey ensures a high level of security for storage and transmission of data (Survey Monkey, 2013).

Pilot testing

The survey was developed by the student investigator, assessed and approved by the PhD committee members, and piloted tested with a group of professionals for content and measurement appropriateness. The pilot-test was also conducted to assess the format and overall satisfaction with the survey (Di Lorio, 2005).

Six staff from the MOHLTC, holding senior level positions such as managers, senior policy advisors, and a health specialist with experience in survey design participated in the pilot-test. They had limited or no knowledge about PPPs, which was relevant to appraise the understanding of the questions.

Ministry staff pilot-testing the survey received an invitation via email with a link to access the survey as well as a fillable PDF form attached into the email so that they could review the questionnaire carefully for a more detailed feedback. Their comments referred to long questions; long and unclear statements; wordy sentences; misunderstanding about some questions; and unclear meaning of some words. The scales were said to be clear and easy to answer. Their feedback was incorporated and a new version of the survey was shared with them to confirm clarity of the wording and

comprehension of the questions. Time to complete the survey was approximately 15 to 20 minutes. Their responses were not included in the study findings.

4.3.3 Data collection and procedures

The online survey was launched during the summer of 2013 (July and August). The recruitment strategy followed the process recommended by Dillman and colleagues (Dillman et al., 2009). They recommend that a person holding an authority position send an initial letter showing support for the study and requesting participants to respond to the survey (Dillman et al., 2009). A personalized letter of support signed by the student's supervisor was sent via email to each representative of 214 stakeholder organizations. This letter of support introduced the study and asked research participants to complete the survey (Appendix 4_d). Few days after the introductory letter, the student investigator sent a personalized email with additional information about the study and instructions about the survey (Appendix 4_d). Participants were advised that only one person from the organization holding a mid-senior level position or higher should respond the questionnaire. This letter contained an exclusive link (URL) created for each organization to access the online survey. Research participants were asked to respond to the survey in two weeks. Three follow-up reminders (Appendix 4_e) were sent to non-respondents using personalized emails to each recipient. In the second and third reminders, participants were given the option to respond to the survey on paper or via telephone. None of the participants used the paper or telephone format to respond to the questionnaire. These procedures were believed to contribute to increasing response rates (Dillman et al., 2009).

Surveys were launched in eight waves with each group receiving the introductory letter in different dates in order to facilitate survey administration. The first wave began in July 9th, 2013 with the group involving restaurant-related associations (hereafter referred as to the restaurant sector or restaurants). In subsequent waves, the survey was administered to Aboriginal health access centres (AHACs), provincial and federal governments/agencies, research groups, health professional organizations, not-for-profit health organizations, public health units (PHUs), and community health centres (CHCs). The latter group was first approached in July 29th.

Consent to participate in the survey was given by reading the informed consent online and clicking on an "agree" button clearly displayed. The student investigator informed research participants about what was involved should they choose to participate in the study, and the purpose for which

the data would be used. Participants were also advised that the information collected from them would be treated confidentially, that their participation was voluntary, and that their decisions to participate or not participate would not have any negative consequences. One hundred twelve individuals representing their organizations responded to the online survey.

4.3.4 Data Analysis

This QUAN method considered organizations representing stakeholder groups as the unit of analysis. All data management and analyses were conducted using the statistical software package IBM SPSS Statistic - version 22, and Microsoft Excel.

4.3.4.1 Response rate

Response rate in this study was calculated by dividing the number of subjects who completed or partially completed the survey by the number of eligible subjects after deducting the opt-outs and unreachable participants. Partially completed surveys were those with, at least, section 1 of the survey completed, which contains the key dimensions/variables to be investigated in this study. Surveys in which participants skipped few questions from the remaining sections (i.e., section 2, 3, 4, and 5) were also considered partially completed.

In general, a good response rate for mail survey is within the range of 50%-70% (Dillman et al., 2009). Online surveys have usually lower rates. Sheehan (2001) conducted a review of online survey response rates and found that, on average, the 31 studies included in the review reported a mean response rate of 36.8% (Sheehan, 2006). Deutskens and colleagues examined the effects of follow-ups, incentives, length of the survey and presentation of the questionnaire on response rate. They found that a short, visual version of the questionnaire with lottery as incentive, and a late reminder had the highest response rate at 31.4% (Deutskens, Ruyter, Wetzels, & Oosterveld, 2004). In this study, every effort was made to produce response rate greater than those reported in the literature.

4.3.4.2 Non-response bias

Experts in survey methods recommend conducting a non-response bias analysis regardless of response rate (Atif et al., 2012). Non-response bias occurs in statistical surveys if the answers of participants differ from the potential answers of those who do not respond. If this were the case, the measured values of the dimensions/variables being tested in this dissertation may not represent the true values of all stakeholders initially identified in this study.

Although there is no one conclusive approach to address non-response bias, a number of methods are described in the literature (Atif et al., 2012). For this QUAN phase, three approaches were used to assess non-response bias: a wave analysis, a comparison of respondents and non-respondents characteristics, and a complementary qualitative assessment of non-respondent organizations. Details of these three approaches are described below.

Wave analysis

The wave analysis, which is a widely used method among researchers, was chosen as the primary technique for assessing non-response bias (Atif et al., 2012). The underlying assumption of wave analysis is that if the responses during the final week of the administration period are not statistically different from responses during early weeks, the responses to the survey are likely to be similar to the potential responses from non-respondents (Atif et al., 2012; Creswell, 2009). In this study, the wave analysis compared statistically the distribution of the responses (questions 1 to 8) from those answering within the first week of survey administration (i.e., wave 1) with those answering the second (i.e., wave 2) and third (i.e., wave 3) weeks of survey administration. Differences among waves would indicate the presence of non-response bias. The *Fisher's exact test* was used to make statistical inferences. A p-value of less than 0.05 was considered statistically significant.

Comparison of respondents and non-respondents characteristics

The online survey captured limited demographic information about participants and their organizations. This limited focus intended to keep the length of the questionnaire short. However, it was possible to collect gender and career characteristics. The gender was inferred by participant names or captured by looking at their profiles in the organization websites. Career position was asked on question 11 of the survey, and for non-respondents, it was obtained by consulting their organization's websites or public directory. The distributions of these characteristics between respondents and non-respondents were then statistically compared using Pearson Chi-Square Test. Differences in distributions would indicate the potential presence of non-response bias. Similar to the wave analysis, a p-value of less than 0.05 was used to make statistical inferences.

Complementary qualitative assessment

A complementary qualitative analysis of non-respondent organizations was also employed to further assess whether non-response bias exist. This assessment consisted of three steps. In the first step, 1 non-respondent organization from each stakeholder group was selected. These organizations were

chosen based on student investigator's knowledge about organizations' involvement or interest in obesity prevention or diet-related chronic diseases. The second step consisted of selecting relevant factors examined in the online survey to serve as comparison in the qualitative assessment. Three factors/items were selected based on the level of importance rated by survey respondents as well as on current public debate on the media. A Google search was conducted using key words related to these three factors/variables (e.g., menu labelling) to identify any written narratives posted in the websites, media reports or speeches. The third step involved examining those written narratives of non-respondent organizations, comparing them with the results of survey respondents and indicating whether a written statement supports or not the importance of selected items as indicated by survey participants.

4.3.4.3 Statistical analysis

In this QUAN phase, non-parametric tests (i.e., Pearson's Chi-square and Fisher's exact) and exploratory factor analysis were the main statistical techniques used for analysis.

Non-parametric tests - descriptive statistics

Non-parametric tests are used to determine whether groups differ on an outcome measure (Munro, 2005). These tests are considered *distribution free* as there is no assumption about the distribution of the variables in the population. With small sample sizes, as it is the case in this QUAN phase, where there is potential for serious distortions of the data, nonparametric tests are recommended (Munro, 2005).

In the primary analysis of question 1 to 8, Pearson's Chi-square test was used to analyze the total distribution of responses, distribution of responses across sectors (i.e., NGO/Academia, public and private) and responses between two key groups: the government and the restaurant sector. The government group consisted of organizations from the public health units and the provincial and federal governments. The restaurant sector involved the associations representing the agri-food sector in Ontario. The decision to analyze responses from the government and the restaurant sector separately was due to their importance as partner organizations in a potential PPP for healthy eating.

Initial analysis indicated that a considerable number of cells (i.e., between 60% to 70%) within cross-tabulations of groups versus variables of interest contained expected frequencies of less than five. Pearson's Chi-square tests require that the frequencies within cells be more than five. To address this

deficiency in the analysis, two main strategies were adopted to minimize cells with less than five cases. First, the non-governmental organization (NGO) and academic sectors were combined into one sector, represented in the results as *NGO/Academia*. Second, the following scales were grouped to have fewer categories: important/somewhat important; yes/maybe; yes, it is a barrier/somewhat a barrier; and undecided/I don't know. This new reconfiguration helped increase the number of frequencies within each cell. In addition, *Fisher's exact* test was performed as it is recommended when cells contain less than 5 cases (Munro, 2005). A p value of less than 0.05 was used to make statistical inferences.

Exploratory factor analysis

Exploratory factor analysis (EFA) used items from questions 1 to 5 to assess the relationships between those items and the pre-determined factors of PPPs formation (i.e., motivational, enablers, governance, benefit and barriers). The pre-determined factors and their respective variables were constructed based on the literature and theories related to interorganizational collaboration. However, up to now, they had not been statistically validated or assessed. The EFA constituted a first, exploratory step to statistically examine the validity of these dimensions.

In factor analysis, the number of research participants needed is usually assessed in relation to the number of variables being measured. Scholars have agreed that a ratio of at least 10 respondents for each variable is desirable. However, ratios as low as 3 respondents per variable have also been proposed as acceptable for conducting EFA (Munro, 2005). In addition, a sample size that is between 100 and 200 respondents is also considered enough for using EFA (Munro, 2005).

In this study, twenty-three items were included in the factor analysis, which used principal components extraction method with Varimax rotation. Correlations between .30 and .70 were regarded as highly correlated with at least one other variable (Munro, 2005). *Cronbach's alpha* [α] was used to assess the internal consistency of the survey instrument and the reliability of individual factors. Alpha values of 0.7 to 0.8 are considered satisfactory, although some authors have reported α values as low as .60 as a satisfactory measure for internal validity of non-clinical research (Bland & Altman, 1997).

There were two levels of analysis. The first level explored whether the five pre-determined factors existed or whether other new factors emerged from the analysis. The second level assessed whether

the items for each factor actually loaded on one of the factors (Di Lorio, 2005). It is possible that some variables load on more than one dimension or factor. These variables are considered cross-loading when the values of the factor loading differ by less than .20 (or .15) from each other (Di Lorio, 2005). In cases of cross-loading items, Di Lorio recommends one of four procedures: (i) place the item on the dimension with the highest loading, (ii) place the item on the dimension with the best conceptual fit, (iii) rewrite the item to fit with items on one dimension, or (iv) delete the item (Di Lorio, 2005). In this study, each item was analyzed individually, and depending on the loading values, recommendations were made following Di Lorio.

The results of EFA were used to explore consistency of the variables and their dimensions, and to make inferences for future research, but not to conclusively determine the variables within each dimension of PPP formation.

Additional analysis

Additional analyses were conducted for the remaining questions (9 to 12) using Microsoft Excel. Questions 9 and 10 were used to select participants for the follow-up interviews. Questions 11 and 12 were used to describe characteristics of respondents such as career level and the type of organization that they represent. Open-response questions were used as “quotes” to complement the description of the analysis of the online survey results, described in Chapter 5. They were also used for developing the follow-up interview questions described in Chapter 6. For this purpose, the open-response questions were analyzed with the aim at identifying common themes.

4.3.5 Methodological rigour

This QUAN phase used a number of techniques to minimize survey errors – coverage, nonresponse, and measurement. *Coverage error* can occur because the choice of survey mode may not provide coverage of the population or may not be the preferred mode to some research participants (Dillman et al., 2009). This study offered research participants multiple modes to respond to the questionnaire: Internet (i.e., survey monkey), hard copy of questionnaire attached to the second reminder email, and an option to respond by telephone. Offering a second or third mode to non-respondents may minimize coverage error and improve response rates by getting responses from people who would be otherwise difficult to respond (Dillman et al., 2009).

Another situation in which coverage error occurs is when the list from which the sample is drawn

does not include everyone in the population (Dillman et al., 2009). In this study, stakeholder identification technique (described earlier in this Chapter) was used to reduce coverage errors by creating and validating the list of stakeholder groups and their respective organizations from a known and bounded population. All organizations listed as stakeholders of the MOHLTC in matters related to obesity or diet-related chronic disease prevention were invited to participate in the survey.

Another survey error refers to *nonresponse error*, which happens when the people selected for the survey, who do not respond the questionnaire, are different from those who respond in a way that is significant for the study (Dillman et al., 2009). Minimizing response error involves motivating people to respond the questionnaire. This study followed Dillman's guidelines for increasing response rates, which include personalization of all contacts to respondents; the use of multiple reminders and the variation of the message across them; offering respondents multiple modes (i.e., email, and telephone); keeping email contact short and to the point; selecting the sender name and address and the subject line text for the email communication; and providing clear instructions for how to access the survey.

The last survey error is *measurement error* that results from poor question wording or design as well as other aspects of the questionnaire construction (Dillman et al., 2009). Questionnaire layout, and the design and wording of individual questions, are important in ensuring that respondents give accurate and precise answers. Dillman and colleagues propose a series of steps for crafting good questions such as assuring the questions are accurate and apply to respondents, ask one question at a time, use simple and familiar words, choose appropriate scale length, among others (Dillman et al., 2009). In addition, the survey was pilot-tested to assess the instrument, and to improve questions, format and scales.

4.4 Qualitative (QUAL) Phase

Phase 2 of the mixed-methods sequential explanatory design used qualitative interviews to address the following research question:

- How would stakeholders respond to the challenges and opportunities associated with of building PPPs in public health?

This QUAL phase was a follow-up inquiry to the online survey. It complemented and expanded the QUAN phase presented previously in this Chapter and served to discover new perspectives or paradoxes based on insights from research participants.

4.4.1 Recruitment

A purposeful sampling was used to select research participants considered *information-rich cases* due to their ability to provide relevant information about issues of central importance to this PhD research (Patton, 1990). There are several strategies to select information-rich individuals. In this QUAL phase, *critical case sampling* strategy was considered appropriate to select participants for the follow-up interviews. This sampling strategy seeks to identify individuals who can critically analyze issues and raise points for consideration, or who are in a position of importance to influence PPP development (Patton, 1990).

The sample was drawn from the online survey, which included a question asking respondents whether they would be willing to participate in a follow-up interview to explore further issues related to PPPs development. Participants who agreed to take part in the interviews were asked to provide their names and contact information (i.e., telephone or email) in the questionnaire for further follow-up. Only the student investigator had access to their personal information.

Sixty-three organizations expressed interest in participating in the follow-up interviews based on the question asked in the QUAN survey. Due to limited resources and time as well as the need to keep a fair representation of different organizations across sectors, it was necessary to develop a set of criteria for selecting interview participants. The selection of *critical cases* involved the following two criteria:

- *Organizations with experience in developing PPPs for healthy eating:* This criterion aimed to capture operational insights based on participants' experience developing PPPs for healthy eating. This information aimed at deepening the understanding of the factors identified as

important/somewhat important in the QUAN survey, while creating additional explanations and elaborations on issues relevant to this study.

- *Organizations representing the government and the restaurant sector:* The second criterion sought to obtain a more distinct perspective from the two key groups representing the public and the private sectors: the government and restaurants. The primary aim of this sampling strategy was to explore divergence of opinions and expand “the breadth and depth” of factors considered important for building PPPs.

Twenty-five organizations met these criteria. The public sector was represented by 14 organizations (local, provincial and federal). Eight restaurant-related associations represented the private sector and the non-governmental sector constituted of 3 organizations. One public sector organization was assigned to both criteria as it was reported having experience with developing PPPs and was also identified as an organization representing the government. The remaining organizations (n= 38), whose representatives initially agreed to take part in the interview but did not qualify in the selection criteria, received a *thank you* email (Appendix 4_v). Sandelowski reminds us that “[an] adequate sample size in qualitative research is one that permits – by virtue of not being too large - the deep, case-oriented analysis that is a hallmark of all qualitative inquiry, and that results in- by virtue of not being too small - a new and richly textured understanding of experiences.” (Sandelowski, 1995)p. 183.

A personalized email was sent to those 25 selected organizations confirming their interest and requesting a time to set up the interviews (Appendix 4_v). The time of the interview was chosen by research participants. Interviews were available in-person (only for those individuals based in Toronto) or by telephone. Two follow-up reminder emails and telephone calls were made to prompt the non-respondents about their participation in the interviews.

4.4.2 Interview guide

Semi-structured interview was chosen as the appropriate method of interviewing due to its relatively open, flexible and interactive approach to interview structure (Mason, 2004). Semi-structure interviews have demonstrated to be a valuable method for gaining interpretative data. This interviewing format is characterized by interactional exchange of dialogue between the interviewee and the investigator in a relatively informal style (Mason, 2004). This means that interviews can be shaped by the interviewee’s own understanding and the researcher’s interests, allowing unexpected themes to emerge from the interactional exchange (Mason, 2004).

The semi-structured interview guide was developed based on the results of the QUAN analysis, and was formulated encompassing three purposes of MMR design: (a) to gain complementary insights (b) to explore divergence of opinions, and (c) to expand understanding of emerging themes (Table 4.5).

A systematic process to develop the interview questions was followed, which included two steps. The first consisted of creating a list of factors indicated as *important/somewhat important* according to the quantitative analysis. From the list, relevant factors were selected based on the following criteria:

- Factors that required further illustration and/or clarification for gaining a better understanding of development and operations of PPPs for healthy eating;
- Factors that showed statistically significant variation in opinions across sectors, and between the two key groups (i.e., government and restaurants);
- Relevant themes that emerged from the open-ended questions from the online survey.

The second step consisted of determining commonalities or patterns among selected factors based on the criteria discussed above. The list of factors was placed into a table to facilitate comparison of data. Common elements were identified and colour-coded (Appendix 4_b). A closer examination of those elements revealed the presence common factors that were subsequently grouped into six themes described as following:

- Factors influencing the food industry to promote healthy eating
- Factors related to conflict of interests between partner organizations
- Factors related to decision-making authority between partner organizations
- Factors related to protection of public sector credibility
- Factors related to public sector partners in PPPs for healthy eating
- Factors related to healthier menu options

The interview guide emerged from these six themes using open-ended questions to encourage participants to talk about their opinions in their own terms. Slightly different interview guides were created to tailor the questions to the target audience (i.e., government & NGO, and restaurants) (Appendix 4_c). The guide for the government and the NGO organizations consisted of 8 open-ended questions, while the restaurant guide contained 7 open-ended questions.

Table 4.5 - Purpose of the QUAL interviews and criteria for identifying relevant factors for the interview guide

Criteria for interview guide	Purpose of QUAL interviews		
	Gain complementary insights of operational aspects	Explore divergence of opinions	Expand understanding of emerging themes
Factors that require further illustration, clarification	X		
Factors that show statistically significant variation across sectors and groups		X	
Relevant themes that emerge from the open-ended questions			X

4.4.3 Data collection

Of those 25 organizations invited to take part in one-hour follow-up interview, 16 confirmed their participation. Prior to the interview, a copy of the questions was sent via email to each participant so that they were prepared to talk about issues of interest.

According to scholars, gaining access, establishing rapport and adapting to issues related to control, gender and age are some of the difficulties encountered when researching elites (Hunt, Crane, & Wahlke, 1964; Kezar, 2003; Ostrander, 1993; Phillips, 1998). In preparation for the interview, the student investigator conducted a Google search to find out any relevant information about the organization and the participant. This preparatory work contributed to the establishment of rapport, stimulating conversation prior to and after the interview. The student investigator also handed her business card when the interview was conducted in person. In addition, the student investigator was cognizant of time and kept the interview according to the allotted time. No sensitive issues regarding control, gender or age emerged during the interviews.

The interviews were conducted via phone (n= 12) and in-person (n=4). Fifteen participants agreed to audio record the interview and for one, notes were taken. The latter interview was included in the analysis, but quotes from the notes were not incorporated into the findings. A copy of the transcript was available for member checking, but was not solicited by any participant.

The student investigator listened to previous audiotapes or read previous notes before interviewing the next participant. This helped anticipate any relevant information that could have changed the

direction of the next interview or added new questions due to dominant discourse or new assumptions discovered during interviews (Rubin & Rubin, 2005).

4.4.4 Data analysis

A free-lancer was hired to transcribe the interviews. The student investigator developed notation syntax of the conversation for the transcriber to use when listening to the interviews (Appendix 4). A notation system may reveal ...*how things are said (and not only what is said)*... (Poland, 2001)p.637. Notation system helps resolve ambiguities in the interpretation of data beyond the verbatim transcription (Poland, 2001). In this QUAL phase, a notation system included pauses, laughter, silence, interruptions, and tensions of participants responding certain questions.

The QUAL data analysis was guided by grounded theory technique and consisted of six, non-linear, iterative stages (Charmaz, 2006). The analysis was facilitated by QSR NVIVO 8.0 data management software.

The first stage comprised the verification of the quality of transcripts and an immersion in the data. This was conducted by listening to the audio of each interview while reading and editing the transcripts when necessary. This initial process was helpful to obtain a sense of the whole data (Charmaz, 2006) and to detect and adjust any potential discrepancies between what was recorded in writing and what the student investigator felt that had been said in the interview (Poland, 1995). During this stage, the use of memo writing was applied to note first impression about the data or thoughts about participant's tone during the interview.

The second stage involved open coding process, which consisted of line-by-line coding or sometimes a complete sentence or an entire paragraph depending on the detail of the information provided. Line-by-line coding prompts researchers to remain open to the narrative of the transcripts while seeing nuances and gaps in the data (Charmaz, 2006). Initial open codes can change in the course of the analysis, or can be disregard entirely in favor of new codes that best fitted the data (Sandelowski, 2000).

Each individual code was named with a verb in gerund. Glaser states that using gerunds while naming the codes "*helps detect process and stick to the data*" Glaser 1978 in (Charmaz, 2006)p.49. This process was useful to capture not only what the participant was saying, but also the context in which

that statement was made. For example, the code *acknowledging profit motives of restaurants* means that participants recognize the necessity of restaurant business to be profitable. Their narratives were made without any tone of negativity attached to it. The tone of participants' narrative and the context of the statement allowed this level of interpretation.

The third stage consisted of refining and reviewing the code scheme, although continuous reflection of the codes occurred throughout all stages. Once all individual transcripts were fully coded, the student investigator revised each code and the respective excerpts to assure fit and relevance. Several codes were renamed anew; excerpts were relocated to another code and some codes were given a new name to reflect the data. In this stage, it became more intuitive to create new codes or re-naming some of them to better reflect the narratives. The description of each code was given in this review process. At this stage, the coding process yielded 106 open codes.

The fourth stage of the coding process consisted of creating sub-categories or hierarchical relationships of initial coding. Charmaz (2006) states that this process allows researchers to "*follow the leads that they define in their empirical materials*" (Charmaz, 2006)p. 61. The purpose of this stage was to sort, synthesize and organize the large amount of data and reassemble them into sub-categories (Creswell, 2009). The list of initial codes was reexamined to capture the more evident relationships or 'leads' in the data. For example, during the initial coding, consumers' education and their influence and decision on healthy eating resulted in the development of several open codes. Comparing codes with codes led the student investigator to discover three sub-categories: *consumer's education about healthy food choices*, *emphasis on consumers for the creation of healthier menu options* and *consumers' dining decision-making*

Throughout this fourth stage, some initial codes were renamed (e.g., from *being socially responsible* to *acknowledging good corporate intention towards healthy eating*). Others were eliminated (e.g., *acknowledging difficulties or differences within the food sector*, and *providing incentives to consumers for healthy eating*) and their data were reallocated into different codes (e.g. *acknowledging profit motive of restaurants*, *experimenting with interventions in other settings*, and *considering food pricing effects on healthier food choices*). This reexamination yielded the reduction of the number of initial codes. At this stage, no explicit frame was used to guide the analytical constructions of participants' narratives (Charmaz, 2006). The student investigator remained open to participants' accounts to avoid any potential limitation imposed by an

analytical frame. This process helped eliciting the empirical aspect of data interpretation, which relied on the experience or opinions of participants.

The fifth step yielded a higher level of interpretation by grouping together the sub-categories into categories based on evident relationships. Revision and improvement of the codes (i.e., sub-categories and open codes) also took place in this stage, which resulted in several adjustments. There was elimination of some sub-categories and reallocation of data into existing codes. For example, an initial sub-category *misleading marketing strategies of restaurants* was renamed to *skepticism from the government on misleading marketing practices of the restaurant sector*. This adjustment allowed integration of similar open codes related to marketing strategies of the restaurant sector that were initially placed in another sub-category. The new sub-category *skepticism from the government on misleading marketing practices of restaurants* was allocated into the new category: *distrust between the government/NGO and restaurants on each other*. At this stage, 11 categories emerged representing not only the conceptualization of codes, but also a coherent, analytical format with a theoretical underpinning (Charmaz, 2006).

The sixth and final stage consisted of merging categories into overarching themes. The development of the themes was inspired by two analytical approaches: deductive and inductive. The deductive-like approach was based on the pre-determined factors being studied in this PhD study: motivation, enabler, governance, benefits, barriers, and healthy eating interventions. The inductive-like approach was based on conceptual 'leads' or new themes that emerged from the analysis of the categories.

This final stage yielded 7 themes, 13 categories, 30 sub-categories and 87 open codes (Appendix 4_b). One theme (i.e., contextual factors) represented a new element that emerged from the inductive-like approach. The other themes represented the pre-determined factors deemed to influence the formation of PPPs.

During this final analytical stage, it became necessary to re-organize the themes into two distinct but complementary classifications. One emphasized themes related to the formation of PPPs in public health. The other classification referred to themes specifically relate to PPPs for healthy eating.

The final themes represent the findings of the QUAL phase, which are discussed in Chapter 6 of this dissertation. The description of the QUAL findings used a narrative format, with detailed discussion about of the themes, categories and sub-categories, using specific illustrations and direct

quotes from participant's narratives. Directly quoted text used symbols to allow the reader to quickly understand the text and its meaning. Expressions, interruption, uncompleted sentences, or other extraneous or non-relevant material were given a symbol to facilitate understanding and clarity of the text (Table 4.6).

Table 4.6 - Symbols used in direct quotes and respective description

Symbols	Description
	Indent and italicize to demarcate the direct narratives of participants
()	Brackets in blank denote expressions, such as 'you know', 'how is that', 'yeh', 'uh-huh', 'mmm' deemed not relevant were removed from the quotes.
...	It denotes connection between sentences that were interrupted with narratives not relevant to understanding of the text or uncompleted sentences.
[]	Squared brackets with words added by the student investigator to facilitate understanding or coherence of the sentence.

4.4.5 Methodological rigour

Credibility in QUAL studies refers to how well data and processes of analysis address the intended focus (Graneheim & Lundman, 2004). In this QUAL phase, a systematic process of choosing participants, developing interview questions and analyzing the interviews was made to ensure that the data were credible. Choosing participants with diverse experiences increases the possibility of shedding light on various aspects of the research questions (Patton, 1990). This QUAL study incorporated a wide range of stakeholder groups representing the non-governmental organizations, academia, the public sector and the private sector. During the interviews, follow-up questions and clarification probes were used to ensure that research participants' viewpoints were truly captured.

To ensure consistency and reliability of the coding definition and procedure, the student investigator randomly selected two transcripts and shared them, along with the matrix for data analysis, with one member of the PhD committee who has extensive experience in QUAL research. The purpose of this verification was to reflect, discuss and reach agreement on the sub-themes and themes (Miles & Huberman, 1994). Verification with research participants, also known as member checking, was not included in this study for two reasons: first, it would require participants to increase their time-contribution to the study and second, it would require some degree of familiarity with the qualitative data analysis, which was not the case for most participants.

Credibility of research findings also reflects on how well negative or discrepant information is presented (Creswell, 2009). The findings of QUAL study presented information that showed similarities and differences that account for a more realistic and valid perspective among research participants.

Debriefing sessions with the member of the PhD committee with qualitative expertise were undertaken throughout the analysis. This process was beneficial not only to obtain feedback from an experienced researcher's point of view, but also to allow any flaws in the interpretation to emerge, while legitimating data analysis and interpretation processes.

Transferability in qualitative research is often regarded as comparable to external validity in quantitative studies as it relates to generalizability of the findings (Miles & Huberman, 1994). However, generalization in qualitative research does not apply, according to Lincoln and Guba, as there is no single correct interpretation of an account in the naturalistic world (Lincoln & Guba, 2000). They suggest that by providing enough information about research sites and participants, readers can draw conclusion with regarding transferability of the information collected.

In this QUAL phase, reference was made to the geographic location of the research (i.e. Ontario) from the perspective of increasing the availability and consumption of healthy food in restaurants. In addition, data collection happened during a time in which the provincial government was undertaking stakeholder consultations about menu labelling legislation and marketing of unhealthy food and beverages. These circumstances provided the context for readers to assess how similar his/her own experiences with the phenomenon under scrutiny are, and whether research findings can be applied to his/her unique situation.

Dependability is achieved by offering an audit trail for readers so that they can examine the research design and how data collection and analysis unfolded. In PhD research, a rich description of data collection and analysis, along with quotations from the transcripts ensured transparency, allowing readers to assess its effectiveness.

Lastly, *confirmability* refers to providing interpretations of data that are reflected in the experiences of research participants rather than the biases or experiences of the researcher (Lincoln & Guba, 2000).

In this PhD study, confirmability was achieved through making explicit the process of recruitment, development of the interview guide and detailed description of data analysis.

4.5. Integration of the QUAN and QUAL Findings

This third phase of MMR represented the last step of developing a theoretical framework as proposed by the literature (Whetten, 1989). The findings of the QUAN and QUAL phases were integrated and substantiated by relevant literature and theories. The result of this integration led to the development of the first theory-driven, empirically based framework that explains the process of building PPPs in public health.

The findings of the QUAN phase provided the statistical validation of important factors and their respective variables influencing PPP formation. These factors formed the elements of the theoretical framework. The QUAL findings offered an additional explanation or interpretation of those elements. This additional explanation revealed new themes/factors or was part of the narrative discussion. For each factor, a set of variables that showed to be more proximally related was organized together into a 'block' and their relationship discussed (Walker & Avant, 1995). This process was applied to all factors, and relationships were specified between 'blocks'.

It is important to note that the framework was not intend to identify causality among elements, but rather to demonstrate influences among them based on the findings observed in the QUAN and QUAL phases. While there are different ways of constructing a theoretical framework, Walker and Avant highlight that *theorist themselves must decide on the most accurate and meaningful ways to organize statements and concepts into theoretical models* (Walker & Avant, 1995)p. 165.

The theoretical framework was supported by a narrative discussion of the findings (QUAN + QUAL), illustrations from the literature review and additional explanations using the theories discussed in Chapter 3 (i.e., resource dependence theory, stakeholder theory, and institutional theory). The intent of the theoretical framework is to offer a coherent way of thinking and explaining the conditions that influence the process of building PPPs using healthy eating in restaurants in Ontario. The prosed framework was considered an approximation or simplification of reality, which is relevant to advance understanding on PPPs in public health.

4.6 Ethical Consideration

Ethics approval to conduct this research was granted in July 2, 2014 by the Office of Research Ethics of the University of Toronto (Appendix 4).

Privacy

In the context of this research, privacy refers to the freedom of research participants to decide for themselves, the time, circumstances, and extent to which their attitudes, beliefs, behaviours, and opinions are to be shared with or withheld from others (Kosseim, 2003). Research participants were informed that their participation in the study was voluntary and that they had the right to withdraw from the study, or refrain from answering any question, at any time without negative repercussion. This information was included in the consent form at the first page of the online survey.

Complete anonymity, however, was not possible in this PhD study. The student investigator collected participants' position and the type of organization to which they belong to (e.g., public health unit) as well as contact information among those individuals who agreed to participate in the follow-up interviews.

Confidentiality

Confidentiality refers to how private information is managed and shared (Kosseim, 2003). The student investigator took the necessary measures to ensure security and confidentiality of information by removing all identifying materials and replacing them with unique study identification codes. Research participants were assured that the information collected was not shared and reported in a way that would ensure that they and their respective organizations would be identified by third parties. For example, in the QUAN study, all data were reported in aggregate form (i.e., by stakeholder sectors), and no individual stakeholder organization was identified. In the QUAL study, quotations used a study identification code (e.g. interviewer A – public sector).

The de-identification process of survey data was conducted manually. The student investigator created a master file (i.e., spreadsheet) that contained all potential participants' information (e.g., name, e-mail) and a unique ID number for each one. Responses from each individual in the spreadsheet were displayed only with such unique ID number. This spreadsheet constituted the final dataset for analysis. The master file was also used to track non-respondents in order to email follow-

up reminders. This file was password-protected.

In the QUAL phase, participants who agreed to take part of the interviews provided their names and contact information (i.e., telephone or email) in the survey for further follow-up. Only the student investigator had access to their personal details, and she contacted them for scheduling an interview.

Survey Monkey has a *web link* method of gathering responses that is anonymous. This was the chosen method for collecting responses in this PhD study. The invitation email was sent to each participant through the student investigator's University of Toronto email account. The email contained a link to the online survey customized to each participant using the same unique ID number assigned initially. This means that each individual participant had its own link to the survey. Survey Monkey only stored this ID number and participants' responses.

Access to research materials was restricted to the student investigator and the members of her PhD thesis committee. When not in use, all electronic data were stored on a secured computer, and all non-electronic data (e.g., hand-written notes and interview transcripts) were stored in a locked cabinet at the Centre for Global eHealth Innovation, a research division of the University Health Network located at the Toronto General Hospital, where they will be kept for a maximum of one year following the first publication resulting from the study, and then destroyed.

Risks

Research participants might have experienced minimal risk. No collection of sensitive data took place. No coercion was used. Participants were made fully aware of their role in this research process, and were free to withdraw at any time during data collection.

The only potential risk associated with participating in this study was the loss of anonymity because of the nature of convenience sampling (QUAL phase), which involved drawing samples from a pool of individuals who were both accessible and willing to participate in the study.

Informed Consent

Informed consent procedure was followed. Eligible participants for the QUAN and QUAL studies receive detailed information about the study, conditions for participation in the study, potential

benefits and issues related to access to information, confidentiality, and publication of results (Appendix 4_m).

Consent to participate in the QUAN was obtained electronically by clicking on the “agree or disagree” button. This information was collected on the first page of the online survey. Consent to participate in the follow-up interviews was a verbal account given by the student investigator, who explained the type of data to be collected and the purpose for which the data were to be used. It was assured that the information collected from them would be treated confidentially, their names and of their respective organizations would not be disclosed, and that they would have the right to withdraw from the study at any time without negative repercussion.

Chapter 5

Quantitative Findings

5.0 Introduction

The online survey was administered during the summer of 2013 (July and August) and targeted representatives from 214 organizations identified as stakeholders of the MOHLTC on issues related to obesity prevention and/or diet-related chronic diseases. The survey was sent to individuals holding senior-level positions such as board of directors, CEOs, medical officers of health, senior academics and executive directors. Overall, the survey was positively received by the representatives of organizations as noted by their replied emails:

Ottawa Public Health will be pleased to participate.

(Medical Officer of Health)

Sounds like an interesting project. I'd be happy to participate and look forward to seeing the conclusions of your work.

(CEO)

The public sector cannot deal with the increasing rate of obesity and subsequent burden of chronic diseases. Your research sounds innovative, and we will be happy to assist.

(Executive Director)

5.1 Response Rate

Of the 214 organizations invited to participate in the online survey, 9 opted-out from the study and notified the student investigator about their decision via email. Three emails bounced back regardless several attempts to verifying email addresses. Five organizations were excluded from the analysis as respondents failed to answer at least 50% of the first section of the survey. A total of 112 responses were included in the analysis, of which 109 had completed responses, and 3 were partially completed (i.e., at least Section 1 of the questionnaire was completed) (Figure 5.1).

Table 5.1 - Response rate by sector and total population

Sector	Total population	Percentage within population	Number of respondents	Percentage within respondents	Response rate
Academic	13	6.1%	6	5.4%	46.2%
NGO	39	18.2%	19	17.0%	48.7%
Private	30	14.0%	15	13.4%	50.0%
Public	132	61.7%	72	64.3%	54.5%
Grand Total	214	100%	112	100.0%	55.4%

Table 5.4 shows response rate by sector and total population. The total response rate of the survey was 55.4%, and similar rates were observed by sectors. The study's total response rate is above the average of online surveys reported in the literature (31.4% and 36.9%) (Deutskens et al., 2004; Sheehan, 2006).

Figure 5.1 - Flow of participants' responses to the online survey

5.2 Non-Response Bias

Non-response bias was analyzed using the two proposed approaches described in Chapter 4: wave analysis and comparison of respondent and non-respondent characteristics. An additional approach was also considered to gauge whether non-respondent organizations would stand differently from respondent organizations on selected factors examined through the online survey. The decision to introduce a third approach was made after data collection, given the relatively small sample of respondents (i.e., 112 organizations). The results of these analyses are provided below.

Wave analysis

The wave analysis compared the distribution of the responses (questions 1 to 8) from those answering within the first week of survey administration (i.e., wave 1) with those answering the second (i.e., wave 2) and third (i.e., wave 3) weeks of survey administration. The wave analysis assumes that responses from those answering in the last wave resemble potential responses from those not answering the survey at all (Atif et al., 2012). In this study, the wave analysis demonstrated no statistically significant difference in response distributions across all waves ($p\text{-value} > 0.05$). This would suggest no evidence of non-response bias. Appendix 5_a provides examples of the results of the wave analysis for selected questions.

Respondents and non-respondents characteristics

The differences in distributions of gender and career level between respondents and non-respondents were analyzed (and statistically tested) using Chi-Square. The analysis demonstrated no statistical difference in gender ($p\text{-value} = .862$) and position level ($p\text{-value} = .707$) between respondents and non-respondents (Appendix 5_b). This analysis would suggest that no bias was introduced through respondent characteristics.

Complementary qualitative assessment

Eight non-respondent organizations representing 6 stakeholder groups were selected for this complementary assessment. They included the Ontario Medical Association, Canadian Diabetes Association, Conference Board of Canada, Sudbury and District Health Unit, Regent Park Community Health Centre, Ontario Ministry of Agriculture and Food, Public Health Ontario and Canadian Beverage Association.

Each organization's website and public available information or media reports were reviewed to identify any written narratives that could support an assessment on whether those non-respondent organizations would stand differently from respondent organizations on selected items (Appendix 5_c). Written narratives were searched using key words/statements related to the following items: (i) influencing food industry to promote healthy eating; (ii) potential inappropriate use of marketing strategies; and (ii) menu labelling. As shown in Table 5.2, the majority of the selected non-respondent organizations seem to stand similarly to the respondents on the continuum of importance of the selected items. These similarities provide additional information to suggest that the findings of the online survey might not be biased.

Table 5.2 – Evidence of written statements among selected non-respondent organizations on PPPs for healthy food and corresponded distribution of responses indicated as important/somewhat important across sectors

Organization	Sector	Evidence of a written statement supporting selected items/ % responses indicated as important/somewhat important		
		Influencing food industry to promote healthy eating	Inappropriate use of marketing strategies	Menu label
Non-respondents:				
Ontario Medical Association	NGO	N/A	x	x
Canadian Diabetes Association	NGO	x	x	x
Conference Board of Canada	Academia	x	x	x
Canadian Beverage Association	Private	x	x	N/A
Sudbury and District Health Unit	Public	x	x	x
Regent Park Community Health Centre	Public	N/A	N/A	N/A
Ontario Ministry of Agriculture and Food	Public	x	N/A	x
Public Health Ontario	Public	x	x	x
Respondents:				
NGO/Academia		88.0%	76.0%	84.0%
Private		86.7%	53.3%	60.0%
Public		94.4%	83.3%	93.0%

X indicates that a written statement supporting the importance of the selected item was found.

N/A indicates that the written statement supporting a selected item was not found or information was not strong enough to assess the position of the organization with respect to the selected item.

5.3 Participant Characteristics

Two different organizations from the public sector (i.e., a public health unit and an Aboriginal health access centre) provided two responses to the survey, even though participants were instructed to provide only one response per organization. Responses from these two organizations were reviewed and compared to assess similarities. In both organizations, respondents held mid-senior career levels. Questions 1 to 8, which contain 44 items, were used to assess similarities (the open ended items of these questions were excluded from this analysis). Responses from the two individuals from the public health unit coincided in 73% of the items, whereas the responses from the individuals from the Aboriginal health centre were similar in 87% of the items. Given that the responses were comparable, the student investigator decided to keep the two responses from each organization as a way to maximize sample size, while avoiding the rejection of important information/data.

Table 5.3 displays the classification of the types of organizations that responded to the survey. Local health promotion organizations, which include PHUs, CHCs and AHACs, had the highest representation (61%), followed by the restaurant sector (13.4%), and the not-for-profit health organizations (10%). Appendices 5_c and 5_d (respectively) provide the list of individual organizations that responded to the survey, and those that did not respond.

Table 5.3 – Classification of participating organizations, total and within sector

Sector:	Organization	Responses	% of Total	% within Sector
NGO/Academia	Health professional	8	7.1%	32.0%
	Not-for-profit	11	9.8%	44.0%
	Research	6	5.4%	24.0%
Private	Restaurant-related	15	13.4%	100.0%
Public	Local health promotion	68	60.7%	94.4%
	Provincial-Federal	4	3.6%	5.6%
Total	Count	112	100%	

The classification of participating organizations was determined by the student investigator. However, an interrater reliability analysis using the Kappa statistic was performed to determine consistency between the pre-determined list of stakeholder organizations and participants' self-identification about their organizations in relation to the groups (Appendix 5). The interrater reliability was found to be with substantial level of agreement, Kappa = .643 ($p < .001$) (Landis & Koch, 1977). Some discrepancy, however, was observed among responses from the restaurant-related associations. Organizations representing the restaurant sector were pre-classified as representing the interest of agri-food and restaurant business (i.e. private sector). However, some respondents (55.6%) identified themselves within the not-for profit group rather than representing the private sector. This might be due to the nonprofit status held by their organizations. Despite this discrepancy, the analysis kept the pre-determined classification, as participants' position represent the interest of the private sector.

As shown in Table 5.4, of the 99 individuals who responded the question about career level, 65 indicated holding an executive position (e.g., CEO, president, vice-president) whereas 25 respondents indicated holding senior management/academic positions (i.e., director, manager, professor/researcher). Although the survey was sent to individuals holding senior-level positions, it was anticipated that some of them would redirect the survey to a staff-level person to respond it on their behalf. Only 9 recipients re-directed the survey to another staff level person holding mid-senior positions (i.e., senior policy/coordinator, epidemiologist).

Table 5.4 - Distribution of responses for **career level among representatives of participating organizations**, total and across sectors.

Sector:		Executive (CEO, president, VP)	Senior Management (director, manager)	Mid-senior (senior advisor)	Total
NGO/Academia	Count	14	7	2	23
	% within	60.9%	30.4%	8.7%	100.0%
Private	Count	10	4	0	14
	% within	71.4%	28.6%	0.0%	100.0%
Public	Count	41	14	7	62
	% within	66.1%	22.6%	11.3%	100.0%
Total	Count	65	25	9	99
	% within	65.6%	25.2%	9.1%	100.0%

Of the 105 respondents who completed the question about whether or not they have entered into a PPP, only 7 respondents indicated that their organizations have entered into a PPP, with 5 representing the NGO-Academia sector, 1 the public sector, and 1 the private sector. Three respondents reported partnering with the food service sector (e.g. restaurant, fast-food chains, catering) (Table 5.5).

Table 5.5 - Distribution of responses for **organizations that have entered into a PPP**, total and across sectors.

Sector:		Yes	No	I don't know	Total
NGO/Academia	Count	5	18	2	25
	% within sector	20.0%	72.0%	8.0%	100.0%
	% within total	71.4%	20.2%	22.2%	24.0%
Private	Count	1	10	2	13
	% within sector	7.7%	76.9%	15.4%	100.0%
	% within total	14.3%	11.2%	22.2%	12.5%
Public	Count	1	61	5	67
	% within sector	1.5%	91.0%	7.5%	100.0%
	% within total	14.3%	68.5%	55.6%	63.5%
Total	Count	7	89	9	105
	% within grand total	6.7%	84.7%	8.6%	100.0%

5.4 Findings

In this section, findings from the exploratory factor analysis are provided first to show whether the pre-determined factors of PPP formation were united by the proposed set of variables or items. This is followed by the findings of the descriptive statistics.

5.4.1 Exploratory factor analysis

With 112 subjects considered suitable for using EFA, and 23 items, there was a ratio of 5 subjects per item. This ratio is acceptable for EFA according Knapp and Brown (Knapp & Brown, 1995) and Munro (Munro, 2005). Multiple runs of factor analysis were conducted to assess loading results and structure. This initial analysis used the pre-determined number of factors ($n=5$) for PPP formation (i.e., motivating, enablers, governance, benefits and barriers) and the computer assignment of factors based on eigenvalues greater than one. The description of both solutions is provided in this section separately (Tables 5.6 and 5.7). A Bartlett's Test of Sphericity was conducted to examine whether a correlation matrix is suitable for factor analysis. A low probability of .000 was obtained in both solutions, which meets the criteria and supports the use of factor analysis for this set of data.

Descriptive solution for the pre-determined number of factors ($n=5$)

The pre-determined number of five factors accounted for 55% of total variance between items (Table 5.6). The items *Q2b. support from an individual champion* and *Q4b. improved performance of your organization* loaded low (.36 and .37 respectively) on Factors 3 and 4. In an initial exploratory phase, these two items were removed and the analysis was run again using the remaining 21 items. This solution resulted in unclear loadings and was disregarded. The two items were incorporated again into the analysis.

The first factor was clearly characterized by all 5 items associated with the pre-determined concept of *barriers*. This first factor had a high internal consistency ($\alpha = .88$) and explained 15.5% of the variance between the items. The second factor was mostly represented by the items belonging to the concept of *governance*. This second factor contains 3 of the 5 *governance* items plus one item from the concept of *benefits*: *Q4c. able to influence food industry to promote healthy eating*. This last item had a substantial loading score (.57) on factor 2. The third factor, which reported a satisfactory internal consistency of .71, presented a combination of 6 items from two concepts: 3 items related to *motivation* and 3 related to *enablers*. One of the 3 items related to *enablers* (*Q2b. support from an individual champion*) had a smaller but still satisfactory loading of .36 on factor 3. The fourth factor, which reported a low internal consistency ($\alpha = .64$), united 5 items from 3 concepts: 2 items related to *governance*, 2 pertained to *enablers* and 1 related to *benefits*. The latter item *Q4b. improved performance of your organization* had a weak but still satisfactory loading (.36) on factor 4. This factor accounted for 9.3% of the variances between items. The last factor united 3 items, of which 2 are associated with

the concept of *benefits* and 1 with the concept of *motivation*. All three items had a substantial loading (between .65 and .82) on factor 5. This factor had a satisfactory internal consistency of .74.

Table 5.6 – Rotated Factor Analysis for pre-determined factors influencing PPP formation (23 variables) (n=112).

Items	Factor ^a				
	1	2	3	4	5
Q5a. Potential conflict of interests	.861	-.020	-.053	.107	-.115
Q5b. Potential for inappropriate use if marketing strategies by one of the partner organizations	.849	.058	-.005	.190	-.096
Q5e. Potential for loss of legitimacy in the eyes of the general public or shareholders	.819	.018	-.105	.072	-.007
Q5d. Lack of trust in the other partner organization	.756	.001	-.120	-.039	-.053
Q5c. Opposition or resistance from stakeholders not directly involved in the PPP	.671	.113	-.106	-.185	-.032
Q3e. Transparent process for monitoring and evaluation	.100	.804	.115	.116	.034
Q3b. Clarity and openness in decision making	.263	.747	.227	.197	-.024
Q3c. Formal accountability system	.072	.637	.229	.225	.033
Q4c. Able to influence food industry to promote healthy eating	-.094	.571	-.024	.050	.037
Q1c. To gain access to expertise or specialized skills	-.292	.061	.633	.084	.314
Q1b. To gain access to client or customer's perspectives	-.297	-.010	.615	.292	-.022
Q1d. To reach out clients or customers who would not be reached by either the public or the private sector alone	-.116	.113	.601	.111	-.095
Q2a. Experience with public-private partnerships	.091	.169	.592	-.203	.142
Q2d. Endorsement from credible institutions	-.102	.382	.498	.210	.134
Q2b. Support from an individual champion	-.069	.288	.360	-.249	.066
Q3d. Equal decision-making authority among partner organizations	-.034	.243	-.098	.723	.150
Q3a. Equal representation from partner organizations on board committees	.060	.238	-.019	.682	.132
Q2e. Existence of guidelines on PPP development	.074	.073	.264	.580	-.052
Q2c. Compatibility of organizational values with PPP goals	.230	-.091	.424	.464	-.226
Q4b. Improved performance of your organization	-.111	.116	.062	.368	.351
Q4d. Creation of differential advantage for your organization	-.054	.078	.060	-.029	.819
Q4a. Improved image of your organization	-.138	.140	-.083	.144	.757
Q1a. To gain access to additional funding	.019	-.328	.342	.029	.648
Initial Eigenvalues ^b	4.11	3.73	1.77	1.60	1.50
Rotation sums of squares	3.56	2.50	2.42	2.14	2.10
Percentage of variance explained	15.5%	11%	10.5%	9.3%	9%
Cronbach's alpha ^c	.88	.70	.71	.64	.74

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

^a Rotation converged in 7 iterations.

Bold type indicates primary factor loading for each item.

^bEigenvalues= pre-rotation column sums of squared loadings.

^cCronbach's alpha= reported for primary loadings (bold type)

Descriptive solution for computer assignment of number of factors (n=7)

The computer assignment based on eigenvalues greater than 1 yielded 7 factors (Table 5. 7).

Compared with previous results, this solution indicated greater variance, accounting for 66% between items. Items loadings on factors 1 to 7 had strong loading magnitude, ranging from .51 to nearly .89. The items *Q2b., support from an individual champion* and *Q4b., improved performance of your*

organization, which had weak loadings on factors 3 and 4 in previous result, yielded significant loadings on factor 6 in this solution (.75 and .51 respectively). All 23 items were included in the factor analysis.

Differently from previous result, this solution produced factors with fewer items. Factors 4 and 5 had each 3 items associated with them, and factors 6 and 7 had only 2 items each. Overall, the first, second, and third factors accounted for 36.2% of the variance between the items. Factor 1 was predominantly related to the 5 items associated with the concept of *barriers*. This factor explained 15% of the variance between items and held strong internal consistency ($\alpha = .88$).

The second factor also presented a clear loading structure as it united 3 items related to *governance*. In previous results, factor 2 loaded one additional item, which created some inconsistency in its structure.

Factor 3 contains 3 of the 5 items referring to the concept of *motivation* and 2 items referring to concept of *enablers*. This factor had a slightly better internal consistency ($\alpha = .74$) compared with factor 3 from previous solution ($\alpha = .71$).

Factor 4 presented an improved loading structure as well and had a higher internal consistency ($\alpha = .74$) compared with the same factor in previous solution ($\alpha = .64$). It contains 3 items, of which 2 refer to the concept of *benefits* and 1 to *motivation*.

Factor 5 comprises 3 items, of which 2 are associated with the concept of *governance* and 1 item with the concept of *enablers*. The latter item (*Q2c. compatibility of organizational values with PPP goals*) had a low but still satisfactory loading (.49) on factor 5.

Factors 6 and 7 are new factors determined by the computer based on the eigenvalues greater than one. Factor 6 contains 2 items related to the concept of *enablers* and factor 7 contains 2 items referring to the concept of *benefit*. These two factors presented a very poor internal consistency of $\alpha = .42$ and $\alpha = .24$ respectively; however their items presented strong loadings, ranging from .51 to .75.

Table 5.7 – Rotated Factor Analysis for computer assignment of number of factors influencing PPP formation (23 variables) (n=112).

Items	Factor ^a						
	1	2	3	4	5	6	7
Q5a. Potential conflict of interests	.888	-.028	-.018	-.116	.073	-.028	.061
Q5b. Potential for inappropriate use if marketing strategies by one of the partner organizations	.856	.087	.013	-.092	.169	-.006	-.007
Q5c. Potential for loss of legitimacy in the eyes of the general public or shareholders	.844	.053	-.031	.017	-.023	-.146	.032
Q5d. Lack of trust in the other partner organization	.754	.012	-.153	-.049	-.014	.013	-.034
Q5c. Opposition or resistance from stakeholders not directly involved in the PPP	.625	.199	-.216	-.004	-.139	.044	-.207
Q3c. Transparent process for monitoring and evaluation	.048	.825	-.007	.021	.129	.123	.113
Q3b. Clarity and openness in decision making	.222	.782	.123	-.032	.179	.148	.103
Q3c. Formal accountability system	.034	.726	.194	.052	.142	.021	.019
Q1d. To reach out clients or customers who would not be reached by either the public or the private sector alone	-.011	.007	.701	-.110	-.138	.120	.472
Q1b. To gain access to client or customer's perspectives	-.271	.078	.692	.010	.107	.070	-.015
Q1c. To gain access to expertise or specialized skills	-.292	.122	.575	.331	.009	.253	.006
Q2d. Endorsement from credible institutions	-.091	.457	.531	.165	.012	.040	.110
Q2e. Existence of guidelines on PPP development	.095	.267	.521	.023	.294	-.350	-.132
Q4d. Creation of differential advantage for your organization	-.098	.147	-.025	.835	.007	.071	-.074
Q4a. Improved image of your organization	-.088	.061	.045	.743	.025	-.186	.392
Q1a. To gain access to additional funding	-.019	-.286	.181	.638	.176	.372	-.187
Q3a. Equal representation from partner organizations on board committees	.047	.179	.017	.066	.807	.058	.138
Q3d. Equal decision-making authority among partner organizations	-.050	.231	.003	.107	.792	-.096	.083
Q2c. Compatibility of organizational values with PPP goals	.210	.001	.406	-.226	.495	.206	-.219
Q2b. Support from an individual champion	-.123	.133	-.034	-.030	.068	.751	.131
Q2a. Experience with public-private partnerships	.039	.178	.280	.120	-.066	.615	-.081
Q4c. Able to influence food industry to promote healthy eating	-.025	.283	-.035	-.065	.054	.130	.746
Q4b. Improved performance of your organization	-.030	-.033	.224	.302	.260	-.093	.510
Initial Eigenvalues ^b	4.11	3.73	1.77	1.57	1.50	1.34	1.18
Rotation sums of squares	3.51	2.50	2.31	2.01	1.84	1.50	1.43
Percentage of variance explained	15.2%	11.0%	10.0%	8.7%	8.1%	6.4%	6.2%
Cronbach's alpha ^c	.88	.79	.74	.74	.66	.42	.24

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

^a Rotation converged in 8 iterations.**Bold type** indicates primary factor loading for each item.^b Eigenvalues= pre-rotation column sums of squared loadings.^c Cronbach's alpha= reported for primary loadings (bold type)

5.4.2 Descriptive statistics

The findings that follow represent the combined importance rates of items indicated as “important or somewhat important” in the survey. Three groups were created to report the summary results.

The first group is denoted in the summary tables as “all sectors” and refers to the combination of responses from all three sectors participating in the survey: NGO/Academia, the public sector and

the private sector. The second group involves responses from government organizations (i.e., public health units, and the provincial and federal governments), and the third group represents the restaurant sector. The decision to report responses from the government and the restaurant sector separately was due to their importance as partner organizations in a potential PPP for healthy eating. Appendix 5_f provides detailed analyses of responses across sectors/groups.

Motivating factors

As shown in Table 5.8, the importance rate across all sectors with respect to all motivating factors that are considered to influence the process of building PPPs varied from 70% to ~90%. *Gaining access to clients or customers' perspective* was the most important motivating factor across all sectors (89%). Respondents from the government and the restaurant sector considered two items as the most important motivating factors: *gaining access to clients or customers' perspective* and *reaching out to clients or customers who would not be reached by either sector alone* (81.5% for the government, and 86.7% for the restaurant). The latter item was rated the second most important motivating factor by respondents across all sectors (81.3%).

The two least important motivating factors among respondents, particularly among organizations from the government group were *access to expertise or specialized skills* and *access to additional funding*. In fact, government organizations (~52%) were less likely than the restaurant sector (~87%) to be motivated by *gaining access to expertise of specialized skills* to enter into a PPP for healthy food ($p=.021$).

Table 5.8 – Summary of total responses for motivating factors across all sectors and the government and restaurant-related groups. Percentage of respondents answering “Important/Somewhat important”.

Motivating factors	All sectors ^a (n=112)	Government ^b (n= 27)	Restaurant ^c (n= 15)
Gain access to clients' or customers' perspective	89.3%	81.5%	86.7%
Reach out to clients or customers	81.3%	81.5%	86.7%
Gain access to expertise or specialized skills*	72.3%	51.9%	86.7%
Gain access to additional funding	69.6%	48.1%	66.7%

^a All sectors refer to NGO/Academia, the private sector and the public sector

^b Government includes the Ontario public health units, and the provincial and federal government/agencies.

^c Restaurants refers to organizations representing the agri-food business.

* Statistically significant difference between the government and the restaurant sector ($p\text{-value}= .021$)

Examples of survey respondents that provided additional comments using the open-response option:

To enhance current local food initiatives.

(Public sector)

[Creating] supportive environments for healthy eating is a strong motivator given [the] large proportion of the population that eats food prepared outside the home.

(Public sector)

To gain access to private sector perspectives [such as] expertise, specifically to learn more about innovation and venture financing

(NGO/Academia).

To establish a stronger relationship with the food industry.

(Public sector)

Enabling factors

All five items related to enabling factors in Table 5.9 were rated as important or somewhat important by more than 80% of respondents across all sectors as well as the restaurant sector. The top most important enabling factor for respondents across all sectors and for the government was *compatibility of organizational values with PPP goals* (93.7% and 96.3% respectively). The restaurant sector considered two different items as the most important: *compatibility of organizational values with PPP goals* and *experience with PPPs* (86.7% for each), followed by *existence of guidelines on PPP development*, *endorsement from a credible institution* and *support from an individual champion* (80.0% for each).

Existence of guidelines on PPP development was rated the second most important across all sectors (86.6%). *Experience with PPPs* and *endorsement from a credible institution* were indicated equally important by respondents across all sectors (82.1% for each), whereas the government indicated same level of importance to *existence of guidelines on PPP development* and *endorsement from a credible institution* (85.1% for each). Despite the importance that all participants placed on all enabling factors, the NGO/Academia were slightly less inclined than the public and the private sectors to consider them as facilitating PPP development.

Table 5.9 – Summary of total responses for enabling factors across all sectors and the government and restaurant-related groups. Percentage of respondents answering “Important/Somewhat important”.

Enabling factors	All sectors ^a (n=112)	Government ^b (n= 27)	Restaurant ^c (n= 15)
Compatibility of organizational values with PPP goals	93.7%	96.3%	86.7%
Existence of guidelines on PPP development	86.6%	85.2%	80.0%
Experience with PPPs	82.1%	77.8%	86.7%
Endorsement from a credible institution	82.1%	85.2%	80.0%
Support from an individual champion	80.4%	77.8%	80.0%

^a All sectors refer to NGO/Academia, the private sector and the public sector

^b Government includes the Ontario public health units, and the provincial and federal government/agencies.

^c Restaurants refers to organizations representing the agri-food business.

Examples of responses added by participants:

[...] would also need to ensure that any conflict of interest is removed regarding taxpayers dollars being spent on supporting private sector goals.

(NGO/Academia)

[The] likelihood that the partnership will produce benefit to clients
(Public sector)

Governance factors

Nearly all respondents rated governance factors as important or somewhat important. As shown in Table 5.10, the combined importance rates from all sectors as well as the government and restaurant sector were rated higher than 80.0%, with the exception of the item *equal decision-making authority among partners*. The latter item seemed less important to respondents from the government as compared to those from the restaurant sector (74.1% and 93.3% respectively).

The two highest rated governance factors across all sectors as well as for the government and the restaurant groups were *clarity and openness in decision-making*, and *transparency process for monitoring and evaluation* of PPP (97.3%, 96.3% and 93.3% respectively). The restaurant sector also indicated equally important to have a *formal accountability system* such as goals, responsibilities, and performance measures (93.3%). This item was also rated the second most important by all participants (96.4%), as well as by the government group (96.3%). As shown in Appendix 5_e (Table Q3a), respondents from the NGO/Academia reported lower importance scores for the item *equal representation partner organizations on board of directors* (76.0%) compared to the public sector (90.3%) and private sector (80.0%).

Table 5.10 – Summary of total responses for governance factors across all sectors and the government and restaurant-related groups. Percentage of respondents answering “Important/Somewhat important”.

Governance factors	All sectors ^a (n=112)	Government ^b (n= 27)	Restaurant ^c (n= 15)
Clarity and openness in decision-making	97.3%	96.3%	93.3%
Transparent process for monitoring and evaluation	97.3%	96.3%	93.3%
Formal accountability system	96.4%	92.6%	93.3%
Equal representation from partners on board committees	85.7%	81.5%	80.0%
Equal-decision making authority among partners	85.7%	74.1%	93.3%

^a All sectors refer to NGO/Academia, the private sector and the public sector

^b Government includes the Ontario public health units, and the provincial and federal government/agencies.

^c Restaurants refers to organizations representing the agri-food business.

Some respondents provided additional comments with respect to governance:

Agreements on purpose, respect, and trust are most important.

(Public sector)

When [it] is comes to the health of the public, I'm not sure that 'equal' is what we are striving for. To promote availability and consumption of healthy foods, there should be legislation to protect the public... Private sector [representatives] should be consulted, and implementation [should be] negotiated... but [board] committees should not have 'equal' representation from industry/private sector.

(NGO/Academia)

Decision-making on policy and messages must remain under public control. Implementation can be shared decision-making.

(Public sector)

Benefiting factors

There was a variation in the level of importance of what would constitute a benefit for entering into a PPP, according to all respondents of the online survey. As shown in Table 5.11, the top most important benefit was to *influence food industry to promote healthy eating*. This was observed across all sectors (92.0%) as well as the government (88.9%) and the restaurants (86.7%).

The two items *influencing food industry to promote healthy eating* and *improved image of your organization* were rated equally by respondents from the restaurant sector as the most important (86.7%). There was, however, a statistical difference in the responses between the government and the restaurants for this item. Government was less likely than the restaurants to consider *improved image* as a benefit to enter into a PPP ($p = 0.016$). All respondents, and respondents from the government and restaurants, reported consistently lower importance scores for the remaining items, with the lowest score for the item *creation of differential advantage for your organization*.

Table 5.11 – Summary of total responses for institutional benefits across all sectors and the government and restaurant-related groups. Percentage of respondents answering “Important/Somewhat important”.

Benefits factors	All sectors ^a (n=112)	Government ^b (n= 27)	Restaurant ^c (n= 15)
Able to influence food industry to promote healthy eating	92.0%	88.9%	86.7%
Improved performance of your organization	67.9%	59.3%	66.7%
Improved image of your organization*	64.3%	44.4%	86.7%
Creation of differential advantage for your organization	51.8%	37.0%	60.0%

^a All sectors refer to NGO/Academia, the private sector and the public sector

^b Government includes the Ontario public health units, and the provincial and federal government/agencies.

^c Restaurants refers to organizations representing the agri-food business.

* Statistically significant difference between the government and the restaurants (p-value= .016)

Additional insights were provided by some respondents:

Public health is in the business of protecting and promoting health. We don't want any other gain than to improve health for the community.

(NGO/Academia)

Positive influence on philanthropic efforts

(NGO/Academia)

Mostly interested in mitigating the risk of negative impacts on the image of our organization.

(NGO/Academia)

Barriers

As shown in Table 5.12, the most important barrier that would influence the process of building PPPs as indicated by respondents across all sectors was *inappropriate use of marketing strategies* (77.7%). Respondents from the government as compared to those from the other two groups seemed to give higher importance to all barriers examined in the online survey.

Respondents from the restaurant sector were less likely than the government to indicate *conflict of interest* as a barrier for engaging in PPP (p=0.012). In addition, respondents from the restaurants reported consistently lower importance scores for all items related to barriers for PPP development.

Table 5.12 – Summary of total responses for barriers across all sectors and the government and restaurant-related groups. Percentage of respondents answering “Yes, it is a barrier/Somewhat barrier”.

Barriers	All sectors ^a (n=112)	Government ^b (n= 27)	Restaurant ^c (n= 15)
Potential for inappropriate use of marketing strategies	77.7%	85.2%	53.3%
Potential conflict of interest*	75.0%	85.2%	46.7%
Opposition from stakeholders not involved in the PPP	74.1%	81.5%	53.3%
Lack of trust in the other partner organization	71.4%	77.8%	53.3%
Potential for loss of credibility in the eyes of the public	64.3%	77.8%	46.7%

^a All sectors refer to NGO/Academia, the private sector and the public sector

^b Government includes the Ontario public health units, and the provincial and federal government/agencies.

^c Restaurants refers to organizations representing the agri-food business.

* Statistically significant difference between the government and the restaurants (p-value= .012)

Respondents provided additional comments:

Public health is funded by tax-payers and partnering with private sector can pose credibility issues.

(NGO/Academia)

Have to carefully control for loss of credibility.

(Public sector)

Would expect an agreement to mitigate the risk of negative impacts on the image of our organization.

(NGO/Academia)

Potential link of own organization's to private sector's own brand/products.

(NGO/Academia)

Potential for loss of academic freedom, particularly in decision-making about accountability/performance measures by the more financially influential party.

(NGO/Academia)

Organizations from the public sector to partner with restaurant

As indicated in Table 5.13, the top three most suitable public sector organizations to partner with the restaurant sector according to the respondents from all sectors were the *Ontario Ministry of Agriculture and Food* (87.2%), the *Public Health Agency of Canada* (82.4%), and *Ontario Public Health Units* (80.7%).

Responses from the government showed more variation. The two most suitable organizations indicated by participants representing the government were *an independent organization established for the purpose of the partnership* (76.9%) and the *Ontario Public Health Units* (68.0%). Either the *Ontario Ministry of Health and Long-Term Care*, the *Ministry of Agriculture and Food*, or *Public Health Agency of Canada* was equally scored as the third most suitable organizations (65.4% for each).

The scores from respondents representing the restaurant sector were different from those of the government. Respondents from the restaurants indicated that the top most suitable public sector organizations to partner with them were *Ontario Ministry of Agriculture and Food* (93.3%) and *Public Health Agency of Canada* (85.7%). Three organizations were equally scored as most suitable to partner with the restaurant sector: *Health Canada*, the *Ontario Ministry of Health and Long-Term Care* and an *independent organization established for the purpose of the partnership* (80.0% for each).

A statistical difference was observed between respondents from the government and restaurant sector. The government was significantly less likely than the restaurants to choose the *Ontario Ministry of Agriculture and Food* as a suitable organization to partner with restaurants ($p = 0.032$).

Table 5.13 – Summary of total responses for suitable organizations from the public sector to partner with the restaurant chains, across all sectors and the government and restaurant-related groups. Percentage of respondents answering “Yes/Maybe”.

Public sector organizations	All sectors ^a (n=108-110) ^d	Government ^b (n= 25-26) ^d	Restaurant ^c (n= 13-15) ^d
Ontario Ministry of Agricultural and Food*	87.2%	65.4%	93.3%
Public Health Agency of Canada	82.4%	65.4%	85.7%
Ontario Public Health Units	80.7%	68.0%	60.0%
Health Canada	79.1%	61.5%	80.0%
Ontario Ministry of Health and Long-Term Care	76.4%	65.4%	80.0%
An independent organization established for the partnership	75.0%	76.9%	80.0%
Ontario Ministry of Education	71.3%	57.7%	53.8%
Your own organization	69.4%	50.0%	73.3%
Ontario Ministry of Children and Youth Services	69.1%	50.0%	66.7%
Ontario Ministry of Economic Development, Trade and Employment	65.5%	50.0%	73.3%

^a All sectors refer to NGO/Academia, the private sector and the public sector

^b Government includes the Ontario public health units, and the provincial and federal government/agencies.

^c Restaurants refers to organizations representing the agri-food business.

* Statistically significant difference between the government and the restaurants (p -value= .032)

^d N varies because of missing values of individual items.

Among health-related, public sector organizations (Table 5.14), *Public Health Agency of Canada* was indicated by respondents from across all sectors as well as the restaurant group as the most suitable organization to partner with the restaurants (82.4% and 85.7%, respectively). Differently, respondents from the government indicated *Ontario Public Health Units* as the most suitable organization (68.0%).

The *Ontario Ministry of Health and Long-Term Care* (76.4%) was the least suitable organization to partner with the restaurants according to respondents from across all sectors. On the other hand, according to the responses from the government, *the Ministry* was the second most suitable organization, together with *Public Health Agency of Canada*, to partner with the restaurants. In addition, the respondents from the restaurant sector seemed less likely to choose *Ontario Public Health Units* (60.0%) as their partners in potential PPPs.

Table 5.14 - Summary of responses for suitable **health-related organizations from the public sector** to partner with the restaurant chains, total from all sectors, and the government and restaurant-related organizations.

Public sector organizations	All sectors^a (n=108-110)	Government^b (n= 25-26)	Restaurant^c (n= 14-15)
Public Health Agency of Canada	82.4%	65.4%	85.7%
Ontario Public Health Units	80.7%	68.0%	60.0%
Health Canada	79.1%	61.5%	80.0%
Ontario Ministry of Health and Long-Term Care	76.4%	65.4%	80.0%

^a All sectors refer to NGO/Academia, the private sector and the public sector

^b Government includes the Ontario public health units, and the provincial and federal government/agencies.

^c Restaurants refers to organizations representing the agri-food business.

^d N varies because of missing values of individual items.

Some other suggestions provided by respondents:

Association of Ontario Health Centres

(Public sector)

Organizations such as mine can be partnering at local level, but I do think Public Health has to take leadership

(Public sector)

Nutrition Resource Centre

(NGO/Academia)

Ontario Food & Nutrition Strategy--Sustain Ontario or similar

(Public sector)

Roles of government and restaurants

Table 5.15 shows the summary of total responses across all sectors as well as the government and the restaurants groups for roles and responsibilities in a potential PPP. As indicated by high percentage of responses (above 80%) across all sectors and from the government and restaurant groups, with two exceptions, the government and the restaurant sector were indicated to have equal roles in PPPs for healthy food.

The majority of respondents across all sectors indicated that the government should be responsible for *developing guidelines* (95.5%), *participating in the design of the partnership* (92.7%) and *coordinating the implementation* (91.8%). It was observed, however, a statistical difference in opinions of respondents across all sectors ($p=.032$) with respect to *developing guidelines* as being a role of the government. As shown in Appendix 5_e (Table Q7aGov), the private sector seems less likely to consider *developing guidelines* as role of the government.

Nearly all respondents from across all sectors and from the government group (95.5 and 96.2% respectively) indicated that *being accountable for the partnership performance* was a role of the restaurants, while most respondents from the restaurants (93.3%) indicated it as a shared responsibility between government and restaurants.

The majority of respondents from across all sectors and from the government group (92.8% and 88.5% respectively) indicated that *contributing funding to the partnership* was most likely a role for the restaurant sector. However, respondents from the restaurant sector (93.3%) seemed to consider it as a government' responsibility.

Table 5.15 - Summary of total responses for the role of the government and restaurant chains across all sectors and the government and restaurant-related groups. Percentage of respondents answering “Yes/Maybe”.

Roles in a PPP	All Sectors ^a (n=110)		Government ^b (n=26)		Restaurant ^c (n= 15)	
	Gov role	Rest role	Gov role	Rest role	Gov role	Rest role
Develop PPP guidelines*	95.5%	78.2%	96.2%	76.9%	86.7%	86.7%
Participate in the design of the partnership	92.7%	92.7%	96.2%	92.3%	80.0%	93.3%
Coordinate the implementation of the PPP	91.8%	88.2%	96.2%	88.5%	93.3%	86.7%
Monitor the partnership operation	90.9%	86.4%	88.5%	88.5%	80.0%	80.0%
Be accountable for the PPP performance	90.0%	95.5%	84.6%	96.2%	93.3%	93.3%
Contribute funding to the partnership	81.8%	92.8%	73.0%	88.5%	93.3%	86.7%

^a All sectors refer to NGO/Academia, the private sector and the public sector

^b Government includes the Ontario public health units, and the provincial and federal government/agencies.

^c Restaurants refers to organizations representing the agri-food business.

*Statistically significant difference among responses across all sectors for the role of the government (p -value= .032)

Respondents provided additional comments:

Please do not create another [government] cumbersome bureaucracy. [It] is in the interest of private industry to make this partnership work.

(Public sector)

[...]the partnership should be government led with consult or expertise provided by restaurant chains.

(NGO/Academia)

[...]would prefer to partner with industry association, not individual companies.

(Public sector)

The public sector should be able to assert full authority here [...]. I believe that chains exert a disproportionate (excessive and asymmetrical) influence already on policy process, in the absence of partnerships... the partnership is more of a way to develop a solid implementation relationship with the chains rather than affording them any decision-making authority in the public interest.

(NGO/Academia)

Interventions for healthy eating in restaurant

As illustrated in Table 5.16, more than 80% of respondents from all sectors agreed with the interventions to increase the availability and consumption of healthy food in restaurants, despite significant differences in opinions within this group. A large percentage of respondents agreed with *creating or expanding healthier menu options* (93.6%), followed by *marketing strategies to make healthy food more attractive* (91.8%), *economic incentives* (88.2%) and *menu labeling* (86.4%). However, there were statistical differences across responses from all sectors with respect to 4 out of 5 strategies: *menu labeling* ($p=.009$), *economic incentives* ($p=.006$), *healthier menu options* ($p=.015$), and *smaller portion sizes* ($p=.004$). More than or equal to 81% of respondents from the government agreed that all interventions should be implemented in restaurants for increasing healthy eating. Variation, however, was observed in the responses from the restaurant sector. *Marketing strategies* (86.7%) to make healthier food more attractive were scored the highest intervention among respondents from the restaurant sector, whereas *smaller portion size* (53.3%) was scored the lowest. Respondents from restaurants were more likely to disagree with the government on *economic incentives*, *menu labelling* and *portion size*. In particular, there was a statistical difference in the responses between the government and restaurant sector for menu labelling ($p\text{-value}=.012$) and portion size ($p\text{-value}=.036$).

Additional insights from some respondents based on the open-response question:

Point-of-sale provision of nutrition information.

(Private sector)

Ban advertising of unhealthy food and beverages to children under the age of thirteen.

(NGO/Academia)

Past experience suggests restaurateurs feel smaller portions are not preferred options; however there might be potential to look at smaller portions of calorie dense portions of entree and increase veg & fruit portions of the entrée.

(Public sector)

Table 5.16 – Summary of total responses for strategies for healthy eating across all sectors and the government and restaurant-related groups. Percentage of respondents answering “Agree”.

Interventions for healthy eating	All sectors^a (n=110)	Government^b (n= 26)	Restaurant^c (n= 15)
Healthier menu options *	93.6%	96.2%	80.0%
Marketing	91.8%	92.3%	86.7%
Economic incentives *	88.2%	88.5%	60.0%
Menu labelling *	86.4%	92.3%	60.0%
Portion size *	80.9%	80.8%	53.3%

^a All sectors refer to NGO/Academia, the private sector and the public sector

^b Government includes the Ontario public health units, and the provincial and federal government/agencies.

^c Restaurants refers to organizations representing the agri-food business.

*Statistically significant difference among responses across all sectors (healthier menu: p-value= .015; economic incentives: p-value= .006; menu labelling: p-value= .009; portion size: p-value= .004)

*Statistically significant difference among responses between the government and the restaurants (menu labelling: p-value=.012; portion size: p-value=. 036)

5.5 - Interpretation

This study represents the first known empirical investigation that examined factors influencing the process of building PPPs in public health with a focus on increasing the availability and consumption of healthy food in restaurants in Ontario. Throughout this section, items rated as important or somewhat important are referred to as ‘important’ only for the purpose of brevity.

5.5.1 Exploratory factor analysis

In general, the results from the factor analysis provide evidence that nearly all items were appropriately grouped into the pre-determined factors initially proposed in the survey instrument (Appendix 5_g). This analysis is likely the first attempt in the literature to examine correlations among variables in a survey instrument capturing factors that influence the development of PPPs for healthy eating in restaurants. This is certainly a vital step in validating a new survey instrument.

The solution with 7 factors yielded technically adequate and congruent groupings of items from the survey instrument. Two new factors emerged from the analysis, which provided insightful alternatives for re-configuration of some items. Factors were re-named to reflect this new reconfiguration: factor 1= barriers; factor 2= governance; factor 3= motivation; factor 4= benefit; factor 5= shared leadership; factor 6= enabling; factor 7= outcome.

Items loaded on factors 1= barriers and 2= governance were strongly correlated and had high

internal consistency. These results confirm the initial configuration proposed in survey instrument. There is also a strong support from the literature for retaining these items. Authors have raised innumerable barriers as well as the importance of good governance in PPPs with the food industry (Buse & Walt, 2000b; Hawkes & Buse, 2011b; Kraak et al., 2009; Lewin et al., 2006).

An interesting finding refers to the grouping of items loaded on factor 3= motivation/enablers. Initially, items within these two concepts were arranged separately based on the notion that organizations need first to be motivated by legitimate reasons in order to be receptive to external collaboration. Once this happens, organizations will then seek out for enablers to facilitate the development of collaboration. Based on the grouping of this factor, two items initially conceptualized as enablers - *Q2d. endorsement from credible institutions* and *Q2e. existence of guidelines on PPP development* – seem to conceptualize better as a motivational items that create the conditions for PPP development. These two items perhaps reflect the notion of support or “push” required when organizations are willing to enter into a novel collaborative arrangement such as PPPs.

Item *Q1a, gain access to additional funding*, initially identified to measure motivation, was jointly loaded within items related to the concept of benefits represented by factor 4 in this analysis. This new grouping possibly reflect the weak level of importance given by respondents of the online survey on this item as to motivate organizations to enter into PPPs. *Gaining access to additional funding* may be, in fact, a benefit of entering in a PPP, particularly for public sector organizations facing fiscal constraints.

Item *Q2c., compatibility of organizational values with PPP goals*, had a weak loaded magnitude (.49) on factor 5= shared leadership. Some researchers would argue “against its retention” as this item presented the lowest loading score. However, it is noteworthy to mention that a high proportion of the survey respondents rated this item as the most important enabler for PPP development. This, in fact, would argue for its retention rather than elimination. Given the difference in results, a question remaining for future research is whether *compatibility of organization values with PPP goals* is better suited in other factor.

Factors 6= enabling and 7= outcomes presented very poor internal consistency with $\alpha=.42$ and $\alpha=.24$ respectively. These factors had also only two items each to explain correlations. Their lower reliabilities may have reflected the heterogeneous item content, or an insufficient number of items to

determine fundamental internal consistency. Nevertheless, their loading magnitude was strong, ranging from .51 to .75.

The two items loaded on factor 6 (*Q2b. support from an individual champion*, and *Q2a. experience with public-private partnerships*) were considered important by nearly 81% of survey respondents; whereas the item *Q4c., able to influence food industry to promote healthy eating*, loaded on factor 7 and was indicated by 92% of survey respondents as an important item to influence PPP development. These items are therefore highly recommended for retention. The item *Q4b., improved performance of your organization*, loaded on factor 7, did not carry strong score in the online survey. This evidence may suggest less applicability of this concept on influencing PPP development, and may call for its further examination in future research. These two new (factors 6 and 7), nevertheless, might shed lights on additional dimensions required to study PPP formation: enabling factors and outcome factors.

5.5.2 Descriptive statistics

Motivating factors

The top two most important motivating factors for PPP development refer to *gaining access to clients or customers' perspectives*, and *reaching out to clients or customers who would not be reached by either sector alone*.

These two items reflect the discussion in the literature on the importance of food access and effective messages for healthy eating. A number of cities in the United States have seen a high number of neighborhoods without supermarkets (also known as food deserts), which have impeded many communities to access healthier food options. Many governments have established partnerships with the private sector and attracted fresh-food retail investments to serve those underserved communities (*The Food Trust, 2004; Treubhaft & Karpyn, 2010*). That is, both governments and supermarkets seem to have gained access to a particular group of the population who would not be reached by either sector alone. With regards to understanding *clients or customers' perspectives*, scholars have called upon more studies to examine consumers' food habits and food preference to better develop and promote food products that contribute to a healthy diet consistent with national or international dietary recommendation (Gortmaker et al., 2011).

These two top motivational items differed from the motives of other PPP in public health. In the case of PPPs for product development, such collaborative efforts might be driven by the need to overcome the unattractive commercial return on the investments of companies in low and middle-income countries by offering an alternative model for investment (Reid & Pearse, 2003; Widdus,

2001, 2005). A different explanation is provided in relation to PPPs for strengthening health services. In this case, experts argue that the development of this type of PPP is motivated by the ability of both sectors to fill gaps that have been left by the health system because, on its own, competing priorities, management capacities and lack of resources render it incapable of providing public goods in effective and efficient ways (Meredith & Ziemba, 2007; Nishtar, 2004).

This study found that *gaining access to expertise or specialized skills* and *gaining access to additional funding* were the two least important motivating factors to enter into a PPP for healthy food. This result contrasts with the literature that articulates additional resources and expertise as the core motivating factors to engage in PPPs (Buse & Waxman, 2001; Reich et al., 2003; Widdus, 2001). It is possible that the context in which PPPs are developed may explain the distinction in these two motivating factors. Most of the literature on PPPs for public health refers to low-and-middle income countries facing complex health problems, many unmet community needs, limited resources and extreme competition for limited resources (Reich et al., 2003; Widdus, 2001). This scenario may explain the need for *gaining additional resources and expertise*.

In this doctoral thesis, the government seemed less interested than the restaurant sector in *gaining access to different expertise or skills* (51.9% and 86.7% respectively; $p\text{-value} = .021$). This might indicate that the government does not perceive restaurants' perspectives or skills as adding value into its work.

Enabling factors

Nearly all of respondents gave a high level of importance to all items related to enabling factors for PPP development. Of particular importance was *compatibility of organizational values with PPP goals*, which was rated the most important item by all respondents of the online survey. This finding appears to be consistent with the literature on challenges of engaging with food industry to promote healthy eating. In fact, frameworks and tools have been proposed to assess compatibility issues in partnerships with the food industry with the goal of helping governments and NGOs conduct due diligence in selecting appropriate partnerships (Kraak, Harrigan, et al., 2011).

The importance of having *guidelines for private sector engagement*, rated also high among the enabling factors, may indicate current deficit of PPPs in public health in Ontario. Scholars have highlighted the importance of having PPP guidelines to minimize conflicts of interest and biases when engaging

with food industry to promote healthy eating (Hawkes & Buse, 2011b; Kraak, Harrigan, et al., 2011). United Nations agencies such as the WHO have developed specific guidelines for private sector engagement (Buse & Waxman, 2001; Kraak, Swinburn, et al., 2011). However, in Ontario, the Ministry of Health and Long-Term Care has yet to define its own policies and guidelines for private sector engagement to guide any collaboration with the food industry.

Respondents from the government and the restaurant sector reported that *endorsement from a credible institution* is an important enabling factor for PPP development. This seems to indicate that organizations intending to enter into a partnership seek some reassurance to diminish any potential skepticism and to safeguard the organizations' integrity. In its report "Global Strategy on Diet, Physical Activity and Health", WHO, for example, expresses such endorsement by stating: *The food industry, retailers, catering companies[...] and the media all have important parts to play [...] all could become partners with governments and nongovernmental organizations in implementing measures aimed at sending positive and consistent messages to facilitate and enable integrated efforts to encourage healthy eating [...]* (World Health Organization, 2004a)(p.13).

Experience with PPPs also emerged as an important factor to facilitate PPP development. This may be due to current limitations in research and practice with respect to PPPs in Ontario, underscoring the need to rely on external sources of expertise if a PPP is to be developed.

Governance factors

The main practices raised in the literature on good governance in PPPs are in line with the items identified in this study as important by nearly all respondents of the online survey (Buse & Tanaka, 2011; Hawkes & Buse, 2011b). *Clarity and openness in decision-making* and *transparent process for monitoring and evaluation*, which were rated equally important across most of respondents, represent the practice of transparency in PPPs. Studies have suggested that transparency may reduce duplications, highlight operational gaps and may facilitate input and feedback between partners on how to maximize outcomes (Buse & Tanaka, 2011).

Accountability in PPPs is considered a key driver in governance and refers to a concept linked to partnership performance as it influences why decisions are made (Kraak, Swinburn, et al., 2011). *Formal accountability system* was the second most important item rated by the majority of respondents. This may imply that partner organizations would be inclined to define shared goals, roles and

responsibilities, including measurable indicators and targets for monitoring progress and measure success.

The literature has criticized global health partnerships as having insufficient representation of relevant stakeholders in boards, inadequate to enable members to properly represent their constituencies (Buse & Tanaka, 2011). In this doctoral thesis, the practice of *equal representation from partner organizations on board committees* and *equal decision-making authority among partner organizations* were reported by most respondents as an important governance practice in PPPs. Based on this finding, it may be implied that in future PPPs in Ontario, partner organizations would have a positive tendency to create a legitimate representation of partner organizations, sharing different functions and roles in the scheme of the partnership.

Benefiting factors

Overall, there was a great variation across sectors on what would constitute an important benefit for engaging in a PPP. Some of the main arguments in the literature on factors that influence interorganization collaboration seem not to apply fully to PPPs for healthy food in Ontario. The literature explains that organizations may seek out or be receptive to interorganization cooperation when they face with situations of resource scarcity or performance distress (Pfeffer & Salancik, 1978; Schermerhorn, 1975).

In this study, *creation of differential advantage*, *improved image* and *improved performance* were considered the least important benefits that respondents across sectors would think to obtain from participating in a PPP. In the case of *improved image*, the results indicated a statistical difference in the opinions between the government and the restaurant sector. *Improved image* is a concept that is likely to attract restaurants, as they might perceive benefits of being associated with the government, whereas the contrary may be not true or desirable.

Influencing food industry to promote healthy eating emerged as the most important benefit across all sectors as well as for the government and the restaurant sector. Although this finding was likely to be expected to come from the public sector, it was surprising to discover that the restaurant sector also gave higher importance to this benefit. This may suggest that restaurants seek for legitimacy of their actions. The primary reason might not be to provide better nutrition to reduce risks of overweight or obesity; rather these organizations might be facing pressures by key stakeholders (consumers,

government, intergovernmental organization, media, etc.) to adjust to the emergent problem of obesity or diet-related chronic diseases.

Barriers

In general terms, barriers for building PPPs varied across respondents of the online survey. The barriers reflect some of the contentious issues discussed in the literature on partnerships with the food industry. *Inappropriate use of marketing strategies* was rated the most important barrier for engaging in PPPs. Indeed the literature has provided examples of inappropriate co-sponsorship and co-branding practices involving certain food and beverage products (Kraak, Swinburn, et al., 2011). For example, UNICEF faced criticism when partnered with Cadbury in 2008 to sell co-branded candy and chocolate in Canada to raise funds to support children's education in Africa (Kraak, Swinburn, et al., 2011).

The *inappropriate use of marketing strategies* by the food industry is perhaps linked to the second most rated barrier, that is, *conflict of interest*. Scholars have advised governments, NGOs and intergovernmental organizations to create mechanisms to avoid conflict of interest by, for example, ensuring that co-branded activities support only healthy products and healthy eating (Kraak, Swinburn, et al., 2011). As anticipated, government was significantly more likely than the restaurant sector to report *conflict of interest* as an important barrier for PPP development. If not handled appropriately, this difference of opinions about *conflict of interest* may create mistrust among partners and accentuate any perceived risk of dominance by commercial interests.

Opposition from stakeholders not involved in the PPP was the third barrier rated as important by respondents across sectors. This seems to reflect the notion that the behavior of organizations is inherently dependent on the types of actors involved, their shared beliefs, and cultural norms that prevail in the context of policy development (Peters, 1998b). In Ontario and Canada, where public health is essentially a public sector responsibility, oppositions against PPPs from external stakeholders may seem inevitable.

Less important were the items *lack of trust in the other partner organization* and *potential for loss of credibility*, particularly among the restaurant sector. Although not well explored in the literature, mistrust has been referred as to a critical element in the development of PPPs (De Costa et al., 2008; De Pinho Campos et al., 2011). In PPPs for product development, scholars argue that successful partnerships

have depended largely on the ability to avoid cultural clashes (Ridley et al., 2001) and to discuss sensitive issues at an early stage of the partnership in order to reduce the level of skepticism and mistrust among partner organizations (De Pinho Campos et al., 2011). The low level of importance given to this item by respondents of the survey might be, in fact, due to the lack of opportunities in Ontario for collaboration between the public and private sectors.

Organizations from the public sector to partner with restaurants

According to responses across all sectors, the top most suitable organization to partner with the restaurant sector was not from the health field. The *Ontario Ministry of Agriculture and Food* was indicated the most suitable organization from the public sector to partner with restaurants. The *Ministry of Agriculture and Food* seems to be a “logical fit” with regards to PPPs for healthy eating due to its mandate and experience working with the food industry, and its role in advancing the agri-food sector in Ontario, including the promotion of fruit and vegetable consumption. However, the government group, which consisted mostly by organizations from the health field, was less likely than the restaurant sector to choose the *Ministry of Agriculture and Food* as a suitable organization to partner with restaurants. It is possible that the comparative advantage of the *Ministry of Agriculture and Food*, that is, its mandate and experience with the agri-food industry may in fact pose some constraints on its intention. This ministry may be perceived as promoting and supporting the interests of the food industry rather than that of the public’s health.

As for the government and the restaurant sector, they seem to agree that the most suitable organization would be *an independent one established for the purpose of the partnership*. This is consistent with the literature on PPPs for product development, of which its business configuration has evolved from program-based PPP model to an independent organization model such as GAVI Alliance or The Global Fund (De Pinho Campos et al., 2011).

Among health-related organizations from the public sector, *Public Health Agency of Canada* was the preferred organization to partner with restaurants according to respondents from all sectors as well as the restaurant group. There is precedent for the development of PPPs involving this organization. PHAC has engaged in various occasions with the private sector to address risk factors for chronic disease such as physical activity and healthy eating. For example, PHAC has partnered with Maple Leafs Sports Entertainment Foundation, Tim Hortons and others players to fund a diabetes

prevention program among urban First Nations, Metis and Inuit youth (Public Health Agency of Canada, 2012).

In comparison with other health-related organizations, the *Ministry of Health and Long-Term Care* received the lowest score among respondents from all sectors, whereas *Public Health Units* received the lowest score among respondents from the restaurant sector. In addition, respondents from the government indicated lower scores to all health-related organizations from the public sector (i.e., MOHLTC, PHUs, Health Canada and PHAC). It is unclear at this point why these organizations received lower scores. It is possible, however, that availability of resources and capacity of the government in developing PPPs might have played a role.

Roles of government and restaurants

In general terms, respondents across all sectors indicated equivalent roles between the government and the restaurant sector in potential PPPs for healthy eating. One exception was observed with regards to the role of *developing PPP guidelines*. Nearly all respondents from the public sector were most likely than respondents from the private sector to agree on *developing PPP guidelines* as role for the government. This finding is consistent with the literature on PPPs for healthy eating. Scholars have called upon the government to develop guidelines for private sector engagement, including not only definitions on dietary recommendations but also guidelines on food marketing strategies to avoid further conflict of interest (Gomes & Lobstein, 2001; Kraak, Swinburn, et al., 2011).

Most respondents across all sectors seemed to agree that *accountability of partnership performance* is an equivalent role of the government and restaurants. However, respondents tended to agree more with the restaurants playing such role. Examples of global PPPs have indicated that, for accountability to serve effectively, it will depend upon clear specification of objectives and agreement on roles and responsibilities, including work plans, deadlines, deliverables, and sanctions for non-performance (Buse & Tanaka, 2011).

Respondents from government and the restaurant sector seemed to agree on having shared roles in PPPs, apparently with one exception. Respondents from the restaurant sector indicated that *contributing funding to the partnership* should be a role of restaurants. In other types of PPPs in public health, provision of funding has come largely from private philanthropy and pharmaceutical companies. Scholars have examined the global influx of resources directed to PPPs to improve

health in low-and-middle countries. They found that development assistance for health has risen sharply since 2002 mostly because of increases from organizations such as the Bill & Melinda Gates Foundation (Ravishankar et al., 2009).

Interventions for healthy eating in restaurants

Overall, the majority of respondents agreed with the importance of interventions to increase the availability and consumption of healthy food in restaurants. *Healthier menu options* and *marketing strategies* were the top two interventions indicated as important by respondents across all sectors as well as for the government and the restaurant sector. This positive response might be a reflection of current practices among restaurants. In some cases, restaurants have modified recipes or cooking techniques, added healthier food or offered reduced portion size (Centers for Disease Control and Prevention, 2010). They have used primarily point-of-purchase campaigns emphasizing healthy food (e.g. yogurt, fruits) placing signs next to low-fat, low-cholesterol entrees on menu boards (Centers for Disease Control and Prevention, 2010)..

High scores were observed for most interventions. However, statistical differences appeared in mostly all items: *healthier menu options*, *menu labelling*, *economic incentives* and *portion size*. Respondents from the private sector seemed less likely than respondents from NGOs/Academia and the public sector to agree with *healthier menu options* as an intervention to increase healthy eating. With respect to *menu labelling*, differences in agreements were observed between the government and restaurants, with the largest differences across all sectors (i.e., NGO/Academia, the private sector and the public sector). At least in part, this might be a reflection of an announcement made in the Fall of 2013 by former Minister of Health and Long-Term Care, Deb Matthews. She introduced a legislation requiring large chain restaurants to display calories and other nutritional information on their menus and menu boards (Ministry of Health and Long-Term Care, 2013b).

The importance of *economic incentives* to promote affordable healthy food options varied according to respondents from all sectors. The private sector, which consisted of restaurant-related associations, was less likely than the NGO/Academia and the public sector to agree with the importance of economic incentives to promote healthy eating. This perhaps is linked with the limited evidence in the literature on price incentives (e.g. reduction or discount coupons) to increase access and consumption of healthy food in restaurants (Glanz & Hoelscher, 2004). However, pricing strategies have been used to promote healthy food choices in other venues. For example, discount prices on

low-fat snack sales from vending machines has been associated with significant increase in low-fat snack sales (French et al., 2001). In addition, evaluation of combined nutrition messaging and price reduction strategies suggests that price decreases may be a more powerful means than health messages for increasing consumption of healthy foods (Battle & Brownell, 2002).

Respondents across all sectors and those from the government seemed to agree with creating or expanding standard options for *smaller portion size* of food and beverage. However, this intervention, which showed significant differences in the level of agreement, was the least popular among respondents from the restaurant sector. Studies suggest that the availability of larger portion sizes influences increased consumption of food and beverage among both normal-weight and overweight men and women (Rolls, Morris, & Roe, 2002). Although evidence exists on the effects of increased energy intake associated with portion sizes, the result of this thesis may indicate a potential disagreement among respondents with regards to smaller portion size as a means to promote healthy eating in restaurants.

5.6 – Final Remarks

The online survey in this thesis was the first ever conducted effort in Ontario and elsewhere to examine factors that influence the process of building PPPs in public health with a focus on PPPs for increasing the availability and consumption of healthy food in restaurants in Ontario.

The factor analysis provided evidence that nearly all items were appropriately grouped into the five pre-determined factors initially proposed. However, it also showed a technically adequate and congruent grouping of items into 7 factors, which could be considered for further improvement in the survey instrument. This is likely the first attempt in the literature to examine correlations among variables in a survey instrument capturing factors that influence the initiation of PPPs in public health.

Perhaps more importantly, this survey has confirmed that many factors considered important for PPP development in other areas of public health, are also important for partnerships for healthy food in Ontario.

This quantitative phase revealed emerging findings. Organizations in Ontario representing the NGO/Academia, the public and private sectors are more likely to be motivated to enter into PPPs

when they recognize certain practical gains (i.e., *gaining access to clients or customers' perspective* and *reach out to clients who would not be reached by either sector alone*) rather than additional funding as discussed in previous literature.

A surprising finding was that the majority of the restaurant-related associations gave high importance to the item *able to influence food industry to promote healthy eating*. It is arguable now, after the factor analysis results, whether this item should be placed as “benefit” or as “outcome” in a survey instrument. In either case, the analysis seems to suggest that the restaurant sector is seeking for legitimacy of their actions with regards to promoting healthy food and healthy eating.

A shared vision of what constitutes good governance in PPPs was identified in this PhD thesis. Nearly all participants agreed with importance of *clarity and openness in decision-making*, the practice of *transparency, accountability* and *representation* in PPPs in public health.

In addition, the findings support initial assumptions about divergence in opinions between the government and the restaurant sector on the importance of some factors that would influence PPPs for healthy eating. *Gaining access to expertise or skills* as a motivating factor to enter into PPPs is less important for the government as is for the restaurant sector, whereas the item, *improved image of your organization*, is much more important for restaurants. In addition, the restaurant sector is less likely to perceive *conflict of interest* as a barrier for building PPPs for healthy eating.

These findings also support fundamental messages about collaborations between the public and private sectors. That is, the need to fine-tune between *organizational values and PPP goals*, as well as address *inappropriate use of marketing strategies* and *potential conflict of interest*. These issues are, possibly, one of the critical deliberations government should consider prior to engaging in partnerships with the restaurant sector.

In relation to potential PPPs for healthy eating in restaurants, perhaps the government and the restaurant sector would find common ground on various fronts. They seemed to agree that PPPs should be structured as *an independent organization established for the purpose of the partnership*. They also seemed to coincide on shared roles and responsibilities, with exception of contributing funding. This latter item was indicated to be a role for the restaurants. In addition, the government and the

restaurant sector agreed on the importance of several healthy eating interventions, even though there were statistical differences with regards to menu labelling and smaller portion sizes.

The empirical evidence built from this analysis is part of a mixed-method research design to build a framework representing the factors considered important in the process of building PPPs in public health. The next chapter presents the QUAL analysis of the follow-up interviews, which will be integrated with the findings of this online survey to develop the theoretical framework (Chapter 7).

Chapter 6

Qualitative Findings

6.0 Introduction

This chapter presents the findings of the qualitative phase of this mixed method study, which was used to complement, expand and explore divergences of the quantitative findings. The QUAL data analysis inspired by the grounded theory technique was undertaken to get a better understanding of relevant factors related to the development and operations of PPPs for increasing the availability and consumption of healthy food in restaurant chains in Ontario. The main research question that guided this phase was: How do key stakeholders respond to the challenges and opportunities in relation to building PPPs for healthy eating in restaurant in Ontario?

The chapter begins with a brief description of the participants who were interviewed in this study. Next, the findings are presented under the umbrella of the pre-determined factors that influence PPP development: motivating factors, enabling factors, governance, benefitting factors, hindering factors, as well as interventions for healthy eating in restaurants. These factors are called *themes* in this QUAL phase. Within each overarching theme, a description of the corresponding category and sub-categories is provided and relevant quotes are used to substantiate the findings presented. When appropriate, a reference to the purpose of this phase is made to highlight the contribution of this QUAL component to the overall study. The chapter ends with the concluding remarks.

6.1 Description of Participants

Of the 25 participants invited to take part in the interviews, 16 of them confirmed their interest and were interviewed during Fall of 2013. Eight participants were from the government. One represented the provincial government. Another was from the federal government and 6 were from the local government. Among them, one participant was part of an organization with experience in PPP development.

In addition, one participant represented the NGO sector with experience in developing PPPs, and 7 represented the restaurant-related associations, of which one had experience in developing PPPs. They were the same individuals who responded to the quantitative survey and were similarly distributed in terms of gender.

6.2 Findings

In this section, the presentation of these findings is divided into two groups, which are referred to below as *formation of PPPs in public health* (broad classification) and *healthy eating in restaurants* using a PPP model (specific classification). Despite some intertwined information, this distinction seemed necessary for differentiating findings that could be applied to explain PPP formation beyond healthy eating, from those that can be specific to interventions for healthy eating in restaurants using a PPP model.

6.2.1 Formation of PPPs in public health

This subsection presents the findings that are related to factors influencing the process of building PPP, which can be applied to a wide range of public health interventions. That is, the findings are not exclusive to PPPs for healthy eating and might be considered in other types of public health interventions that intersect with the private sector. Although the initial intention was to examine large restaurant chains, it became evident throughout the analysis of the interviews that small, independently owned restaurants shall be included in interventions promoting healthy eating. Thus, the description that follows is not restricted to large restaurant chains.

6.2.1.1 Contextual factors

The theme contextual factor reflects the expansion of results of the quantitative survey. This theme describes issues around circumstances that may influence government decision-making about and planning for PPP engagement. It also uncovers the requirements that the government should undertake when planning a PPP. These factors are discussed in the sections that follow.

Circumstances influencing decision-making about PPP development:

The analysis of the interviews pointed to some circumstances that may play a role in influencing either the public or the private sector to enter into a PPP (Table 6.1). In this category, participants discussed how complex problems, political pressures or research evidence affect decision-making.

Table 6.1 - Category about circumstances influencing decision-making about PPPs

Sub-category	Open codes
Complex problems	<ul style="list-style-type: none"> Being pushed to engage in collaboration due to complex problems or pressures that cannot be solved alone
Political forces	<ul style="list-style-type: none"> Being willing to engage in collaboration due to political reasons Considering public opinion to guide government's decision
Research evidence	<ul style="list-style-type: none"> Considering research evidence to guide government decisions

Complex problems that cannot be solved by government alone:

When organizations face problems and realize that they are complex in nature, they may be pushed to engage in collaboration with other sectors. One participant illustrated this issue with an example of the former Mayor of New York city, Michael R. Bloomberg. New York's approach to PPPs was fostered by the intention to restore New York City's confidence after 9/11, as well as dealing with downward fiscal pressures and changing citizen expectations (Freedman Consulting - LLC, 2013).

They [New Yorkers] were also on the brink. That was the difference. If you are pushed to a situation where you can't come back from; if you are at the precipice of falling off a cliff, () you are forced to () acknowledge that there is something required from both parties to get the best good. He [former Mayor Michael R. Bloomberg] understood that. We [Ontarians] haven't hit rock the bottom. That's our biggest problem.

(Interview #14: PRIV)

The issue of facing complex problem applies not only to the public sector, but also to private corporations as they are affected by the escalating costs of medical insurance.

Health care costs have escalated. Eventually () companies are going to look at it and say: we can't afford to keep doing this anymore. () Is it a matter of getting more salads in? No, it's not. But it takes an entire company to make a mindset.

(Interview #14: PRIV)

Political forces influencing decision-making:

Political forces were also identified as influencing government's willingness or not to enter into a PPP either due to political reasons or public opinion. One participant explained: "what people think is where the policy realm comes in" (Interview # 14: PRIV). The quotes below further illustrated that:

() There is some negativity with all of these types of discussions (). We have got a case [that] not always we have a majority government in every province (). We are always cognizant of [that] and what the public thinks about these types of things [partnerships]. [This] might impact how deep they [government] get into them [PPPs].

(Interview #8: NGO)

() *Politics is what is (). Some people wanna look good before an election at the political level, right? So, it is gonna be push, push, push, push [for PPP development] and look what I did, if it works.* (Interview #13: PRIV)

Research evidence supporting decision-making:

Another factor raised by some participants was the need to consider research evidence when deciding on interventions involving the public and the private sectors. One participant criticized the lack of research done by the Ontario government for the implementation of food policies in schools. He explained:

They [Ontario government] decided that [they] are not going to allow certain foods [being sold] in schools. They didn't do a study like you are doing. They just decided that the best thing for all of us is no more French fries and no more pizza but, today, all the kids are at Pizza Pizza and cafeterias are going out of business.
(Interview #13: PRIV)

Some participants from the private sector stated their inclination to work with the government to build research evidence for addressing healthy eating in partnership with the restaurant sector.

I think you could engage them [restaurants] to have a better understanding of what they see as positive and what they see as barriers, () major concerns, and speak with somebody like me.
(Interview #4: PRIV)

() *Why doesn't the government work with us [the private sector] and we have an agency to measure the public opinion as they come in and out of the stores () so that we can take the model and move it elsewhere in the province of Ontario and do it effectively?* (Interview #13: PRIV)

Government requirements in considering the development of PPPs:

This category captures participants' discussion of several considerations when planning PPPs (Table 6.2). Participants from the public sector indicated that there is a need to lay the groundwork and develop guidelines to escort them towards essential aspects in building PPPs.

Table 6.2 – Category about requirements for the government when considering PPP development

Sub-category	Open codes
The groundwork for planning PPPs	<ul style="list-style-type: none"> • Devoting time for planning before entering into a PPP • Being guided by public health goals • Distinguishing when using regulations or partnerships • Deciding on the approach for using public money on interventions involving restaurants • Considering the nature of the intervention before deciding on PPP development • Defining the type of collaborative arrangement • Avoiding partnerships with potential conflictive food company • Partnering with associations representing the food-related sector rather than an individual food company • Having the government controlling decision-making with regards to PPPs • Having government guidelines to enter into a PPP

Groundwork for planning PPPs:

There was considerable discussion regarding requirements for planning PPPs. Participants raised points related to devoting time for planning PPPs, being guided by public health goals, having the government controlling decision-making, among others. One participant indicated that based on his own experience from previous PPPs, it was important to dedicate plenty of time in planning the partnership. He explained:

Certainly with respect to our public-private partnership, what has been important to us is that we spent a lot of time up front in determining who does what, who is responsible for what, what are () the performance measurements, [defining] the commitment and [discussing] openness and transparency as well. () You have to put a lot of time into that () to make sure that people are respecting what they've committed to do.

(Interview #2: GOV)

Participants also stressed the importance of keeping public health goals at the centre of the partnership to protect government from being expropriated by profit motive. One participant commented:

What is very important in all of these things is that you really have to be driven by the public health objective and you really have to establish the public health objective prior to choosing the collaboration. () Then you stay true to the public health perspective of why you're doing this.

(Interview #2: GOV)

Participants acknowledged that regulations and partnerships are two different approaches that can be used to influence the industry to provide healthier food. One approach is mandated by the

government, and the other is voluntary, based on shared agreements. Distinguishing when applying one approach over the other is a necessary step before considering PPPs.

Sometimes is only a public policy issue (). Let me give an example. The public long-term care facilities () allocate seven dollars and forty-five cents () for three meals and two snacks a day to people who are towards the end of their lives. () So in this case, I wouldn't ask [to develop] a public-private partnership () to improve that. In this case, it is clearly a public policy decision.

(Interview # 16: PRIV)

If we are backed up with legislation, then it would be [necessary to have] some sort of enforcement. If there is a partnership, then you are offering in goodwill.

(Interview #1: GOV)

I don't think that it is a partnership if it is legislated. A partnership to me indicates that people have willingness to do it and legislative mandate is not willingness.

(Interview # 10: GOV)

Another aspect related to the planning of PPPs is about the debate about using taxpayer dollars in supporting healthy eating interventions. One participant explained that deciding on whether to approach the problem of preventing diet-related chronic disease through regulation or through a PPP is a choice that the government needs to make. In either case, taxpayer dollars will be used to support the initiatives either through enforcement in the case of regulations or through direct/indirect funding in the case PPPs. In addition, even if it were not used in those two scenarios, taxpayer money would be used in detriment of medical cost. A participant concluded this by saying:

There is not a pot of gold somewhere that is a neutral pot of money.

(Interview # 8: NGO)

Concerns about flowing money from the restaurant sector directly to the government were raised as a concern by some participants. They indicated that the government should avoid this at all cost and explained that by restricting private sector money, the government would feel comfortable to participate in a PPP.

I think, first of all, there would have to be no dollars directly flowing from the restaurant sector to the government in exchange for being allowed to use its [government] image.

(Interview #5: GOV)

A number of participants stressed that it is necessary to consider the nature of the public health problem and the type of intervention required before deciding on a public-private partnership.

These two conditions would influence decisions on whether a collaborative arrangement is appropriated or necessary. Participants illustrated this point with examples:

A public-private partnership to me is like a toolbox. () I don't know what I am building. My toolbox is gonna be different if I wanna do some plumbing or if I wanna do some carpentry. I have a different tool set of toolboxes. I like to look at these things from an end game. What is my end goal? What do I wanna accomplish? Do I wanna have healthier eating or more local food? () and I try to pick what tools best fit.

(Interview # 16: PRIV)

() I think it would be difficult for the government to partner with the restaurant sector on promoting nutritious or whole food...() how would a restaurant promote nutritious food if that wasn't what they serve, right?

(Interview # 15: GOV)

The question really is about () how much do we as the government have to visibly partner with the industry to make it happen.

They know it. The restaurant industry knows the problems.

(Interview # 2: GOV)

Another consideration in the planning stage refers to defining the type of a collaborative arrangement between the public and private sector. Participants indicated that a PPP could take different formats, ranging from a loose form of collaboration such as networking to a more formal arrangement with shared resources and responsibilities. The following quote best explains potential arrangements:

It could be a simple networking about exchanging information. It could be more cooperative, () where you're actually talking about enhancing the capacity of the partners to achieve mutual benefit. There's the nature of what we're talking in terms of a partnership that it can be very casual or that can involve sharing resources. You can go the whole gamut of different sorts of approaches. Depending on the approach that you're using, you can affect things in different ways (). There are those with a very loose, open [approach] or a very partner-driven along with shared resources.

(Interview # 2: GOV)

Some participants expressed concerns about government engaging with certain sectors within the food industry, in particular food and beverage manufacturers or fast-food companies due to potential controversial issues or conflict of interest. From a government's perspective, engaging with manufacturers or fast-food restaurants may undermine government's credibility and, therefore, government should avoid partnering with them. The quotes below exemplified these concerns:

One has to be very careful of the types of partnerships that you go into and the topic of that partnership. That's where the type of initiative becomes important, [for example,] eating campaigns that involve Coke and Pepsi Co and () a wide variety of companies as well or a number of restaurants as well. In some ways, I would like to go there, but at the same time I would think that we would maybe lose our credibility. () I'm reticent at this point to say, work with food manufacturers.

(Interview # 2: GOV)

I'd be personally skeptical that you could have a fast food restaurant promoting healthy eating. So I think it would have to be in an unbranded way, right? So you could have a partnership with a restaurant and the restaurant wants to promote eating fruits and vegetables but I think it would have to be absent their brand and logo in order to not be marketing their restaurant.

(Interview # 15: GOV)

One participant stated that concerns with government's credibility might be lessened if the partnership involves food retailers or media companies, as explained by the quote below:

Other companies could be appropriate such as grocers. () You could bring in the grocers into that sort of thing 'cause they're a bit more agnostic with respect to what they sell. They just wanna sell, right? So, they're fine if they sell healthier-for-you products or less healthier-for-you products, so it's not as big a conflict. () When you have public-private partnerships with different media companies like Corus Entertainment, like Transcontinental, with the print media like AOL, the digital environment, () that's a different kettle of fish, right?

(Interview #2: GOV)

Partnerships between public health units and restaurants were also raised as conflictive due to the fact that in Ontario the medical officers of health have the mandate to inspect and certify restaurants, as evidenced by the quote below:

The problem with public health units, and we probably really do actually have a conflict of interest, is that [it] would not be listed as a partner () as we have the ability to close these institutions [restaurants] based on inspection results. I have the ability to terminate somebody's business so that's a big deal.

(Interview # 5: GOV)

Participants across all sectors agreed that partnering with association representing the food related-sector is feasible and appropriate for the government. They indicated that this would protect the government of being perceived as favouring one company over the other or as associating a restaurant as healthy choice.

For the government to work with this association I think [it] is probably a fairly easy 'cause we often do work with associations, right? [This] is different than the government aligning with a particular chain.

(Interview# 1: GOV)

When we do public-private partnerships with companies we don't want to give the perception that we are sort of in bed with a particular company so our public-private partnerships [are] done through associations.

(Interview #2: GOV)

Some participants also found that food-related associations are best placed to partner with the government due to their knowledge of the industry and their position to facilitate the execution of the partnership. One participant explained:

I think it would be better to get some key organizations, like the Ontario Restaurant Hotel Motel Association or the [former] Canadian Foodservice and Restaurant Association, [and] getting some people there that understand the businesses. () They're going to be the best ones to say to you, yeah this is gonna be feasible, this is on track, or there is just no way that this concept is gonna fly.

(Interview # 4: PRIV)

Participants also discussed the issue of ensuring that government holds decision-making authority in PPPs, in particular with regards to communications. Their reasoning refers to the role of the government in protecting the health of the citizens and its accountability with taxpayer dollars.

The quotes below illustrate some of these points:

When it comes to decision-making, in theory the government has the public good at heart, whereas a private entity will always, always lead on the private benefit.

(Interview # 16: PRIV)

We have to make sure that when we get into a partnership with them [restaurant sector], it's sort of our ethical obligation to ensure that public health is the overriding factor, which means essentially that the decisions about policies and about the messages have to stay with the government and the public health organization.

(Interview # 2: GOV)

() We've done locally with our different types of public-private partnership is that we basically kept 100% control over the message and that's very clear all the way along (...) It took a while to get the industry association to agree with that but if they want to collaborate with me, part of the thing is that I have a 100% control over the message.

(Interview # 2: GOV)

The overall message conveyed by some participants was that guidelines developed by the government are needed in order to support the government in the process of developing partnerships with the private sector. Those guidelines are needed not only for ensuring due diligence in protecting government credibility but also for supporting them in the planning stage. One participant explained:

I think the government would have to, within its own walls, decide upon some pre-existing guidelines and principles by which it would decide whether or not to enter into a particular partnership. () Those pre-existing guidelines and principles have to really be established by government itself. I don't think that's the level at which you sort of get the input from the private sector in creation of government's own guidelines. So for example, in public health, we inspect restaurants and we give them a rating, right? We don't collaborate with the restaurants to create what those rules are. We have certain standards. If the restaurant

meets those standards, they get an “A” and they can publish their “A” from us. () We are happy with that, but we have set the standards first.
(Interview # 5: GOV)

6.2.1.2 Motivating factors

This theme describes a new category that emerged from the QUAL interviews, which relates to incentives. Participants raised incentives as an important motivating factor to engage restaurants in collaboration with the government to promote healthy eating. They discussed financial and non-financial incentives and acknowledged the business profitability of restaurants as an element to take into consideration.

Incentives for restaurants to develop healthy eating initiatives:

This category describes the financial and non-financial incentives that the restaurant sector would expect to obtain for engaging in a PPP for healthy eating (Table 6.3). It also captures the discussion about profit motives of restaurants; that is, the requisite to consider that restaurants need to be profitable.

Table 6.3 – Category about incentives for restaurants to develop PPPs for healthy eating

Sub-category	Open codes
Financial incentives	<ul style="list-style-type: none"> Showing evidence of business opportunity for healthy eating interventions
Non-financial incentives	<ul style="list-style-type: none"> Being endorsed by the government
Acknowledgement of profit motive	<ul style="list-style-type: none"> Acknowledging the profit motive of restaurants Avoiding interventions that affect profits motives of restaurants

Financial incentives for the restaurants to promote healthy eating:

This sub-category is captured by participants’ discussion of financial incentives that would motivate restaurants to engage in PPPs for healthy eating, particularly among those small, privately owned restaurants. Participants explained that restaurants would be willing to create healthier menus if they perceive any evidence of potential business opportunity. Some participants agreed that if PPPs for healthy eating present financial opportunities, restaurants would invest significant resources. One participant explained:

There are alternative ways and means of offering [healthy menu options]. How? Showing success stories and maybe case studies of those businesses that have done it and succeeded. When they see that business sense, they might () switch over or at least add a [healthier] choice. (...) If it makes business sense for the restaurant, they’re going to continue doing it. If it doesn’t, how long are

you gonna keep up that menu? And if it does make sense, they will make their core menu less and less and keep switching to that [healthy] item.
(Interview # 3: PRIV)

Incentives that bring economic advantage for restaurants such as tax incentives, new customers, government subsidies or direct funding were raised as “strong levers” (Interview # 12: GOV) to engage restaurants in healthy eating interventions. The quotes below illustrate this finding:

I believe it's only my own belief that, public-private partnership is the only way to go. You need to have the incentives (...). [For example], I got seventy percent Ontario product flowing through a retail chain. () Your taxes are cut by X Y Z. That's an economic incentive; they [food sector] understand that (). You're still being able to channel the money () locally. In a public-private partnership, it's the same basis. How do you do it? You get 'em on the taxes because each of these corporations, each of these entities, they've still got a tax base that's relatively high. If they can look at something that's gonna save them fifteen to twenty percent while the cost ratio may go up five to eight percent, they're still coming across with a good ten or twelve percent and that's a healthy return.
(Interview # 14: PRIV)

I think incentive is always one that can obviously strengthen any kind of public-private partnership. I think at the end of the day, () we can see some best-practice examples of restaurants offering healthy foods and it's still not necessarily changing the purchasing habits of the consumers. So at the end of the day if the food service industry is going to do this, if it's going to cost them anything, whether if it's from a food purchasing perspective or even in terms of their marketing. If there's some type of incentive from government to support moving into either healthier options or healthier labelling or, in fact, actually, shifting their entire menu to offering healthy option, I think there has to be what's in it for the business industry [not] just simply because it's the right thing to do. [This] is not quite frankly enough.
(Interview # 4: PRIV)

Participants agreed that without a direct economic incentive, restaurants would not commit to the goal of increasing the availability and consumption of healthy food, as illustrated by the quote below:

They [restaurants] have to see some economic, direct economic benefit () for abiding by an agreement. Otherwise they'll just start to find all kinds of loopholes and run around it, which has a chance of happening anyways.
(Interview # 5: GOV)

Non-financial incentives for the restaurants to promote healthy eating:

Another integral part of incentives is to allow restaurants to be endorsed by the government. This was raised by participants from the public sector as an attribute to motivate restaurants to engage in PPPs for healthy eating. There were several references made about restaurants benefiting from the positive public image of governments. In general, participants found that government portrays the image of being a genuine institution in which people can trust.

() *what they're looking for is the brand that I have; [it] is Health Canada; that's reliable and that people can trust.*

(Interview # 2: GOV)

Being endorsed by the government means that restaurants would have to follow a set of criteria established by the government. The quotes below illustrate this point.

If people have somewhat trust in the government (...) if a restaurant is endorsed and backed by the government, they [government] put their seal of approval on a restaurant because it's meeting the criteria on healthy food.

(Interview # 12: GOV)

If there is a perceived advantage to the private sector of being endorsed by government, then government can say: well in exchange for this endorsement () you can set limits on the promotion of food and beverages high in sugar or you can create a price structure so that there is no price incentive for restaurants to sell products high in sugar, fat and sodium. They[restaurants] promote them, not because they want to promote bad things. They promote them because it makes them more money.

(Interview # 5: GOV)

Profit motives of the restaurant sector:

This sub-category reflects the dichotomy of engaging restaurants to promote healthy eating while avoiding any negative impact on their business profitability and performance. Participants explained:

... At the end of the day, if they [restaurants] don't make money, they're gonna go out of [business]. Invariably the profit, the private motive, is still the driving feature.

(Interview # 16: PRIV)

There isn't anything wrong with the private sector making money. They're obliged to do that. They've got their shareholders that want them to do that.

(Interview # 2: GOV)

A restaurant exists to make a profit, as slim as it is. () If it doesn't sell, how much food are you gonna keep on your menu?

(...) Food service companies, their core menus, their success, the reason they exist is [because of] items that people buy.

(Interview # 3: PRIV)

At the end of the day, restaurants have a business to run. They're not paid to manage the health of the country. They have a business to run and that's how they're measured.

(Interview # 4: PRIV)

Invariably, most restaurants are business oriented. Any healthy eating intervention that threatens profitably it may experience disapproval.

We know that eating healthier is better. () We know that offering healthy [food] is better. () The number one bottom line for any industry business is: show me the dollars and cents and if I'm changing my menu to all healthy and If I have no customers,

I'm not gonna make that change. If I'm changing my menu putting some healthy options and they're not selling, what am I gonna do? Business is business, right?

(Interview # 4: PRIV)

However, regardless the profit motive of restaurants, participants highlighted the difficulties of engaging with certain food companies because of what they sell and make profit of are not necessarily the healthier options. One participant illustrated this with an example:

Tim Horton's is a great example (). If you want to have a public-private partnership to promote healthy eating in a Tim Horton's that makes () most of its money in selling sugar, which is by itself not a healthy food, () your question becomes interesting, right? Are we gonna force them not to sell sugar? Are we gonna say you can't sell doughnuts, but you have to sell celery sticks? I think, in this case, there's very little we can do. (...) There will be lots of lobbyists that work for Tim Horton's. () They gonna go off to the hockey moms and the hockey dads; they're gonna buy their coffee and doughnut in the morning; they're gonna bring their kids to the rink at five o'clock in the morning, then they're gonna get them super engaged. They are gonna engage their customers () it's gonna be huge political battle.

(Interview # 16: PRIV)

6.2.1.3 Enabling factors

This theme explains participants' discussion about how champions can enable the development of PPPs. The issue of *champions* in PPPs was examined in the QUAN survey and additional insights were obtained during the qualitative interviews. This finding showed the importance of champions in the process of PPP engagement.

Support from a champion to facilitate the formation of PPP:

This category explains the type of champions that is required to facilitate significant business change and create new business opportunities for PPP development (Table 6.4).

Table 6.4 – Category about support from a champion

Sub-category	Open code
Support from a well-known individual or political figure	<ul style="list-style-type: none"> Having a well-known individual or a political figure to facilitate the development of PPPs
Openness to find common interests	<ul style="list-style-type: none"> Creating opportunities for dialogue Finding commonalities Willing to accept trade-offs Being ready to engage in PPPs

Support from a well-known individual or a political figure:

Participants acknowledged that PPP development requires a different mindset for business change. This involves leaders or individuals with specific skills, charismas or influential personalities to generate significant changes. One participant explained this with an anecdotal example:

Fundamentally this is what I think: if you're gonna implement long term change, you need a warrior, you need a poet and you need basically an engineer. Three people! A warrior is someone who fights continuously [and] who's always there. You give them an objective and they're gonna fight towards that. A poet is somebody who's articulated, who can explain, who can be able to accentuate the positives of what you're doing the entire time. They look at the fluidness of words and they come across. It's almost musical. When they speak, they're able () to drive that inspirational message that this warrior has been fighting for. The engineer in this case is building the system that allows for this inspirational conduct. (...) What's required is a system that's in play beforehand.

(Interview # 14: PRIV)

Champions, according to some participants are a well-known individual, a business leader, a political figure or groups representing the public interest such as human rights groups. They act as inspirational conveners who enable changes. One participant referred to Nelson Mandela to explain how a public figure is able to influence changes in the system. He explained:

Nelson Mandela was a individual, a public person making a huge amount of change and () vastly inspiring generations. That wasn't just the government saying: now we're gonna do this, right? When you look at changes over time, () the passing of Mandela is a great example.

(Interview # 16: PRIV)

Political figures or political environments play an important role in supporting PPP development. One participant illustrated this by given an example of 2010 Winter Olympic Games in British Columbia. The figure of the provincial premier in that time coupled with the legacy of the Olympic Games acted as an enabler for many partnerships that happened in the province.

What happened in B.C. [British Columbia] is that they () leveraged the Olympics coming to Vancouver in 2010 to make commitments about B.C. being one of the healthiest places on the earth. That was part of what they wanted to do () [to] have a legacy for that. So a lot of the development of these initiatives about partnership with different companies about having better nutrition actually was sort of a fallout or a sideline that came out of the Olympics. You had, at the Premier's level, [someone] who was very passionate about that. You have someone driving it. We don't have that same type of drive at the federal level at this particular time.

(Interview #2: GOV)

A number of participants identified business leaders as champions to create commitment to major change such as healthy eating. One participant explained:

You need someone who wants...to embrace healthy eating and it needs to be senior leader. It doesn't have to be the CEO, but it needs to be someone who has the representation and power to make the commitment on behalf of the organization and work through the inevitable hurdles that they're going to face because this is not easy to do. We found when we had that, it made the project move along much quicker and you certainly were able to resolve issues far faster.
(Interview# 8: NGO)

Openness to find common interests:

Being opened to create opportunities for dialogue between the government and the restaurant sector was raised as an important tactic to assess potential common interests. Some participants showed appreciation of the opportunity to have dialogue with government and a chance to demonstrate their interest in promoting healthy eating.

I have a wonderful respect in the business relationship with [name deleted to protect confidentiality]. I think she's one of the best people that ever came to health promotion. She's open [and] she listens. () We meet on everything. We have great discussions and today I find a very open-armed discussion with health promotion and the relationship I have [with them].
(Interview # 13: PRIV)

I always believe that if we can give people the chance, give people a chance to prove themselves wrong. You know what I mean? So why not give industry a chance, be transparent, set the objectives and give them a chance to respond and then in a period of time if the change hasn't taken place then you put some timelines in place where you're going to legislate it.
(Interview #8: NGO)

Participants believe that given the opportunity for dialogue, the government and the restaurant sector can find commonalities despite the differences in their business mandate. One possibility is to focus on the *future generations* (Interview # 14: PRIV), as illustrated by the quote below:

() I think what you need to do is [to] find the commonalities between () the public and private sectors because there are commonalities. One is being driven by profit motive. The other one is being driven by the best interest of the societal good. Somewhere in between there are commonalities that can be dealt upon. What you're seeing is a partnership where the chain is being something evil (...). We've hit an impasse, so where's your commonality? I believe [that] the commonality is future generations that are still gonna be able to eat. That's where your commonality is.
(Interview # 14: PRIV)

Participants from the government recognize that partnerships between the government and the restaurant sector might be perceived as raising conflict of interest. They conform to the evident

differences between these two sectors and indicated that with willingness to accept trade-offs, partner organizations can find common grounds.

() At the end of the day, it's a less than a perfect world. One side has a lot of money and no legislative power. The other side has legislative power and relatively smaller amounts of money in its budget that it wishes to spend on it. So the balance is not equal in legislative power, absolutely; but the balance is not equal in dollars either. So I think that one kind of trades off against the other.

(Interview #5: GOV)

() Restaurant ultimately has to change their menu at some point, if they want () this partnership to be existent. (...) I think that could work and ultimately letting the public know that the healthy options are available there and that we [restaurants] are meeting the criteria that the government agency has set out for us to support healthy eating by the menu choices that we've included onto our menu.

(Interview # 12: GOV)

This is a really difficult barrier to overcome [marketing strategies of restaurant promoting unhealthy food] because that's how they make a lot of their money. I think they have to be able to sacrifice something in that area. It goes back to the public-private partnership. If there is a partnership, they [restaurants] will be willing to offer alternatives.

(Interview # 10: GOV)

Participants acknowledged that there is readiness by the restaurant sector to start working together with the government to promote healthy eating and the willingness of convenience stores to be part of the solution. They referred to the Informed Dining Program in British Columbia (B.C.), and other examples of specific restaurant chains already promoting healthy choices.

The [former] Canadian Restaurant and Food Association has taken it [Informed Dining Program] across the country and B.C. in some way is supporting that. () They are doing some support materials so they can be used not just in B.C. but across the country as well. So there is a readiness by the association to start to work together with government around nutrition information at point of purchase.

(Interview # 2: GOV)

I think chains such as McDonald's and Boston Pizza () are very disciplined and are more than willing to work with all levels of government and agencies to have menu labelling and promote healthy options within their site.

(Interview # 13: PRIV)

The convenience sector wants to be part of the solution. We have stores in desert communities throughout this province. It's gonna take the government to come to the table to work with us in terms of educating communities so instead of handing out a brochure at a doctor's office for my son who's obese. Why can't we start promoting healthy lifestyle in every community with three million people visit a convenience store every day? Nobody wants to hear that because it doesn't give them any income oversight or power to fix something, right?

(Interview # 13: PRIV)

6.2.1.4 Governance factors

This theme discusses the governance structure and practices required for successful PPPs. The interviews added complementary insights to what was examined in the quantitative survey. Participants raised a number of governance structures and practices as perceived to be required when developing a partnership between the government and the restaurant sector.

Governance structure and practices towards successful PPPs:

This category describes openness to finding common interests and shared responsibilities (Table 6.5). Participants discussed the advantage of having a health-related, independent organization leading the PPP and alluded to establishing formal commitments and fostering transparent governance practices in PPPs.

Table 6.5 – Category about governance structure and practices for successful PPPs

Sub-category	Open codes
Formal commitment, transparency and shared responsibilities	<ul style="list-style-type: none"> • Having core values, focus and clear goals • Having a trustworthy governance structure and processes • Formalizing agreements between the public and private sectors • Shared decision-making • Sharing credits
Health-related, independent organization leading PPPs	<ul style="list-style-type: none"> • Government with less flexibility to run PPPs • Understanding government decision-making • Health-related organizations running PPPs • Considering an independent organizations running PPPs

Formal commitment and transparent governance in PPPs:

This sub-category reflects the importance of having core values, PPPs goals and a trustworthy governance structure clearly described. Participants highlighted that the “*rules of the engagement*” (Interview # 1: GOV) must be formalized to help partner organizations focus on the outcome of the partnership. Participants also explained the significance of ensuring partner organizations to appreciate the core values, goals or objectives of PPPs, as illustrated by the quotes below:

If you have core values, if you clearly outline what you’re gonna deliver as a partner and what are your things that you’re gonna follow and show your commitment, that’s the responsibility of telling people about that partnership. [You need to] constantly check in and make sure that it’s a win-win, and that the expectations are very clear. [This] is very important.

(Interview # 4: PRIV)

I think the government needs to have clear objectives of what their partnership is. () It can't just be partnership for the sake of partnership. () We in government need to think about what would the objective of the partnership be so we could negotiate the way that's going to be feasible for both parties. So I think it's the government identifying clearly what its plan is and where it sees partnership fitting into that.

(Interview # 15: GOV)

A number of participants added the importance of having accountability mechanisms that underpin the values, goals or objectives of the partnership to reinforce the creation of a trustworthy and transparent governance structure.

There is a need to have accountability. (...) In public health, () we piloted it first [the food and beverage policy for the city] and () we were the ones who absolutely made the change because our director would not sign off for it to move forward unless we had done what we were supposed to do. So the accountability was you don't get the money to buy the food for your event unless you do what policy says. If there were no accountability, if there were no repercussion for not doing it, why would you do it? We need accountability.

(Interview # 1: GOV)

(...) Having a very transparent process is important. () This is a new ground for the government, for the sector and the population so I think that people are going to want to understand it [the PPP] and it needs to be transparent. (...) I think it starts with a very much collaborative approach allowing input from all stakeholders, having a mechanism for resolving disputes that everyone agrees to and the third party could weigh in as the arbiter. That could be your role if you're co-chairing. You could be the eleventh vote as an example if it meant to break a tie. I think there's a role to bring in a neutral third party in the event there is a dispute.

(Interview # 8: NGO)

Having an agreement to formalize the partnership was conditional to some participants. They believe that a formal agreement that establishes the roles, responsibilities, the rights and obligations of parties is an essential component towards successful PPPs. They explained:

The formalized side of it, I agree strongly with. For us, () before our very first one [partnership] that we launched over three years ago, it probably took us about a year and a half to put together the agreement () because it was the first time we'd done anything like that. (...) I've got a hundred percent control of [public messaging]. It took a while to get the industry association to agree with that but if they want to collaborate with me, part of the thing is that I have a hundred percent control over the message.

(Interview # 2: GOV)

() If you clearly outline what you're gonna deliver as a partner (...) what you're looking for in a partnership and what your expectations are from them and outline like what is not acceptable and then you have that kind of memorandum of understanding between government and private industry, then anything is feasible, but it's all about really clearly articulating who's doing what and how, what's acceptable and what's not.

(Interview # 4: PRIV)

When you have contractual agreements, the rights and obligations of both parties are very clear. (...) You would have a standard template for the agreement and you would make that agreement available online as an example if someone wanted to inquire about it, but these would be standard agreements that all parties would sign. You wouldn't have a different one for each organization. There would be some proprietary pieces of it, I'm certain, but I think everyone would be fine with that. If the bulk of the agreement was consistent and people understood it and could access it, I think it would remove a lot of the potential not just the critics, but also the skepticism of the whole model.

(Interview # 8: NGO)

I think that we need to know how to do it [the PPP] and we need the legal, () financial and communication mechanisms to allow us to move into agreements. (...) So establishing those would enable more partnerships.

(Interview # 15: GOV)

Participants considered shared decision-making as part of the governance process in PPPs. Some indicated that decision-making should be based on expertise of the appropriate sector. Other participants expressed that partnerships means compromise and that both sectors need to come up with an arrangement and have a role to play and share.

If someone is a chef [and he or she] has absolutely no nutrition background, [he or she] should not have an equal say. The dietician should be the one who is the expert in the area of dietetics if it's a dietetic session. Decisions should be with the dietician. () I don't tell a restaurateur how to run their business. () We've got all these people on this committee to make good decisions, so taking a look at why you brought people in for their expertise. The person that you've brought in who's the expert in that area really should be the final content person.

(Interview # 1: GOV)

Partnerships are 'give and take'. I think it's asinine in a partnership if one has more leverage over another. It's give and take on what's there. There are roles to be played, as I said.

(Interview # 14: PRIV)

I would tend to come down on the perspective that both need to have decision making authority because ultimately if the restaurant partner or if the industry partner doesn't feel like they have sufficient decision-making power, they're going to abandon the partnership, right? So then you're no further ahead.

(Interview # 15: GOV)

In addition, one participant added that PPPs are like joint adventures, in which they share opportunities and challenges, while sharing potential credits.

It's joint [approach] in that you're sharing the opportunities at the same time you're also sharing the credit. That's what everybody forgets is that there's gotta be something in it for both sides down the road. Somebody's gonna wanna take credit for it. Somebody's gonna or wanna have their picture taken. Somebody's gonna or wanna have their hand shook.

(Interview# 14: PRIV)

Health-related, independent organization leading PPPs:

Participants expressed a mix of concerns about the type of organization leading PPPs. Comments about government having little flexibility to run a partnership were raised by a number of participants. They recognized that government's modus operandi, which is filled with bureaucratic processes and enforcement role may place some constraints on engaging with the restaurant sector. Participants explained:

We have far less flexibility because we're bound by () who we are (...) and we get all caught up with the administration [processes].

(Interview # 1: GOV)

I work at the Public Health Unit level. We definitely would not have the staffing to charge this. We would not have the resources at the public health unit level to be able to oversee a project of this nature. We only employ three dietitians in our entire health unit. We have twelve health inspectors in a very large district. This would be a very large burden on the staffing that we have so at the health unit level. Unless we received funding through the Board of Health, through our Board of Health and the Ministry of Health and Long Term Care to do this, it wouldn't be feasible for us at the Public Health Unit level.

(Interview # 12: GOV)

I'm wondering if they [government] realize that the bureaucracy of the government might actually impede this process and that industry is very creative and can be very responsive. () I wouldn't say that's a trademark of government to be timely and responsive and non-bureaucratic. Sometimes there are good things, don't get me wrong. (...) I suppose they would think they're just not set up appropriately to work with industry. I'm speculating here.

(Interview # 8: NGO)

Another aspect that was discussed as part of the governance referred to the bureaucratic processes rooted in the government structure, which requires tolerance by the restaurant sector. One participant explained:

The government would need to ensure that the restaurant industry understands how government decision-making works [and] which decisions require approval. How and what level and why? For example: policy decisions or communication decisions or funding decisions because in my experience working with partners, that's often a barrier that people don't understand why it takes so long to do something or why such and such can't happen. () They don't understand things that would be common for you or I to understand, Katia. () It's not just the ministry and the Minister who sign off of communications, but it needs to be reviewed at the Centre by cabinet office and Premier's office, right?

(Interview # 15: GOV)

Participants also stressed the importance of having a health-related organization leading the partnership. That is, the importance of having a public organization that keeps the health perspective at its core mandate, representing the public's interest.

If we [government] can take it [the PPP] outside of our organization and create that public association then () we get the best from everybody.

(Interview# 1: GOV)

Part of that challenge would be who in the government is representing my interests. There are people in government that promote sugar or fat. There are people that work in the Ministry of Agriculture and Food that have that particular sector. So who at the government is actually talking to the industry association and has the best health interest at heart. (...) In my experience with the medical officer of health, they will tell you the truth even if you don't like it. A ministry of health person, like a provincial ministry still has to report to a political person (...) whereas with the medical [officer of] health I don't find that. They don't even report to City Council. They report to the board of health, right? So that's why I would say that.

(Interview # 16: PRIV)

One participant representing the restaurant sector argued that government should be leading a PPP as they have the ability to bring together different players.

It's important that the government take the lead because the government is the one that can bring everyone together. Whether it is the chain or independent [restaurants], the government is the one that can ensure that there is consistency in the message. The government is the one that can help to promote food education so that people understand what they're reading on the menu. I think it's extremely important that government takes the lead on this and bring the industry in.

(Interview # 9: PRIV)

A number of participants reflected on the advantage of having an independent, public organization rather than the government leading the partnership with the restaurant sector. They suggested that an independent organization might have more flexibility to operate in a nimble environment.

I think government has a place at the table. I think we have to bring industry along with us, and when I say 'us', I mean, () credible third parties, NGO's like ourselves. (...) The idea of a credible party entering in and leading these discussions or co-chairing or co-leading, I think it's certainly a model that could be embraced and I know that those of us on this side of the health discussion, certainly we do a lot of that work already. The honest broker, so to speak. () Eighty percent of heart disease is preventable and of that preventable piece, there's a good portion that's related to what you eat. We have a vested interest in this area. () I'm not sure what your approach is on this, but I think there's a role for an NGO type model, a health charity at the table [as] we can help move the agenda along.

(Interview # 8: NGO)

If we had a public association () with a public voice of the government, we all can do a better job. If we become this collection of people working together who represent the public interest or that of government. It's not as heavy handed as government can be. There's more flexibility.

(Interview # 1: GOV)

6.2.1.5 Benefitting factors

This theme reflects the discussion of *corporate social responsibility (CSR)* as an attractive benefit for organizations seeking improved corporate image. Previous QUAN survey showed divergences in opinions about the importance of corporate image to facilitate the development of PPPs. However, the QUAL findings confirmed that CSR might play an important role in influencing restaurants to voluntarily engage in healthy eating initiatives.

Corporate social responsibility influencing healthy eating initiatives in restaurants:

Participants described CSR as benefiting the image of restaurants as good corporate citizen (Table 6.6). They also talked about some restaurants having good intention of promoting healthy eating, but were mindful about purchase decision of customers.

Table 6.6 - Category about corporate social responsibility influencing PPP development

Sub-category	Open codes
Corporate voluntary approach for the development of healthy eating interventions	<ul style="list-style-type: none"> Recognizing good corporate intention or efforts of restaurants towards healthy eating Acknowledging the industry's voluntary approach for healthy eating

Recognizing good corporate intention or efforts of some restaurants towards healthy eating:

Participants across all sectors acknowledged that some restaurants, in particular large chain restaurants have expressed intention or have initiated some type of intervention to promote healthy eating. They recognized that some, although few of them, operate in high ethical standards and have good intention to promote healthy eating. Participants described:

Some private companies are good at making money and are socially responsible. (...). Those are not the rules and at the end of the day, if they don't make money, they are gonna go out [of business]. Invariably, the profit () motive is still the driving feature of some and a very few have high, social and environmentally responsible standards.

(Interview # 16: PRIV)

I think fundamentally a lot of business operators (...) wanna do it in their hearts, but () again they're in the business to sell food and (...) I gonna guess that at the end of the day it is really all about what we sell and what our customers expect from us.

(Interview # 4: PRIV)

() I'm going with the grand assumption that () a number of restaurants legitimately want to enter into this. I wouldn't say all of them though, but I would say those that have a genuine interest are sincere about trying to find a way to do it. The experience we've had is () [that] restaurants may want to enter into these agreements and promote healthy eating, but the consumer isn't necessarily oriented to purchasing those items. (...) I think there's definitely some sincerity when they speak of the whole CSR component.

(Interview #8: NGO)

Participants recognized that nowadays there has been substantial improvement in the availability of healthier food and that restaurants have created alternative options to increase fruit and vegetables consumption.

If I can dial the clock back, let's say fifteen years, I think there's been somewhat an improvement in the way of healthy choices that people are choosing in restaurants and that restaurants are offering them. It's been helpful.

(Interview #7:GOV)

() Restaurants today () actually do a very good job in [offering] healthy options. I've never seen more salads and more exotic salads than ever before.

(Interview # 13: PRIV)

Acknowledging the industry's voluntary approach for healthy eating:

This sub-category describes participants' discussion about voluntary approaches taken by many restaurants to promote healthy eating. This voluntary effort is seen through food reformulation of some items (e.g. salt reduction), and food substitution to healthier food alternatives (e.g. side salad or chicken instead of beef hamburgers). Participants also commented that some restaurant owners may have a legitimate concern about their customers' diet and health issues. This discussion is illustrated by the quotes below:

I think it's legitimate and certainly if you're participating in it you're seen as being proactive and appearing to be concerned for your customers' health in the day.

(Interview # 8: NGO)

They [restaurants] are responding to the recommendations that came out of a multi-sectorial advisory group - the sodium working group and the strategy we put out in 2010. (...) Some of these foodservice companies have certainly responded very well, McDonald's being one of them. () They have changed their menu boards to tie into what the government was hoping for. McDonald's didn't need us side-by-side. They were doing this without Health Canada. They're just doing it [reducing sodium content of a number of menu items].

(Interview # 2: GOV)

Wendy's still has chicken nuggets and French fries and baconators [sandwiches] (). But they also have salads and baked potatoes and chili so they have healthier options.

(Interview # 12: GOV)

Many restaurants now have looked at putting more sorbets, more fruits, smaller mini desserts on it [menu]. [Do] you know that big slab of cake? Many restaurants don't do that anymore, yet they're sold everywhere. If you go to a restaurant now, that's probably not all of them, () you start seeing more healthier desserts than ever in the history of a restaurant owner.

(Interview #3 PRIV)

Sales strategy for promoting healthy eating was also raised by some participants as already happening across the food retail sector. One participant explained that some major convenience stores in Canada have voluntarily started creating “combos” of menus with healthier alternatives.

If you go into a Seven Eleven store today in Toronto, they have big pole sign saying: a cup of coffee and a banana for \$1.99. Not coffee and a muffin, but a banana! I talked to the manager because they're one of our members and asked: how is it going? He said: [This] is a national program so every Seven Eleven store in Canada has a coffee and banana for a \$1.99. Even Tim Horton's doesn't have a coffee and a banana for a \$1.99. He said: we're selling about eighteen bananas a day now.

(Interview # 13: PRIV)

Many participants referred to the Informed Dining Program in B.C. as an example of a voluntary approach initiated by the government in partnership with the restaurant sector to provide consumers with nutrition information at point-of-purchase. The quotes below illustrate this point:

I think the best example I can think of is the Informed Dining Program in British Columbia as a public-private partnership that has contributed to promoting healthy eating. () I think that's a really good example of the influence that a partnership had on restaurants providing more nutrition information to their customers.

(Interview # 15: GOV)

An agreement between the B.C. government, several restaurant chains and the [former] Canadian Restaurant and Foodservice Association [now called Restaurants Canada] is a voluntary approach to getting nutrition information across to consumers at point of purchase.

(Interview # 2: GOV)

6.2.1.6 Barriers factors

This theme captures divergences in opinions between the public and the private sectors of a number of concerns regarding factors influencing the formation of PPPs. The QUAL findings revealed the mistrust that exists between the two sectors. They are discussed in more detail below.

Distrust between the government/NGO and restaurants on each other:

This category explains the skepticism that exists between the public and private sectors on each other (Table 6.7). On one hand, participants from the public sector were concerned with the misleading marketing practices that restaurants use to promote their food menus. On the other hand, participants from the restaurant sector were frustrated with the bureaucratic aspects of government policies and processes.

Table 6.7 – Category about distrust between the government/NGO and restaurants on each other

Sub-category	Open codes
Skepticism from the government on misleading marketing practices of restaurants	<ul style="list-style-type: none"> • Being aware of misleading messages about healthier food choices • Being influenced by restaurants' marketing strategies • Being transparent with consumers about healthy food sold in restaurants • Mistrusting the restaurants' intention to promote healthy eating
Skepticism from the restaurant sector on government policies	<ul style="list-style-type: none"> • Leading by example healthy eating initiatives • Listening to the position of the restaurant sector about healthy eating • Mistrusting government's intention to collaborate with the restaurants

Skepticism from the government/NGO on misleading marketing practices of restaurants:

Some participants raised the importance of being aware of marketing strategies of restaurants, which usually focus on misleading consumers about healthier food choices. They discussed this in the context of *health halo effect* (Interview #2: GOV); that is, the misleading perception of certain products being healthier on one narrow attribute, which may lead them to eat more food than they would intend to do. Participants explained:

I get concerned about the whole health halo effect that might come about if we're actually having () healthy eating messages associated with particular types of packaged food. (...) If you are having health-related messages in this restaurant environment, do people understand or do they misunderstand that this isn't a healthy place to be necessarily?

(Interview #2: GOV)

A participant from the agri-food sector expressed concerns about marketing strategies of the food industry and the contribution to the problem of obesity or diet-related chronic disease.

We've let the industry take us to where we don't wanna be and we went with our eyes shut, our ears clopped over and frankly, we've let all the marketing and all the mass marketing that goes through dictate how we do things.

(Interview # 14: PRIV)

Various participants referred to the power of marketing strategies influencing food purchase decisions of consumers. They argued that consumers buy unhealthy food products or choose unhealthy food menus because it is what the restaurants advertise.

Of course people come in for their double whopper with cheese because that's what they've advertised on television for the last three weeks. (...) [then] they measure what they [consumers] buy in their restaurants. Well, that's because of what people can hear in London across the Atlantic Ocean. (...) I think the industry does just not want to bother, right?
(Interview# 5: GOV)

Issues about transparency, that is, restaurants being transparent with their consumers about healthy food options sold in their establishment were identified as of concern as well. Participants explained that there have been cases in which food establishments have either wrongly promoted food products as healthy or manipulated them to fit nutrition guidelines. Participants illustrated this as shown in the quotes below:

People have to () acknowledge the facts, like the pure facts (). (...) When we get into the situation where we start doing a spin on what healthy is or isn't, that's when we get into trouble. (...) For instance, one of the things that's happened with the school legislation is that they have tried () to define healthy by saying that a product must have certain nutrition profile. So then what's happened in some cases is that they just manipulated ingredients and portion sizes to come out with the numbers. (...) They've manipulated the ingredients so the numbers come out right as opposed to starting with good ingredients and producing a good product. We're a little at the tipping point of being played for fools so don't go there. Stop with the spinning! People are sick of it. Tell the truth, it will win you customers.
(Interview # 1: GOV)

There's evidence to support in many cases voluntary systems like healthy eating, () but healthy eating guidelines aren't often followed, they're often abused or people () take advantage of them so I think there is some negativity with all of these types of discussions in the past.
(Interview #8: NGO)

When people step through the door that has to be a reality for them, not the same old thing that the salads cost two and a half times what the hamburger is going to cost or that the only healthy choices is an apple, right? And the rest of it is all high fat.
(Interview # 5: GOV)

There is some level of mistrust by the public sector on restaurants' intention to promote healthy eating. This tension was captured through the careful consideration given by participants about engaging with the restaurants for healthy eating initiatives.

I've had people tell me that we should not engage with the food industry at all, () because it should be pure, but you know the current government doesn't agree with that perspective.
(Interview # 15: GOV)

If there is a partnership, then definitions need to be established and then those definitions get applied in a real way and not just spun out, getting underneath and saying: we've manipulated the food such that it gives us these parameters that it's really not what it seems.

(Interview # 1: GOV)

Even if one could trust completely [the food industry], that industry would have to come at this only with a public health perspective.

(Interview # 2: GOV)

() It doesn't seem reasonable at this point [for the restaurants hold authority in PPPs] because the past history has indicated () that food establishments will sell and market what sells.

(Interview # 7: GOV)

Skepticism from the restaurant sector on government policies and processes:

This sub-category describes the notion of mistrust witnessed by restaurants on aspects related to policy development and operations of government. One participant expressed distrust in the way that government has been promoting healthy eating in public facilities. The argument behind this position refers to the lack of government leadership in promoting healthy eating in food establishments that are publicly owned. This is illustrated by the following quote:

If the food service industry is gonna want any kind of partnership with government, they're also gonna want to see the government implementing that [healthy eating initiatives] in any of their food service establishment. I think this goes back to where government can lead by instilling this type of practice in the broader public sector, [such as] in their hospitals, in their cafeterias, in their () educational institutions. So if they want healthy [eating] () at a business level, then they need to be doing at a government level. I think [that] leading by example speaks volumes.

(Interview# 4: PRIV)

Another aspect that was raised with certain level of cynicism alludes to whether the government takes into consideration the industry position when developing policies. This emerged from the government's consultation with the industry on menu labelling and marketing strategy of unhealthy food to children in Ontario.

The industry is going to be watching very closely to see how government moves forward because if government moves forward unilaterally without accepting recommendations from the industry, I think there could be some issues arising. () For me right now, this is going to be a very good test to see what happens over the next six months with these consultations that have been completed and to see how government () has listened to all sides or government is just going to make its own decisions.

(Interview # 9: PRIV)

() *I always get a little nervous when I attend all these consultations and people keep pointing at the public health units. () The public health units stood up and said: we don't accept anything except zero promotion of food to young people. Zero! () that sort of ends our discussion with [them] because () there are other healthy options that you should be promoting, right?*
(Interview # 13: PRIV)

One participant raised an unpleasant experience with public health units due to the apparent lack of interest in collaborating with the food industry.

My fear is, and will always be, the public health units () to have them as the lead on this kind of issue because () it's not in their interest to work with business. It's their interest to attack business.
(Interview # 13: PRIV)

This skepticism was also observed in relation to the government intention in developing PPPs for healthy eating. This notion was discussed in terms of short-business cycle of government as well as funding opportunities.

There is no such thing as a partnership with the government, because governments change and bureaucrats change and that's the problem, right? (...) I'm not sure what a partnership looks like. I know the government is looking for someone else () to pay for it. That's the feeling I'm getting. Partnership means costs. (...) They want a partner, [but] really they want someone to pay for something.
(Interview # 13: PRIV)

6.2.2 Healthy eating in restaurants using a PPP model

This subsection presents the findings that are related to the factors influencing the development of healthy eating interventions in restaurants in Ontario using a PPP model.

6.2.2.1 Contextual factors

Similarly to the contextual factors discussed earlier in the findings for PPP development, this theme describes the requirements that government shall consider when developing PPPs specifically for healthy eating in restaurants. This theme represents an emerging finding that was captured from the analysis of the qualitative interviews.

Government requirements for the development of PPPs for healthy eating:

According to participants, there are a number of requirements that government needs to take into account when developing PPPs for healthy eating in restaurants (Table 6.8). This category discusses the long-term economic benefit of healthy eating, the development of guidelines and standards, and

the ability of the government to leverage restaurant's expertise. Participants also felt that by taking an incremental approach, government may find feasible to consider PPPs for healthy eating in restaurant settings.

Table 6.8 – Category about government requirements for the development of PPPs for healthy eating

Sub-category	Open codes
Long-term economic benefit of healthy eating	<ul style="list-style-type: none"> • Impact of unhealthy diet on the health care system • Long-term goals for improving healthy eating
Government leadership in healthy eating guidelines and standards	<ul style="list-style-type: none"> • Aligning the demands of consumers with the governments • Avoiding distinction between healthy and unhealthy food • Defining success for healthy eating interventions in restaurants • Having consistent food definitions, guidelines and messages • Having the government developing guidelines for healthy eating
Leverage restaurant sector's expertise and resources for healthy eating initiatives	<ul style="list-style-type: none"> • Having restaurants leading the implementation of healthy eating initiatives • Possessing resources and capacity to promote healthy eating • Recognizing the expertise of the restaurant sector for developing healthy eating interventions
Incremental approach for healthy eating policy and programs	<ul style="list-style-type: none"> • Considering incremental government approach for healthy eating initiatives • Experimenting with interventions in other settings

Long-term economic benefit of healthy eating:

Participants acknowledged the implications of unhealthy diet on people's health and its impact on the health care expenditures due to diet-related chronic disease. They raised the fact that eating healthy will not occur overnight and interventions should attempt to set long-term goals. Some mentioned about “*quick fix*” approach (Interview # 13: PRIV) seeking by the government. They explained:

If I get a clogged artery, I go to the hospital and spend three days in, get my artery cleaned up, then I'm good for another fifteen years. Well, that's a cost that nobody talks about. (...) Our medical system, our healthcare profession is now a repair shop. It's nothing more than that. (...) My taxes are going to someone who couldn't figure out what a healthy choice was. (...) I could no more tell the general populace to eat healthy than I could make gold out of air. You just can't. But, it takes transitional steps to be able to get that (). (...) I think if we moved beyond the [electoral cycles], if we stop being so limited in what we do, you can develop () public-private partnerships that look at the long term goals ().

(Interview #14: PRIV)

We have to be careful that we're not trying to use the restaurant business to fix all of our problems and that's what I see today with the Ontario government looking for quick fix in four weeks.

(Interview # 13: PRIV)

One participant referred to the Smoke Free Ontario Strategy to explain that changes in smoking habits have occurred gradually and related that experience to healthy eating. He argued that changes in people's diet towards healthy eating will be a slow process as well.

() It's the same of that the Smoke Free Ontario. Twenty-years ago, I may have never thought () that you're not gonna take the smoking out of restaurants. It's not going to happen because people are so inundated with [this habit]. () Well now it seems almost silly to think of smoking in a restaurant. (...) I think in time, it'll slowly go towards that trend with healthy eating.
(Interview # 7: GOV)

Incremental approach for healthy eating policy and program:

This sub-category captures the discussion about government taking an incremental approach for healthy eating interventions, while considering alternative venues to promote healthy eating. One participant acknowledged the value of having an overall healthy eating framework in place. However, from a government perspective, this might be challenging perhaps due to political issues.

The thing that I struggle with is that the bigger you make something, the harder it is to do it, right? So it's like on one hand yes an overall strategic framework that everybody would be guided by would be a great idea [but] sometimes that's just not possible.
(Interview # 15: GOV)

One participant suggested conducting an experiment of selling fruit and vegetables in alternative settings as a way to explore, learn and possibly scale up initiatives. The quote below describes the point:

We're all concerned about [food] desert communities, right? (...) We call the desert community because the convenience store is the only bastion standing in some of those communities. () So let's take () a small town in north of Toronto. Why don't we go in there and test putting apples, oranges and bananas in every retail environment on the counter and the government work with us to see if it works. () So why don't we work on a test to see how long does it take to convince that segment that () this is part of everyday lifestyles. The government can learn from that.
(Interview # 13: PRIV)

Government leadership in healthy eating guidelines and standards:

This sub-category describes the leadership role that many participants believe the government should take with regards to healthy eating interventions in restaurants. Participants expect the government to lead healthy eating interventions but not dictate to them.

The government has to lead when it comes to healthy lifestyle options, and I mean not only lead by legislation, but also lead by education. (...) We look for government to lead us and work with us, not to dictate to us as we've seen over the last few years.
(Interview # 13: PRIV)

Many participants raised the need of having consistent food definitions and guidelines with regards to healthy eating. They commented that consumers would have difficulties to understand healthy eating messages and companies to create healthier products if consistent guidelines are not developed.

() The Informed Dining Program () is basically making sure that nutrition information is made available in a consistent way for consumers so if you're going into one restaurant and the next restaurant, it's there the same way. You don't have trouble understanding because it's consistent. (...) The problem for industry is that () every province and territory has standards that are somewhat different from each other, so it makes it difficult for larger companies to be innovative in terms of developing healthier foods where it changes from one jurisdiction to another jurisdiction.

(Interview # 2: GOV)

Some participants commented that the lack of inconsistent definitions might also pose a risk of restaurants repositioning healthy eating messages according to their marketing interest.

A lot of restaurants could say our food by virtue of how we cook it is already healthier because we're cooking from scratch and there's no preservatives and additives so we might be baking French fries, but our French fries are fundamentally different than what's coming out of McDonald's because we actually get our potatoes fresh from the farmer, we're actually cutting them and cooking them that day and we're using a small amount of salt ().

(Interview # 4: PRIV)

This is where the health ministry and I have a difference of opinion. You mentioned processed like being a bad thing. Every food, except in its raw state is processed. I think what we have to () figure out is how we define the differences between healthy and processed food. (...) A cut steak is processed. (...) An egg is processed. (...) We take things and we do it ourselves. We butter and cover in all kinds of stuff. Chicken or fish or anything like that and we advertise as being healthy 'cause it's a fish.

(Interview # 14: PRIV)

One participant explained that there is sometimes disconnect between the consumers' demand and government policy with relation to dietary intake, which requires government's leadership to communicate to consumers.

() What consumers want is not necessarily the same as what government wants, right? () Consumers are obsessed with gluten free and the government really doesn't care if people eat gluten or not. We just want them to have more fruits and vegetables and fewer calories and less sodium, right? (...) We don't care if they eat bread or not in that equation. () There's sort of a mismatch between consumer dietary interest and public dietary interest.

(Interview # 15: GOV)

Some participants believe that government should avoid messages that make distinction between healthy and unhealthy food as consumers have the freedom to choose what they want to eat. They explained:

In my opinion, I don't think government would want () [to] say what is good food and what is bad food and I don't think government wants to go down that road. () If government starts telling [consumers] that your Big Mac is bad, [consumers] just a) gonna get their back up and b) just gonna ignore it. (...) Government can't tell me what to eat. I will decide that. I live in the land of choice and freedom so I can decide. (...) Personally, I think that government would be reluctant to start judging or branding a product as a good product or not a good product.

(Interview # 9: PRIV)

() The illusion of a restaurant having all healthy choices is not () actually () a good thing. () You're into good food versus bad food and () there's a lot of stigma regarding bad food versus good food. () We want to have healthy options available, but it is the education that revolves around the choice, [and] (...) high sugar, high fat, high sodium are not bad food if they are eaten in moderation.

(Interview # 12: GOV)

One participant commented about the emphasis placed in the negative aspects of food such as sodium, sugar and fat. He suggested turning the attention to a shift towards the positive nutrients of food such as calcium, fibre and protein, in which the government could play a pivotal role.

We're always worried about the amount of sodium, fat and sugar that we have in our diets and those are very legitimate reasons, but a healthy diet is also made up of positive nutrients. () We're talking about things like calcium, fibre and protein. They get lost in the discussion, so I think if there's any way of () making that part of the discussion, I think it would be time well spent.

(Interview # 8: NGO)

Another aspect that may require government leadership is defining what success means in healthy eating interventions in restaurants. A participant questioned whether it might include numbers of healthy food menus sold or a shift in food choices towards healthy options among certain types of consumers.

It would be really interesting to get a break down of how many apples and caramel sauce McDonald's sell compared to French fries. I'm gonna guess, probably, a small fraction. () One could say: () that's great because at least a small fraction are buying apples with caramel sauce instead of buying the sundaes or the French fries, right? (...) You're making a small shift and so I guess that's all part of what is the expectation of success. () What are the benchmarks for success? Is it taking a small group of consumers and moving them into a healthier space or is it having sort of a lofty idea that you're gonna remove something to replace it with something and that's gonna work?

(Interview # 4: PRIV)

A number of participants believe that governments are better positioned to ensure that consistent messages about healthy eating are delivered to the population, as they can be trusted to provide accurate, reliable information. The quote below illustrated this point:

The decision needs to rest with government. I'll speak now from a consumer perspective. () If you're going to implement something, there needs to be consistency in the message that is being delivered and that the consumer knows. I'll use the analogy of being able to compare apples to apples. () It doesn't matter whether it's in Toronto or in London or whether it is with a big chain like the Keg or the small independent restaurant like Me and Susie. As a consumer, if I go into the Keg or I go into Me and Susie and I'm looking at menu labelling or labelling on the wall of the restaurant, that there's that consistency and I think that only government can ensure that there is that consistent message is delivered.
(Interview# 9: PRIV)

Leverage restaurant sector's expertise and resources for healthy eating initiatives:

This sub-category describes the discussion about leveraging the expertise, resources and skills of restaurants to implement healthy eating interventions. A number of participants acknowledged that restaurants are better positioned to lead the implementation of healthy eating initiatives, as they know their business and consumers the best.

[The restaurants] know their business best; they should have a function in determining how things should be done, and an opinion of what should be done.
(Interview # 16: PRIV)

They [restaurants] could have as much or more decision-making and that could be more about the dissemination of the messages and the way that they actually implement a program on the ground (...) 'cause they understand their customers the best.
(Interview # 2: GOV)

You've developed the policy, but implementing that, there's always challenges and barriers. So I think having that ongoing partnership [with the restaurants] to mitigate those challenges would certainly be helpful.
(Interview # 6: GOV)

Some participants talked about utilizing the resources available in the restaurant sector to develop healthy eating initiatives. They acknowledged that innovation can be found in the restaurant business and that the government could harness it for the creation of healthy eating interventions.

The restaurant industry, the food service industry is about a seventy five billion dollar industry. There's a lot of money available there that they can invest in this initiative [healthy eating] if they see something to their benefit. I would hate to not to have that resource available to help spread the word about healthy eating.
(Interview # 8: NGO)

My suggestion would be let business to lead, not public health. For years, we've allowed public health to lead and it hasn't worked, so the partnership should be led by a business model. (...) If the government is the catalyst to make it happen, support

the industry and the industry will do it, but let the industry run with it. (...) Let the industry have an accreditation perhaps that signifies specific restaurants that have healthier items on it.

(Intervention # 3:PRIV)

The private sector can enable the government () to develop anything that they want.

Innovation should come from the private side and I think that's an important key consideration that we're missing out.

(Interview # 14: PRIV)

6.2.2.2 Barriers

This theme captures the tension about government regulation on issues related to healthy eating. The QUAL analysis was able to explore some divergences in opinions previously indicated by the QUAN survey. It reveals that there are discordant observations that may hinder any attempt to collaborate for healthy eating.

Discordant observations about government regulations on healthy eating:

This category discusses two conflicting positions about government regulations on healthy eating: criticism by the restaurant sector against government regulation and the preference of the public sector for regulations (Table 6.9).

Table 6.9 – Category about discordant observations about government regulations on healthy eating

Sub- category	Open codes
Criticism of government regulations on restaurant business	<ul style="list-style-type: none"> • Being overregulated by the government • Disapproving government regulations or interference in restaurant business • Finding reasons against menu labelling policy • Lacking understanding or consistent interpretation of government policies
Preference for government regulation on healthy eating	<ul style="list-style-type: none"> • Banning food marketing to children • Engaging the municipalities for restricting access to unhealthy food • Having legislation to promote healthy food • Restricting display of unhealthy food in front shelves

Criticism of government regulations on restaurant business:

This sub-category captures the arguments against government regulation or interference on restaurant business with regards to healthy eating. A number of participants argued that restaurants are overregulated with legislation from various ministries and raised their disapproval of government

interference in restaurant business. They commented that being overregulated undermine their business operations.

One of those barriers is that the industry is very much regulated, extremely regulated. With so many regulations, () that's really a big item to talk about because every ministry, municipality included, are throwing regulations at an industry that operates on very slim margins, especially the independent owners with anywhere from one to three percent margin. We're speaking in the voice of a business owner and the business owner has to handle all that. I hear it from many business owners that they're so inundated and yet their job is to go cook and serve people.

(Interview # 3:PRIV)

You can't regulate business to the point that the government's running the business instead of the business. They'll just pull out of the province. (...) It's easy to pick on restaurants and industry association. I've seen it. It's not about nutrition. I think we've had bad performers from a government trying to throw so many other things, not even related to health.

(Interview # 3: PRIV)

Sometimes industry doesn't want the government too involved. (...) They will react because they don't want regulations. (...) If they [government] want to mandate it and legislate it, that's certainly one-way of doing it. That certainly wouldn't be consistent with a public-private partnership.

(Interview # 8: NGO)

Is government supposed to come in and say to them: no, you can't feed your children with that. I think that could be a challenge. (...) I don't know if government would view healthy eating, or putting healthy eating and healthy food on the same pedestal as tobacco or alcohol. I sense it would be a reluctance to do that, but I could be wrong.

(Interview # 9: PRIV)

I don't think it's a regulatory regime that we're looking for. I think anytime that you develop policy, the minute that we implement policy somewhere along the way, then you develop regulations.

(Interview # 14: PRIV)

A sentiment of unfairness emerged from the discussion about government regulations on healthy eating. Some participants raised the fact that regulations imply costs for the restaurants and government may expect business to absorb those. Participants also felt that if the government wants to regulate what the populations eat, they should also regulate levels of physical activity.

Someone [the government] tells [the restaurants] how to do things and then tell them they have to pay for it and then they [the government] regulate them for not doing it right, and then [government] is not there when it all falls apart.

(Interview # 13: PRIV)

It has to be a fair play (). We've seen the grocery stores as our biggest competitors in the industry. Their sales are going up every year and food service is going down. More sales from the beer store for home consumption than alcohol served in restaurants. It's not fair. It just does not make sense on it. (...) We're creating uneven playing field from a health point of view. Whatever we should be asking, we should be [asking] for both whatever that might be. Let's limit the amount of cakes that are sold at our

grocery store and the amount of non-nutritional food at the grocery store if that's the case. (...) If we're saying: don't make us big portions in restaurants, then let's not have as many items sold at grocery stores that does not have nutritional value. It's common sense that way. And then it's fair, right?

(Interview # 3: PRIV)

Issues against menu labelling regulation in Ontario were also raised by the restaurant sector.

Participants questioned about the effectiveness of menu labelling in promoting healthy eating, arguing that consumers do not read labels. They also commented about challenges of customizing food menus and the implications on the nutrition content of menu labels.

() People used to talk about labelling as being the be all and end all. No offence, nobody reads labels. They don't.

(Interview # 14: PRIV)

I'm not sure [whether] people really understand what menu labelling is going to be. () Let's just think of the McDonald's drive-through window menu board. How are you going to articulate what you're trying to articulate at a drive-through window where people are into speed of service? They're not going to read it, but you're saying the font has to be as big as the price. (...) Let's be honest. Let's say you order pizza from Piz̃za Piz̃za. And I order a pepperoni piz̃za and I say: 'make it double cheese and add bacon. Where on the menu labelling are we gonna see that change? So where did that come in and how do they define it on the menu? At the end of the day, that's a person's choice, right?.

(Interview # 13: PRIV)

Concerns about interpreting regulations were raised as hindering potential business. Participants felt that restaurant owners face difficulties to understand different regulations, and that the public health units in Ontario interpret them in their own words.

Many of the regulations that are thrown at them [small restaurants] are good will intended regulation, (...) the accessibility regulation for example, that food service owner wants to comply with. It's very difficult [to comply with] because how can they distinguish one [regulation] over the other? Listen, at the end of the day, that puts us in a sit that we need to help the business owner understand the law so they don't get charged or they don't get inspected and lose a demerit or whatever it is, right? Because it's the law!

(Interview # 3: PRIV)

You can't allow thirty-six public health units in Ontario and thirty-six Medical Officers of Health to say [interpret] the regulation because () they can see their own way. () That really becomes a very inconsistent business because if you were running a chain, let's say Jack Astor's in Ontario, in your thirty six different health units with over two hundred different inspectors all saying this is how I see it. I don't care how they see it in Kitchener versus Windsor. It becomes very hard on the business to do business in Ontario.

(Interview # 13: PRIV)

Preference for government regulation on healthy eating:

This sub-category captures the discussion about supporting regulations for promoting healthy eating. Some participants believe that changes in restaurant practices to promote healthy eating will only occur with a legislative mandate. They felt that, despite attempts of supporting voluntary approaches, healthy eating guidelines are often not followed by the industry and that without a legislative approach, healthy eating programs would not be effective.

I would hope that we would get that in legislation because I do think that () voluntarily things aren't gonna change. I think we have to get towards healthy public policy. I think the partnership could help to develop the policy.

(Interview # 6: GOV)

I go back to what I said originally, if things are not legislated, and it doesn't have to be strong wording, but if things are not set in (...) standards or legislative authority (...) generally speaking, () they are going to keep doing what they're doing and that is to sell their product. They're in private business.

(Interview # 7: GOV)

The Informed Dining Program in British Columbia as a public-private partnership has contributed to (...) providing more nutrition information to their customers. Do I think that will actually promote healthy eating? Not for the attribution we discussed. I don't think the program is as strong as a legislative approach where the information needs to be more prominent and easier to find, but it's definitely not gonna hurt, right?

(Interview # 15:GOV)

Some participants believe that government should restrict unhealthy food to the population. Some suggested government banning food marketing to children and youth.

I would go after the advertising and marketing budgets. () We prohibited the advertising of tobacco. We prohibited the consumption of cocaine. Now, we'll prohibit the advertising of sugar products. We'll prohibit the advertising of high salt.

(Interview # 16: PRIV)

I think the government would feel more comfortable with the partnership if, for example, there was a ban to younger children so that the promotion of those foods weren't to children and youth. I think for me it's about banning the marketing for young children and youth.

(Interview # 6: GOV)

Suggestions referred also to restrictions of drive-through restaurants in certain areas of cities or limitation of unhealthy food in front shelves.

The municipalities have enormous possibilities with respect to municipal bylaws () about placement of types of restaurants in () lower socioeconomic areas of our major cities (...) where there's an increased accessibility of fast food, lower quality food.

There're parts of Ottawa () where they're not gonna let in () those fast food restaurants.

(Interview #2: GOV)

() *What I would want to see is just what we've done for tobacco. () The doughnuts aren't out front. () The unhealthy choices should not be at the front and center. () It should be only healthy food choices that are in that section. Everything that's unhealthy needs to be back and behind.*

(Interview #6: GOV)

6.2.2.3. Consumer driven-factors

This new whole theme was not originally examined in the QUAN survey. Based on the analysis of the interviews, this emerging theme surfaced from the discussion about consumers' demands and incentives for healthy eating. Participants argued that both governments and restaurants should focus on understanding and addressing consumers' requirements in order to engage them in healthy eating in restaurants.

Consumers' demand for healthy eating in restaurants:

This category presents discussions about dining-out decision-making among consumers (Table 6.10). It also describes the importance of giving emphasis on consumers' expectation, needs and taste when creating healthier menu options.

Table 6.10 – Category about consumers' demand for healthy eating in restaurants

Sub-category	Open codes
Consumers' dining decision-making	<ul style="list-style-type: none"> • Choosing restaurants not based on healthy eating menu options • Deciding on what to eat is a consumers' choice • Seeking a dining experience when eating out
Emphasis on consumers for the creation of healthier menu options	<ul style="list-style-type: none"> • Considering consumers' demand for creating menu options • Considering different types of consumers when promoting healthy eating • Considering taste as a determinant of food choice • Engaging consumers to figure out healthy eating interventions

Consumers' dining decision-making:

This sub-category captures the discussion about the role of consumers in deciding where to go and what to eat. A number of participants commented that consumers' dining-out decisions are not made based on healthier options available. Rather consumers' decisions are based on the type of food they want to eat and the dining experience offered by the restaurants. They commented that many restaurants have healthier menu options available, but consumers don't order them.

When somebody goes in a restaurant chain, they're going there because they want to go there. If you go to Montana's, it's because of their ribs. If you go to Swiss Chalet, it's because of their chicken. If you go to Kentucky Fried Duck, it's because of whatever meat product they have that to sell. It's fundamentally flawed to believe otherwise that somebody's going to look at it and walk in and suddenly go to Harvey's wanting a burger and order a vegetarian meal instead. Healthier options are always available.

People just don't take them, nor do they want them

(Interview # 14: PRIV)

() Quite frankly if I want an apple, I'm probably not going to go to McDonald's. I'm going to go into McDonald's if I'm feeling like having some French fries. () Even if McDonald's have [and sell] apples, it's not gonna be reflected in their sales.

(Interview # 5: GOV)

The consumer in some cases doesn't appear to be all that interested in purchasing the items [healthier options]. [Those] are still very low sellers. It's not always because they taste terrible. In some cases, I've had them and I wouldn't buy them. But in many cases, I think it's just a case of when people go out to eat, they're not getting it on an ongoing basis, they want something that tastes good, it's a little bit of decadence and that's what they're looking for. They're not necessarily thinking healthy.

(Interview # 8: NGO)

() At end of the day, you're stuck, for right or wrong, in a free market system () where we can decide drink ourselves to death, to smoke ourselves to death. That individual choice is seen as freedom to consume whatever you want, with some exceptions.

() If you're gonna start to dictate () to those restaurants what they can and cannot serve, you're gonna have the huge political battle that deals with freedom of choice.

(Interview # 16: PRIV)

Emphasis on consumers for the creation of healthier menu options:

Participants discussed the role of consumers in influencing the creation of healthier menu options in restaurants. They agreed that consumers' engagement is crucial for the success of healthy eating interventions. They explained:

It's so important [to] engage the consumer. () That was the real drawback that PPM150 [Ontario School Food and Beverage Policy] has caused within the schools. We came in with this regulatory change, but we didn't engage the students enough. They're not necessarily eating [healthy] at the school. They're walking the two blocks over to the fast food restaurants.

(Interview # 6: GOV)

It's important for consumers to be involved in the discussion. () We can talk about theoretical studies, but going back to the fact that the food, the menu items are purchased on site in the restaurant or standing in line. () We really need to understand this through the consumers eyes. () We're not having the depth of consumer understanding. We jump to conclusions and interventions and I think we need to spend more time understanding what goes on in consumers' minds when they're making those purchases.

(Interview # 8: NGO)

Participants commented that consumers' demand determines the type of menu or food product available in restaurants. That demand can be expressed through public engagement, public support or a social movement towards healthy eating.

It's interesting to observe the shift that has happened in those restaurants already as a result of public opinion. () If the public pressure increases or continues to be at least at some level, so that all of a sudden McDonald's introduced a salad, what, ten years ago? Twelve years ago? Fifteen years ago ()? They never had salad before. The only thing that was green was some white iceberg lettuce on the Big Mac, right? So I think there's a role for a public engagement, I wouldn't necessarily call it a partnership.

(Interview # 16: PRIV)

The health wave is not gonna go away. It's internationally growing and growing and, at the end of the day, what will really make it happen is the customer demand for specific products. If the customer wants it, they will make the business cater to them. It doesn't matter how you're looking at it. There are businesses that are opening specific on just nutritional, sort of healthy items only, but there are others () that perhaps are not jumped into any healthy items yet, because that's the customer demand and me as a consumer going out, I need a dining experience. (...) At the end of the day, consumer demand tells a business owner what to put on the menu.

(Interview # 3: PRIV)

() The push from the public has more credibility from the food industry point of view because they are the ultimate consumers. They're voting with their food dollar. So they [restaurants] are trying to provide what it is that someone will buy from them. I believe that if there is enough public support [or] if it's strong enough from a public point of view or consumer point of view to say: I'm coming to your restaurant, I want healthy choices. If you don't provide it, I'm not coming. It will probably be a bigger driving force than anything we could come up with.

(Interview # 1: GOV)

Participants also raised the fact that consumers can show preference for food menus that are not considered as healthy but rather popular food menus. As such, restaurant would be resistant to change their menus.

We could go out and say to the food service industry, let's look at things like cutting portion size and they might come back and say: that's what my customers demand. That's what gets them in my restaurant. They come in to my restaurant because they're getting this portion size and that's what they perceive as value. So all of a sudden if I cut my portion sizes without cutting my cost, my customers will come in and they'll complain and I'll lose them. So how does that work for me?

(Interview # 4: PRIV)

One participant explained that restaurants know their clients well and tailor their menus and dining experience according to different types of consumers. He described that there are four types of consumers and that restaurants will approach them differently.

I really like the descriptions of consumers. Gary Freed called some [consumers] as the foodies. They're the consumers who want pleasure from food. There's another group of consumer that's called the healthiest. These consumers are serious label readers looking for ingredients list () natural, organic, even vegan foods. They're looking for weight control. The greenies who want food that come from an environmentally and social responsible [companies]. [Then] there are the speedy who pay for convenience and then there are the cheapies. I think the government [and] the industry need to understand that there are all these varieties of consumers out there, and that it's not just any one consumer. (...) I would agree with my friend who is the speedy. If healthy ingredients were used in the food, he wouldn't even know. He could be eating good food without even knowing it (...) He wouldn't care [because] as long as it's fast, but if it was healthy and he got that the same time, he'd be ok with that.

(Interview # 9: PRIV)

Taste was discussed as a key determinant of food choice. Participants explained that consumers' palate influences how the restaurants prepare their food. They argue that if *the food is healthy and taste great, consumers will come back* (Interview # 1: GOV).

They [food manufactures] put out their line of lower sodium deli meats, [but] they didn't sell because they tasted less salty. So the palate, what people said was that they wanted a taste that wouldn't change. Not that it didn't taste good. It tasted different. That swayed them from dropping the products.

(Interview # 1: GOV).

(...) As long as those burgers are not just healthy, but they gotta taste good. People love flavour. It's very important that the flavours are there.

(Interview #3: PRIV)

Some participants commented on the opportunity to promote healthy, tasteful food products. They stressed the importance of focusing on consumers' expectation about palatable food so that to avoid potential product rejection.

Taste remains in many cases the number one driver of food purchases so we don't wanna forget about that. In many cases, they [restaurants] have invested sufficient resources in the product development. We think healthy food generally tastes terrible but that's changing. () I think the whole notion around healthy or I keep saying delicious and nutritious, if we can get the portion of the equation right, I think it's a great first step.

(Interview # 8: NGO)

Campbell's soup reduced their salt and they did it and () there was backlash. Some consumers didn't like the taste of the new soup.

(Interview # 9: PRIV)

Consumers' incentives for healthy eating in restaurants:

This category discusses incentive mechanisms to promote healthy eating among consumers (Table 6.11). Participants believe that financial and non-financial incentives might engage consumers in healthy eating behaviour.

Table 6.11 – Category about consumers' incentives for healthy eating in restaurants

Sub-category	Open codes
Incentives for consumers to engage in healthy eating	<ul style="list-style-type: none"> Considering food pricing effects on healthier food choices Creating tools to facilitate healthier eating initiatives

Incentives for consumers to engage in healthy eating:

This sub-category captures the discussion about food pricing effects on promoting healthy eating as well as tools to facilitate healthier food choices. Participants argued that price is a fundamental determinant for promoting healthy eating. They commented that healthy food options are available. However, higher prices of healthier food may limit some consumers to buy them.

() *Take a look at the menus for healthier items versus the other stuff. What's the one thing that you noticed? There's only one thing [that] should be fundamental. Price. The healthier options are available. Get a Caesar salad. Unfortunately, your Caesar salad's gonna cost you six bucks and your two dollars is gonna get you two pieces of chicken and [French] fries.*

(Interview # 14: PRIV)

The foods that aren't quite as healthy for you are really cheap and easily available and the healthier foods are sometimes more expensive. You can actually have some food pricing formulas or approaches that result in the healthier foods being more accessible for people.

(Interview # 2: GOV)

I think people legitimately want to eat healthy, most people, and not all of the time though, but when most of us are inclined to do that () one of the things we have to deal with is cost. (...) We're going to have to get the equation between cost and what we're eating right. I think that's () distorted today because you can buy tremendous amounts of unfortunately calorie dense food for very little money, yet when you go to a higher end more nutrient dense food item or meal, the cost is disproportionate, so we're going to have to address it. It's a grim reality. (...) We have to make it available and we have to make it available at a reasonable price.

(Interview # 8: NGO)

() *It's that whole idea of making the healthy choice an easy choice, right? So the healthy choice has to be lower cost. If the unhealthy choice happens to be a dollar less, () that will be the determining factor.*

(Interview # 6: GOV)

Beside affordable prices, participants suggested looking at some direct or indirect financial mechanisms to attract consumers to purchase healthier food options. Ideas such as tax credits or membership credits were raised as examples to further explore with consumers.

I think you have to incentivize the consumer as much as you have to incentivize the food service. (...) Maybe if you eat out at those places, you get points. You get some kind of incentive and you can use that towards a gym, a yoga class, something like that. (...) You're missing the middle and the middle is the consumer. You can make change on a policy level. You can make change at a food service level, but if you aren't fundamentally doing something to inform and inspire and incentivize consumers then, there are still lineups at McDonald's every day, right?

(Interview # 4: PRIV)

Participants also suggested creating marketing campaigns or tools to attract consumers to choose healthier food products.

() Maybe developing criteria for restaurants to fit in, making that criteria known to the public and then having that seal of approval from the government agency on the window. The public is now aware of what criteria this restaurant had to meet. Maybe developing promotional stuff and getting the knowledge out there to the public via the media or () social media would (). (...) The only way I can see that changing is if you're marketing a baconator or a grand slam at Wendy's, maybe [you] make that not come in a combo. The marketing is still going to be there for that large burger, but you don't have to have a milkshake a fries with it.

(Interview # 12: GOV)

It could be that if you work with X number of establishments to offer healthy menus, you've created a tool just for consumers who were interested in [receiving incentives] and by doing that maybe you've created an app that specifically highlights those food service establishments that have these kind of options. () [Are] you looking to get healthy in Ontario? Here are the places we recommend that you if you're gonna eat out, where you eat out.

(Interview # 4: PRIV)

6.2.2.4 Intervention factors

This theme depicts two strategic considerations for successful healthy eating interventions in restaurants. One relates to engaging multiple stakeholders for strengthening healthy eating interventions and the other refers to considering a multifaceted approach for promoting healthy eating in restaurants. Many elements presented in these two categories are new findings that were not examined in the QUAN survey.

Multi-stakeholder engagement for strengthening healthy eating in restaurants:

This category as a whole represents new findings captured through the QUAL interviews and expanded previous QUAN findings (Table 6.12). The elements that form this category were deemed important to strengthening healthy eating interventions in restaurants. It captures the discussion about engaging multiple stakeholders from within and beyond the restaurant industry, including small to large restaurants, food distributors and stakeholders from other sectors.

Table 6.12 – Category about multi-stakeholder engagement for strengthening healthy eating in restaurants

Sub-category	Open codes
Small, medium and large restaurants for increasing the reach of healthy eating initiatives	<ul style="list-style-type: none"> • Engaging the restaurant sector in developing healthy eating initiatives • Including small, privately-owned restaurants for promoting healthy eating
Food chain distribution for supporting healthier menu options	<ul style="list-style-type: none"> • Engaging the restaurant sector in developing healthy eating initiatives • Blaming poor eating at home rather than in restaurants
Beyond restaurant settings to reinforce healthy eating	<ul style="list-style-type: none"> • Involving other sectors to collectively address healthy eating and obesity

Small, medium and large restaurants for increasing the reach of healthy eating:

This sub-category reflects the importance of engaging different types of restaurants in dialogue for developing healthy eating interventions. A number of participants felt that a public-private partnership should have “*representations from all types of businesses of the food service spectrum*” (Interview # 4: PRIV) from small to large restaurant chains. They said that usually government chooses the “*low-hanging fruit*” (Interview # 14: PRIV), which in this case is represented by the large chains.

You go for the low-hanging fruit. This is what we're missing. We keep going for the big stuff and forget () local chefs in the city(). It doesn't need to be chain-driven. It needs to be individually-driven and this is why, inherently, we fail all the time.

(Interview #14: PRIV)

() Small businesses [operators] are not going to be the problem. It might actually be the solution.

(Interview # 13: PRIV)

Participants acknowledged the expertise that restaurants could bring to the table and their role in providing recommendations for creating healthier menus. They also commented that engagement with restaurants should start from the inception of the partnership to get the buy-in required for implementing healthy eating interventions

() We have had a discussion with [former] Canadian Restaurant and Food Service Association in the past. They were involved when we put together the Sodium Reduction Strategy. [They] were at the table with us [and] were involved in putting together a

very comprehensive set of strategies that involved () food composition () in restaurants and food services. (...) They have actually been involved in right from the beginning.

(Interview # 2: GOV)

The industry is close to action [and] close to the business owner. We have more succinct communication with them [restaurant owners]. [We] also help identify the leadership in the industry and those perhaps that can influence others on it. (...) I think the industry should be in consultations from A to Z and many of them are also affiliated with other global jurisdictions, not just in North America.

(Interview# 3: PRIV)

I think the real collaboration happens at the engagement level because I think if you could engage them [the restaurants] to have a better understanding of what they see as a positive [about the partnership] and engage the industry to think about the big picture.

(...) We learn through the development of our Feast On[tario] program. We did a lot of industry consultation as we were developing the program. We had some ideas of where we were going, but we engaged a lot with the industry and we made a lot of changes from recommendations with the industry because, at the end of the day, if the industry is going to make this work and if they are engaged at the beginning at a grassroots level, coming in and telling them, this is the program, this is how it's gonna work? Good luck getting buy-in. A top down effect is never, in my opinion, the best way to go.

(Interview # 4: PRIV)

One participant referred to a new approach that forest advocates have taken to protect virgin forests in Canada, which reinforces engagement and dialogue. He commented that food advocates in Ontario are not engaging in dialogue with the industry in a similar fashion.

() About fifteen years ago, there were a lot of fights in the forests of Canada. () The largest civil disobedience case in Canada's history where people were blockading a logging road in British Columbia. () Thousands of people got arrested for blockading the road. () You don't hear forest protests anymore. Why is that? Because the campaigners () have realized that making those kind of efforts doesn't always give you the results you want. () What they do is that they go and talk to a printer, a big printer, and say look, what paper do you use? And they tell you that's from a virgin forest. Guess what? We have an alternative and they go in and actually say, if you use this paper from this supplier, it has recycle content; it is not from virgin forests. () They engage them in conversation [and] try to change them from the inside. If that doesn't work, they increase their pressure. (...) Nobody's doing that on food. They should be negotiating with them [and] having a conversation. What kind of food are you serving? Where is it coming from? Is it sustainable? Is there a change in menu possibly? They should have an opinion. That's part of public discourse, part of democracy.

(Interview # 16: PRIV)

Despite agreeing with engaging restaurants in dialogue, some participants representing the government sector referred to 'engagement' as consultations to develop policies and regulations rather than to create public-private partnerships.

First of all, they might be involved in the drafting of the legislation. That's not unheard of the government. [They] would consult with the restaurant sector.

(Interview # 5: GOV)

() We would have to get the restaurants to come on board and the restaurants certainly would have their voice on public policy (...) I think we have to get towards healthy public policy but that's where it takes everyone coming to the table to come up with how that public policy actually should be written and developed. () If the government does it all by itself, you're not gonna get an effective system as if you have all the partners there.

(Interview # 6: GOV)

Food distributors or food suppliers for supporting healthier menu options:

This sub-category reflects the discussion about the role of food distributors or food suppliers in facilitating restaurants to create healthier menu options. Participants commented that restaurants, particularly the small, privately-owned businesses may face challenges in procuring healthy food products and that food distributors or suppliers can play a key role in filling this gap.

If you want me as the restaurant to have healthy choices on my menu, I need to make sure that I can procure that healthy food. () I can use an example of a good friend of mine in the restaurant business. () She is conscious of what she puts on her menu, but the challenge for her is to procure the food. Whether it is directly buying from the farmer or even her wholesaler who delivers the food to her. She may want to have that healthy menu, but she needs to () know who her suppliers are. () I still think a large barrier for a restaurant is just that access for [healthy] food to provide to the customer. (...) She also relies on a large food supplier like Gordon food service or Morton or Sysco. She can only choose from their shopping list of ingredients so to speak. If her food supplier doesn't operate a healthy choice and she can't source it, then what does she do? Where does she turn to? It's a challenge for her.

(Interview # 9: PRIV)

One participant commented on a case in which the food distributor had a crucial role in promoting Ontario cheese to food retailers and restaurants. He explained:

Premiere Wynne just passed a food act and we made grants to some really big companies, like Sysco, one of the largest food distributor in North America. () One of my staff knows the cheese guy. They sell a lot of cheeses and the cheese guy said: when my customers buy cheese, they buy cheddar and Havarti and Gouda, but it doesn't say where it comes from. They don't buy Ontario cheddar or Ontario Gouda or Ontario Havarti. Give me a quarter of a million dollars. I'll match it and that half a million-dollar project will completely reprogram our ordering system for our clients on cheese. I will educate my sales force to people who are on the ground selling Sysco stuff about this product. () In twelve months, they sold five million dollars more Ontario cheese.

(Interview # 16: PRIV)

Beyond restaurant settings to reinforce healthy eating:

This sub-category reflects the voice of the private sector. They felt that promoting healthy eating couldn't be limited only to restaurants. They commented that other sectors within and beyond the food realm should be involved in promoting healthy eating as there are a number of factors that influence eating habits. One participant suggested creating a food system strategy to address such complex issue of healthy eating.

There are so many convenience factors and women working so there's not as much cooking at home. (...) Thinking about some of the other ways that are gonna change consumer habits, (...) it goes back to having a national food strategy [or] even like a provincial or () at the city level. A food strategy that fundamentally becomes a core sort of every pillar where food touches on, whether it's in health, in education, in finances, in tourism (...) transportation, agriculture. (...) If you're not thinking about all of the other things that drive people to eat poorly, then you're not gonna fix the problem, 'cause the problem is so much bigger than the portion sizes [of food].

(Interview # 4: PRIV)

Some participants mentioned that healthy eating is a responsibility from every sector and individual in a society. They indicated that government and individuals should be accountable for healthy eating and not only the food industry.

If we're gonna move forward you need to a) engage us [food sector], but you can't just put the onus on the back of the food industry. () There is a role for the restaurant. There is a role for the consumers. There is a role for government and we all share a collective responsibility to implement this and not just put the onus on any one sector.

(Interview # 9: PRIV)

Participants raised the fact that lot of eating is still done at home and therefore healthy eating should not be limited to restaurants only. Rather, healthy eating initiatives should be expanding to other settings such as at-home.

Keep in mind that twenty-five to thirty percent of all eating is done in a restaurant. Most of it is done at home. Most people buy processed foods. What are we doing at home? You go to the grocery store, you buy (...) potato chips and nachos and all this stuff, really. How much of that you're selling in a restaurant? Very little. () At the end of the day, there's more bad eating done at home than there is in restaurants. We truly need to see how people eat at home. () If you look at what the grocery stores sell, you don't need a major study. There are more unhealthy items being eaten at home than there is in a restaurant on it.

(Interview # 3: PRIV)

We can all go home and make whatever we want. I can go home and make the French fries.

(Interview # 13: PRIV)

Multifaceted approach for promoting healthy eating interventions in restaurants:

This category describes the importance of considering a multifaceted approach to interventions promoting healthy eating in restaurants (Table 6.13). It discusses support for small, privately owned restaurants, consumers' education, food reformulation and other complementary interventions in restaurants.

Table 6.13 – Category about multifaceted approach for promoting healthy eating in restaurants

Sub-category	Open codes
Consumers' education for healthy eating	<ul style="list-style-type: none"> • Requiring the government to provide consumer education about healthy eating • Educating children about healthy eating • Educating consumers about healthy eating • Educating parents about healthy eating
Food reformulation for healthier food choices in restaurants	<ul style="list-style-type: none"> • Creating menu options with healthier food alternatives • Reformulating food products for healthier menu options
Complementary interventions for healthy eating in restaurants	<ul style="list-style-type: none"> • Agreeing with menu label as a good initiative • Promoting local food choices • Targeting smaller portion size of food and drinks

Support for small, privately owned restaurants:

This sub-category discusses the support that small, privately owned restaurants need for promoting healthy eating. A number of participants raised that fact that small restaurants lack knowledge about healthier food preparation. They commented that educating those food establishments is necessary if one wants to promote healthy eating. The quotes below illustrate this issue.

(...) Sixty-five to seventy percent [of restaurants in Ontario] are independent operators. They are small businesses owners () that might own one restaurant or two or three. They don't have the resources [and] operate in slim margins. () They don't have the time and the knowledge themselves to do it. Most of their issue is knowledge, knowledge of preparing not only to identify the ingredients, the cost of providing nutritional ingredients, but also someone who knows how to write a recipe with specifications, to break it down into measurements. That part is more of a hassle than actually converting them into nutritional ingredients. If the government puts some funds aside to support us in number one: educating the industry in what healthy [food] is. What are the nutrition ingredients that are healthy and can become substitutes over others? () That's where the emphasis should be placed. What are those nutritional items that perhaps could be substituted in recipes by chefs to keep the flavor, yet be healthy. I think the majority of the industry doesn't have the knowledge. (...) Many chefs in my career that I've seen stick to specific menus [because of] how they were trained. Many other ones come along and they're more opened minded on how to do it, how to prepare it. It's still something that can be taught to the industry as a whole.

(Interview # 3:PRIV)

I was at the Royal Winter Fair [and] went to one of the cooking demonstrations and the chef who was doing it was saying I'm not using very much salt. Well I saw salt. He had added a layer of salt to every bit of his frittata and then on top of that the meat that he used, [which] was like a big dose of ham. He had like salt on salt on salt and it was already a cheese promotion [and] he made a big promotion about salt being a flavour enhancer. When we've had experiences with chefs, () you just see the layers of oil [being used excessively] and you see the layers and layers of salt introduced because it's a method of preparation that exists, and taste that people want to go back for.

(Interview # 1: GOV)

Besides the knowledge about healthier food preparation, participants raised the need for providing support to small restaurants in identifying where to go to procure healthier ingredients.

Somebody needs to make sure that () the restaurateur understands the choices that [her or she] can offer to consumers. Somebody needs to educate the restaurateur on options of how you can serve more healthy food. () The food knowledge of a chef or a restaurant manager is probably not consistent. Somebody is going to have to take the lead and educate [the restaurateur]. (...) The restaurateur needs to be educated themselves as to where they're going to go to source the healthy product that you want them to put on their menu. (...) If I'm going to reformulate my breads, where do I go to get that new recipe? I would send them to George Brown or I would send them to Niagara College, but even within the industry themselves, if they want to try and offer more healthy choices, somebody needs to provide them with the information as to where they can go to get those new options.

(Interview # 9: PRIV)

They commented that most chain restaurants already have dietitians on staff and nutrition information available to consumers. However, small, privately owned restaurants lack resources to conduct nutritional analysis of their food menus. Participants felt that the government can act as a catalyst and facilitate nutrition analysis.

() A big concern that I personally have is with () food service establishments that () actually support local, sustainable and seasonal food menus. Their menus change with the seasons; it changes with what's coming out of the ground. My only concern would be for the small and medium size of operators who are trying to make the choice of local food and changing their menus seasonally and giving healthy options. () If it's required for them to actually do the labelling on their menu or show, for example salt content or that kind of thing, [this] could be cost prohibitive to them.

(Interview # 4: PRIV)

The chains know how to do it, but the rest of the industry might need help in supporting how you make flavour () with different ingredients than putting too much salt. (...) They [small restaurants] just need support from whomever, [and] if the government is the catalyst to make it happen, to support the industry, the industry will do it. It needs some kind of funding to help them get there because one of the resistances for restaurants is the cost of getting the nutritional ingredients breakdown. Most of them [small restaurants] do need to hold them by the hand and help them.

(Interview # 3: PRIV)

We [government] can give that in-kind help. () We're saying: Yes, we want you to make changes and we're going to do everything to make that easy for you [restaurants]. They'll need the nutrient analysis. This should be some way we can either do it or support it.

(Interview # 1: GOV)

I still view the government portion of it being in a supportive role. I think the government acting as a resource, getting the information, the healthy eating portion information available, and then supporting the restaurant in getting the information into the restaurant, getting it onto the menu. So I guess the government does have a supporter role with the positive association [of] being a benefit to the restaurant.

(Interview # 12: GOV)

Consumers' education for healthy eating:

This sub-category describes participants' discussion about the need to educate consumers, parents and children about healthy eating. Some participants criticized the role of the government in educating Ontarians about healthy food, and commented on the need to improve food literacy in the Province.

At the end of the day, I think the biggest thing is to understand where the role of the government is in terms of educating the consumer () to actually significantly educate the consumer about why these choices are better for you. () What makes it better for you beyond () your health, 'cause it could be the health; it could be the health of your economy; it could be the health of your community neighbourhood because you're supporting establishments that you like. I think that there's other ways to message it that might actually help to see a shift in consumer habits.

(Interview # 4: PRIV)

We advocate for food education and making sure that the consumer knows how to read labels and understand when it talks about calories or salt or sugars and understands what that means on the labels. We don't believe that the consumers know that, so we see that as a role for government to help to improve food education.

(Interview # 9: PRIV)

I think the government in Ontario has done a very poor job at healthy lifestyle education. (...) Education is where you've got to start. We haven't done that. () If we'd have done the education part, we might have changed lifestyles over the last five years. The educational part is maybe: [you] shouldn't eat as many and maybe you should be exercising more and walking instead of driving

(Interview # 13: PRIV)

It would be the government's role to really instill the knowledge and the resources to support () the education component to the customers of the restaurant and to make sure that they are aware of the benefits of the healthy choices versus the downfall of the unhealthy choice.

(Interview # 12: GOV)

There's a monstrous educational challenge ahead of us. (...) There's a literacy issue in the country (...) and the ability to read the nutrition facts panel. That's () the only way you're going to be able to control your entire nutrient intake for the day.
(Interview # 8: NGO)

Providing consumers with knowledge and skills on how to prepare healthy food and make healthy choices was raised by a number of participants as a fundamental step for achieving healthy eating goals. Some commented about creating awareness campaigns among consumers to call for restaurants to offer healthy food.

() At the end of the day, what you're trying to do is re-educate a population that's lost control of what they do particularly with [eating]. Let's be honest. I don't think half the city of Toronto even knows how to eat anymore at home. (...) I think if we're ready to do this, quite honestly, we need to get into the education side.
(Interview # 14: PRIV)

When we try to find a solution to what the government feels is a big issue and that's the health cost of the system and the obesity, we need to look at it from all angles and we need to look at educating the household level on how to prepare food. () We're talking about food literacy here and part of that is to understand what is healthy and what isn't. Number two is how to substitute ingredients and how to use it. [This is] education.
(Interview # 13: PRIV)

We'd also have to be () doing the education on the consumer side as well as getting the consumers to recognize the importance of going to a smaller portions size. () It's changing our culture and build[ing] the advocacy of consumers to request healthy food choices. It's looking at what the consumer wants, but trying to have them to be a more informed consumer.
(Interview # 6: GOV)

() We do need a broad awareness building effort to the general population. (...) We know that there's health and nutrition literacy. These are all things that are very real so we're going to have to find a way to address that. Any awareness or any educational components that we take on [because] if the consumer wants something the industry will follow. I'm not saying this is easy, but the idea is [that] we need to educate people on what is appropriate.
(Interview # 8: NGO)

Some participants commented on the role of nutrition education to help consumers make healthier choices. They discussed the aspect of eating with moderation rather than making distinction of healthy and unhealthy food.

A can of coke is not unhealthy. I don't know if you know that, you can ask any doctor. Ten cans of coke a day are very unhealthy, right? So that's a part of the education concept. () There is nothing unhealthy; bag of chips is not unhealthy. But ten bags of chips a day, [you] would be obese. () We all have to quit saying everything is unhealthy and start saying: how do [we] manage [our] intake and then what are the alternatives to that intake, right?
(Interview # 13: PRIV)

The important role of parents in shaping children's eating habits was raised by a number of participants. They believe that educational messages about healthy eating need to target parents of young children as they have influence over the family environment where meals take place.

Participants explained this point with some anecdotal examples:

() Children under the age of thirteen come back to the role of the parents. [As an example,] I'll use my neighbour who has two children under the age of ten. () They have not been taught healthy eating skills in the house. Every Saturday and Sunday I watch dad come home with a Happy Meal from McDonald's. (...) They have become dependent. () Parents need to be educated and that someone needs to tell my neighbor () that feeding your kids happy meals for lunch and dinner on Saturday and Sundays is not a good, healthy choice for your children, but there has to be some onus and responsibility placed on the parent and the consumer as well.

(Interview # 9: PRIV)

This past weekend we went to have breakfast with the kids to our local greasy spoon. There was a family sitting beside us and the young man was probably about eleven or twelve [years old]. He was enormous. () It was ten o'clock in the morning, [and] they're all drinking pop. It sucks. I'm not saying that what we're doing is perfect, but ever since the day my kids were born, we only have apples and pears for dessert and if we have ice cream, it's a big deal.

(Interview # 4: PRIV)

Participants argued that food literacy at younger age could produce meaningful changes in the food system. They felt that changing eating habits is much more difficult in adulthood and the focus should be on children.

We need to get into the education side. We need to develop the education awareness at the scholastic school levels. That's where I feel that the partnership should be. If we teach them to eat healthy as students, they're going to continue that all the way through. They don't change. () Once you're about fourteen or fifteen your eating habits have been set. Study after study after study shows that. I hate to say it, I'm not gonna change their eating habits [among adults]. They're done. They're screwed. They're out of the way. Let's go after the ones under sixteen and focus all our attention on being able to radically change what's now become something normal.

(Interview # 14: PRIV)

I just came from the brain food health conference in Windsor and a lot of it is talking about food literacy and starting with kids. () At the end of the day, we really have to practice what we preach. (...) () Having this kind of partnership is great, but I think it's part of the bigger picture of how we're gonna fix the problem of helping Canada () thinking about food literacy at the school level.

(Interview # 4: PRIV)

Food reformulation for healthier food choices:

This sub-category captures the issue of creating healthier menu options or reformulating food products to offer healthier choices. Many participants acknowledge that healthier options do not mean restricting consumers to certain foods. Rather, it refers to creating healthier alternative options for that same type of food.

When you do offer a choice and you offer the healthy items and you offer perhaps things that might not be considered healthy. Some of them are fish and chips. () There could be alternatives to that fish and chips that are perhaps grilled and that there is more healthy on it.

(Interview # 3: PRIV)

You're not even actually influencing somebody, for example, not to have a cheeseburger. That cheeseburger may be a healthier cheeseburger.

(Interview # 5: GOV)

Participants commented that restaurants offer different food alternatives to attract different types of consumers, which some options being healthier than others. They claim that consumers' choice is often not healthy, but restaurants have the opportunity to promote fruit and vegetables which seemly fits with their business operation.

[If] you're not going to offer them a hamburger, they're not coming in anyhow. Now, with that hamburger, you can offer chicken burgers and alternatives, but [if] you don't have what the customer wants, you won't have a business to legislate anyhow.

(Interview # 13: PRIV)

Increasing food and vegetable consumption () is a big part of the future plan for us because the science ties nicely to that and I think the restaurant sector lends itself so nicely to increasing fruit and vegetable in our diets.

(Interview # 8: NGO)

Participants from the public sector raised food reformulation as a measure to bring healthier food choices to consumers. They believe that restaurants are able to alter their food menu by reducing salt, sugar and fat during food preparation.

The restaurant industry may start to alter the content of its food [and] what it offers to the public. () The fat count of the hamburgers may change; the sodium content may change. I think the actual healthiness of the products will improve. Their menu may change a bit and the content of the things that are already offered may become healthier.

(Interview # 15: GOV)

() What we're thinking about here with respect to restaurants is whether or not we want to reduce calories, total bad fats, eliminating trans fats () and of course, sodium, [which] is a big one that we work with as well. It's looking at things from a straight composition perspective.

(Interview # 2: GOV)

Participants acknowledged that large restaurants are equipped with dietitians on staff who work on improving food menus. They granted that many of those large chain restaurants have already reformulated their menu items to be healthier.

They all have dietitians on staff, certainly the big chains anyway, who could recommend ways to improve the menus, and a lot of them have already done that. () McDonald's has gone through their menu and they have reformulated forty-seven different menu items to reduce the salt and the sugar in their items and with respect to sodium. They said that they could do a lot more. It was actually a lot easier than what they thought.

(Interview # 2: GOV)

Complementary interventions for healthy eating in restaurants:

Besides healthier menu options and food reformulation, a number of participants discussed menu label, local food and smaller portion size of food and beverage as complementary interventions to implement in restaurants. Participants from the public sector agreed that menu labeling not only may influence consumers' decision making about food choices, but also may instill restaurants to adjust their menu towards healthier alternatives. The quote below illustrates this point:

() Menu labelling in restaurants will be the big reveal and in that reveal, restaurants are more likely to redo their recipes so that they look good. () Digging a little deeper will cause people [to] create change on its own because I think once you put the numbers out there, the numbers will reduce the portion size of calorie dense food.

(Interview # 1: GOV)

Participants also discussed promoting local food choices as a component of a restaurant intervention. They believe that *bringing locally grown food* (Interview # 6: GOV) in restaurants not only supports a healthy agenda, but also a sustainable local economy.

Small portion size of high calorie-dense foods was discussed as an additional intervention to promote healthy eating in restaurants. Participants agreed that portion size of high calorie-dense foods is impacting substantially our calorie intake and that change is required to make small portion sizes the restaurant norm.

The term portion distortion is quite rapid in the restaurant sector and you only have to travel in the U.S. for a few weeks and you see what's going on in that market. I think that portion sizes are drastically out of proportion. (...) It's certainly a contradiction because I look at the restaurants [and] their whole marketing campaigns and promotion campaigns are based on large portions.

() We're going to have to change that model and I think we're going to have to over time make normal portion sizes more commonplace than large portion sizes.

(Interview# 8: NGO)

The reduction of portions size I definitely like because that way somebody can still get their French fries fix and they have it in a more reasonable portion size. If you decrease the portion size then it becomes more of a social norm. So these gigantic portions will fall by the wayside and then you get into a more reasonable portion size that's controlled. It becomes the social norm when you reduce those portions sizes.

(Interview # 12: GOV)

While some participants believe that government can influence restaurants to provide smaller portion size, others raised the challenge of getting the restaurants to implement such intervention. They argued that many food establishments promote their business as offering large portion sizes of food and beverages.

We could influence them [the restaurants] in providing smaller portions. () I would hope that we could () actually get it to be stronger than just education and that we could get it to become the norm for the restaurants to serve smaller portions of unhealthy food choices.

(Interview # 6: GOV)

It is a very idealistic goal to have. (...) We could go out and say to the food service industry to cut portion size and they might come back and say: that's what my customers demand. That's what gets them in my restaurant. They come in to my restaurant because they're getting this portion size and that's what they perceive as value. So all of a sudden if I cut my portion sizes without cutting my cost (...) they'll complain, and I'll lose them. So how does that work for me?

(Interview # 4: PRIV)

6.3 Final Remarks

The findings presented in this chapter provided new and complementary understanding of the QUAN data on several fronts. The QUAL findings were particularly helpful in expanding the knowledge about new factors that play a role in influencing the process of building PPPs and interventions for healthy eating in restaurants: *contextual factors* and *consumer-driven factors*. They were not examined in the QUAN survey. With respect to the pre-determined factors (i.e., motivation, enablers, etc.), the analysis revealed new findings for *motivational factors* and *intervention factors*. Complementary insights were gained for *governance* and *enabling factors*. Lastly, new aspects about divergences were found with respect to *benefitting factors* and *hindering factors* for PPP engagement. Appendix 6_a summarizes these findings according to the purpose of this mixed method study.

A number of contextual factors were identified as influencing decision-making of governments on whether to enter into PPPs. External circumstances such as the complexity of the problem in

question, the political forces or public opinion as well as support from research evidence were discussed to affect the intention of governments in considering PPPs as a model of intervention. In addition, internal requirements such as careful planning and guideline development were raised as relevant.

Financial and non-financial incentives were discussed as *strong levers* to motivate restaurants, particularly small, privately owned restaurants to engage in partnerships with the government for promoting healthy eating. Restaurants seem to appreciate being associated with the government perhaps due to the image that the public sector portrays as being a genuine institution in which the public can trust. However, distrust between the public and the private sectors was observed on different fronts and deemed to hinder the process of building potential PPPs.

As PPPs were considered a distinct model of business operation, a different mindset and influential figure is crucial to make such organizational change. Champions were seen enablers in the process of building PPPs. They play an important role to facilitate significant business change in both the public and the private sectors.

Successful partnerships were contemplated as a product of good governance in relation to partnership's structure and operational practices. In that regard, a health-related, independent organization that represents the public's interest and that is not intertwined in the bureaucratic process of government was indicated as an alternative structure. This independent organization is deemed to offer flexibility to operate in nimble environments as well as the ability to bring together different players.

There was recognition that the *status quo* of unhealthy eating in today's society is pressing the health care system due to a great number of diet-related chronic diseases. However, changing eating behaviour will not occur overnight, and the government needs to move away from the *quick fix* approach. It was also raised that incremental rather than comprehensive approaches for healthy eating policy and programs are preferred by the government, and testing new interventions can be part of a broad plan for sustainable and scalable programs.

In considering healthy eating interventions in restaurants, an essential role for the government to embrace was considered the development of guidelines and standards. Government can step up and

work with stakeholders to create those definitions, which is believed not only to improve the understanding of healthy eating messages by the population, but also to provide food companies with consistent definitions for the creation and promotion of healthy food products. Government is better positioned to lead and facilitate this process.

Leverage the restaurant sector's expertise, resources and skills were considered a primary requirement if interventions are to be implemented and delivered in those settings. Not only do restaurants know their customers better, but they also have resources and innovative approaches that government could harness for the creation of healthy eating interventions.

If more and more food establishments offer consumers nutritious, healthier safe food products, this could become a practice among restaurants. The peer influence in the business sector can be as powerful as legislation and regulations to change business practices (Skelcher & Sullivan, 2008). This approach perhaps could be fostered through a PPP.

Different observations about healthy eating regulation are subject to tension between the government and the restaurant sector. On one hand, the restaurant sector perceives being overregulated by the government. The government, on the other hand, believes that changes in restaurant practices to promote healthy eating will only occur with a legislative mandate. These discordant opinions, if not addressed earlier in the development process, may hinder any attempt at collaboration.

There are two important aspects that can influence consumers to engage in healthy eating: consumers' demand and consumers' incentives. Consumers' demand involves understanding what leads consumers to choose certain restaurants and food menus over others. Consumers' incentives involve mechanisms that facilitate healthier food purchases such as taste and food pricing. Addressing consumers' demand while creating the appropriate mechanisms for incentivizing individuals to purchase and consume healthier food products should be an integral part of any healthy eating intervention in restaurants.

Engaging multiple stakeholders and adopting a multifaceted approach are considered strategic for strengthening healthy eating interventions in restaurants. Multiple stakeholders include organizations from within and outside the restaurant sector. This would allow not only accessing expertise from

different types of businesses, but also getting the buy-in of small business operators and expanding the reach of interventions.

A multifaceted approach means that interventions should not only engage small business operators in dialogue, but also support them with knowledge and resources to create and promote healthy food. It was raised that small restaurants lack knowledge about healthier food preparation and need support in identifying suppliers that carry healthier food products as well as dietitians to conduct nutrition analyses.

Consumer education on healthy eating was raised as a major challenge, and government was seen as pivotal in improving food literacy. Food reformulation is another approach considered feasible for promoting healthy eating in restaurants. Besides healthier menu options and food reformulation, participants from the public sector indicated that including menu labels, supporting local foods and reducing portion sizes of high calorie-dense foods are important complementary interventions for strengthening healthy eating in restaurants.

Chapter 7

Theoretical Framework

7.0 Introduction

This chapter presents the integration of the quantitative and qualitative findings into a theoretical framework (hereafter referred to as the Framework). The Framework was developed following the three-step approach proposed by Whetten (Whetten, 1989). The first step involved identifying a set of factors and their respective variables that was considered part of the explanation of factors influencing PPP development. This step was performed by reviewing relevant literature and theories related to interorganizational collaboration. The second step consisted of conducting the field research and was implemented using a mixed-methods research design to determine the elements that were important to include in the Framework and how they relate to each other. The third and final step involved the organization of the validated factors and their respective variables into an integrated representation of the phenomenon. This final step, which is discussed in this chapter, consisted of integrating the quantitative and qualitative findings and the available literature to clarify meaning and explain underlying assumptions based on fundamental views or theories. This final step required a high level of conceptualization to represent the phenomenon of PPP formation into a graphical framework.

This chapter starts by introducing the assumptions under which the Framework was developed. Next, it explains the components of the Framework, that is, the stages and corresponding factors, integrating the findings with relevant literature. The following section describes specific findings regarding PPPs for healthy eating in restaurants in Ontario. The chapter ends with a brief concluding remark.

7.1 The Framework Assumptions

A proposed Framework is illustrated in Figure 7.1. The Framework was built based on a theory-driven, empirically grounded approach using the context of healthy eating interventions in restaurants in Ontario to explain the process of building PPPs. Although it was examined under this specific condition, the Framework was developed with the intention to guide a variety of PPPs in public health. The stages and factors described in the Framework may be suitable to many types of PPPs in public health, with some variables being exclusive to healthy eating (e.g., influencing food industry to promote healthy eating), whereas others being very general (e.g., gaining access to expertise and skills). To some extent, the applicability of these variables may vary according to specific characteristics of public health interventions.

The Framework captured the opinions of all three sectors studied in this PhD research, represented by the NGO/academic sector, the public sector and the private sector. Therefore, it is likely that the Framework not only may be used to inform the development of partnerships among all three sectors, but also other types of collaborative engagements, such as partnerships between the NGO and the business sector, academia and the business sector, among other arrangements.

In Figure 7.1, the stages are represented in linear and progressive steps to facilitate the understanding of relevant factors involved in the formation of PPPs. However, in reality, they may occur in a non-linear, non-sequential, or even, simultaneous fashion. Readers should be cautious to assume simplicity by this representation.

The Framework was also created under the assumption that building partnerships is an evolving, iterative process with potential for unexpected changes at all stages of development. In this Framework, decisions for disengaging are graphically represented in two distinctive moments. However, it is plausible to assume that disengagement can occur at any point during the process of creating a PPP. In addition, the Framework assumes that partnerships are shaped by a temporal condition. That is, PPPs might not occur in certain times and places because organizations might not be ready to consider PPPs as a model of collaboration, even if they face external pressure to do so.

Finally, the Framework is restricted to the initial stages of building PPPs. It attempts to explain the several stages (i.e., process) that organizations should undertake when considering PPPs. Although the implementation, management, monitoring & evaluation of PPPs represent important aspects in PPP development, they are not discussed in this doctoral thesis.

7.2 The Components of the Framework

The integration of the findings, substantiated by relevant literature, resulted in eight stages that encompass the process of building PPPs in public health. These stages, described in Table 7.1, represent the process of which organizations may undertake to build a relationship for creating a PPP initiative.

The Framework acknowledges the importance of leadership throughout the process of building PPPs. The presence of a leader or champion from each organization seems necessary to recognize

the forces pressing collaboration, incite dialogue within organization, mobilize efforts, and guide action. In addition, leaders may need to have active roles throughout the PPP exercise, particularly to steer the process of PPP engagement, balance power-sharing and control (Casey, 2008), and achieve partnership synergy and effectiveness (Lasker et al., 2001; Roussos & Fawcett, 2000)

Leadership is represented in Figure 7.1 across stages of PPP formation.

In this study, most participants (80.4%) indicated that having *support from a champion* is an important factor to facilitate PPP formation. Interestingly, the NGO/academia was less likely than the public and the private sectors to need a support from a champion, perhaps because they see themselves as independent bodies with more flexibility to participate in partnerships.

The qualitative interviews confirmed the importance of having a champion to support the engagement process. Participants recognized that PPPs require a different mindset, which involves having leaders or individuals with specific skills, charisma or influential personalities to generate changes. Those individuals act as inspirational champions able to create the necessary level of commitment to enable change.

Leadership also functions as “the glue that binds the organization together”(Austin, 2000)p. 83. Top leaders usually are the champions of change and have the ability to permeate and connect all levels of their organizations and influence changes when required. Leadership was considered the most important factor in partnership’s effectiveness to create community and system change (Roussos & Fawcett, 2000). If PPPs in public health are designed to bring meaningful changes, top leaders shall be fully engaged to legitimate commitment to the PPP’s goals, to support new functions and to facilitate changes.

Table 7.1 - Stages of building PPPs in public health

Stages	Explanation
Stage 1: Awareness	Organizations are mindful of external issues pressing PPP engagement
Stage 2: Recognition	Organizations recognize potential obstacles and enablers of engaging in PPPs
Stage 3: Contemplation	Organizations assess compatibility for potential PPP engagement
Stage 4: Dialogue	Organizations consider a convener for facilitating dialogue
Stage 5: Negotiation	Organizations make explicit and negotiate motivations and expected benefits to form PPPs
Stage 6: Deliberation	Organizations develop and apply measures to mitigate potential risks in PPP engagement
Stage 7: Engagement Decision	Organizations decide whether to enter into a PPP
Stage 8: Preparation	Organizations define the governance model for operationalize PPPs

Each stage consists of factors or dimensions that make up the process of PPP engagement. The factors were empirically examined in this doctoral thesis, while the dimensions were conceptualized based on relevant literature. Each factor/dimension is explained by a set of specific variables that are deemed to guide the process of building PPPs (Table 7.2).

The variables were arranged based on their level of importance according to the quantitative findings, with number one (1) being the most important variable. When numbers are not provided, it means that the variables were captured either by the qualitative analysis (QUAL) or relevant literature (RL) with no level of importance assigned. Some of the variables may be applied to all sectors (e.g., opposition of stakeholders; or gaining access to expertise or skills), while others (e.g., government regulation; or inappropriate food marketing strategies) are likely to be more relevant to the private sector.

Table 7.2 – Stages, factors/dimensions and variables involved in the process of building PPPs in public health

Stages	Factors/Dimensions	Variables
Across stages	Leadership	Support form a champion (1); (QUAL)
Stage 1: Awareness	Pressing Factors	Complex public health problems (QUAL) Political forces (QUAL) Research evidence (QUAL) Social legitimacy (QUAL) Government regulation (QUAL) Time (RL)
Stage 2: Recognition	Hindering Factors	Inappropriate marketing strategies (1) Conflict of interest (2) Opposition of stakeholders (3) Lack of trust in the other partner organization (4) Potential loss of credibility (5)
	Enabling Factors	Existence of PPP guidelines (1) Experience with PPPs (1) Endorsement from a credible institution (2)
Stage 3: Contemplation	Compatibility Assessment	Selecting and screening potential partner organizations (RL) Assessing partnership need and compatibility (1)
Stage 4: Dialogue	Convener	Creating opportunities for dialogue (QUAL) Finding commonalities between sectors (QUAL)
Stage 5: Negotiation	Motivating Factors	Gaining access to clients or customers' perspective (1) Reaching out to clients who would not be reached alone (2) Gaining access to expertise and skills (3) Gaining access to additional funding (4)
	Benefiting Factors	Influencing food industry to promote healthy eating (1) Improved performance (2) Improved corporate image (3) Creation of differential advantage (4)
Stage 6: Deliberation	Risk Mitigation Measures	Balancing commercial interest with public health goals (RL) Managing conflict of interest and bias (RL) Ensuring co-branded activities support healthy eating (RL) Complying with ethical codes of conduct (RL)
Stage 7: Engagement Decision	Decision-making	Yes - Engage in building PPPs (RL) No - Disengage from the PPP exercise (RL)
Stage 8: Preparation	Governance Factors	Clarity and openness in decision making (1) Transparent process for monitoring and evaluation (1) Formal accountability system (2) Equal decision-making authority (3) Equal representation of partner organizations (3)

Figure 7.1 – Theory-driven, empirically grounded framework for building public-private partnerships (PPPs): The stages of PPP formation in public health

7.3 The Eight Stages of Building PPPs in Public Health

7.3.1 Stage 1: Awareness

The Framework's starting point is the awareness stage in which organizations realize that they are facing complex problems or societal problems that are large enough and multidimensional in scope that one single organization may not, alone, cope with them (Trist, 1983). Organizations are mindful of external issues that impose pressures to justify their internal activities or outcomes to the social system (Oliver, 1990). Those pressures may raise awareness of representatives of organizations about PPP engagement.

Pressing factors

In the external environment, organizations are confronted with pressing factors that urge them to find collaborative solutions to manage them (Emery & Trist, 1965). This study found a set of pressing factors (Table 7.3) that deem to influence PPP awareness.

Table 7.3 – Pressing factors influencing PPP awareness

Stage	Factor	Variables
Stage 1: Awareness	Pressing Factor	<ul style="list-style-type: none"> • Complex public health problems • Political forces • Research evidence • Social legitimacy • Government regulation • Time

Complex health problems, political forces and research evidence were identified as having an impact on government's decisions about engaging with multiple stakeholders, including the private sector, in the pursuit of a healthy society. Complex health problems, such as obesity or other diet-related chronic diseases, have challenged the traditional way in which government has promoted and protected health and prevented ill health. The complexity of addressing obesity, for example, is characterized by the interaction of a number of factors including, not exclusively, the diversity of risk factors associated with obesity, the economic power of the food industry and the public policy required to trigger changes. In addition, many governments are facing an era of increasing public austerity and political instability, which put them in a vulnerable position by the economic interests of powerful private sector organizations. These pressing issues combined with the support from public opinion and research evidence are said to influence government to experiment with

alternative models of collaboration such as PPPs. These findings are supported by the literature on PPPs in other health fields, which suggest that limited financial resources, complex social and behavioural problems, widespread occurrence of a disease and reduced government capabilities influence decisions about PPP development (Reich, 2002; Widdus, 2001).

A set of pressing factors relevant to the private sector refers to *social legitimacy* and *government regulations*. Throughout the qualitative interviews, it became evident that corporate social responsibility is of great value for the private sector. In recent times, the food industry has been the target of intensive criticism by researchers, consumers, health advocates and government as being the driving force behind the global rise in consumption of unhealthy food and beverage products (Stuckler & Nestle, 2012). In this study, representatives from the private sector acknowledge that portraying an image of good corporate citizenship is crucial for the sustainability of their business. They indicated that the restaurant sector is voluntarily promoting healthy eating, considering this as an example of good social responsibility. Some restaurants have already created healthier menus or reformulated their food products to offer healthier choices. Others have partnered with the government to provide nutrition information at point-of-purchase in restaurants. This voluntary response of the restaurant sector can be explained by the concept of social legitimacy or the need of being recognized by the large social system as organizations undertaking appropriate initiatives that bring value to the large social system (Oliver, 1990; Peters, 1998b; Pfeffer & Salancik, 1978). The lack of social legitimacy is believed to exert pressure in the private sector to engage in PPPs.

Government regulation is viewed as another pressing factor in which the private sector seeks to avoid or reduce government control over its resources. The qualitative interviews showed an outcry of disapproval of government regulations on restaurant business. This is because many of the public policies regarding the food environment affect business' self-interests. According to resource dependency theory, organizations facing this type of situation may seek to eliminate government dependence using political mechanisms to create an environment that is better aligned with their interests (Pfeffer & Salancik, 1978). The fear of being regulated may explain why restaurants seek to buffer from the consequence of government control, and may want to engage in collaborative arrangements to obtain more autonomy or avoid interference in their business.

Similar factors have been found in the literature of sustainable development. Scholars have turned to the societal context to explain the rise of partnerships (Van Huijstee et al., 2007). They found that

authors use globalization, liberalization and privatization to explain the complex problems that societies have been experiencing for many decades. They explain that those problems exceed by far the capacity of single actors, which require shared efforts of players throughout all sectors of society in the form of a new collaboration model such as PPPs (Van Huijstee et al., 2007).

Lastly, special attention is given to *time or temporal condition* in which the interaction of these pressing factors occurs in practice. Time might influence pre-assumptions or create misconceptions about PPPs, affecting any intention to start a conversation about PPP development. In this context, temporal conditions might influence the readiness of partner organizations, particularly the public sector, to consider PPPs as an alternative or supplementary model of collaboration. Time, on the other hand, may help individuals mature the idea of PPPs as more knowledge becomes available through research and experience. The notion of time is likely an important factor affecting decisions on building PPPs, particularly in Ontario where there has been limited experience and knowledge on the role of PPPs in public health.

7.3.2 Stage 2: Recognition

At this stage, organizations are aware of the need to find alternative solutions to overcome external pressures. They start recognizing, however, that there are some hindering factors that may prevent or challenge them to engage in such collaborative arrangement. On the other hand, they also identify factors that could enable PPP engagement (Table 7.4).

Table 7.4 – Hindering and enabling factors in the process of building PPPs

Stages	Factors	Variables
Stage 2: Recognition	Hindering Factors	<ul style="list-style-type: none"> • Inappropriate marketing strategies • Conflict of interest • Opposition of stakeholders • Lack of trust in the other partner organization • Potential loss of credibility
	Enabling Factors	<ul style="list-style-type: none"> • Existence of PPP guidelines • Experience with PPPs • Endorsement from a credible institution

Hindering factors

A key hurdle to PPPs is overcoming the various barriers that can make the process of building PPPs especially difficult. Those hindering factors are not a one-time issue. Rather, potential obstacles can accompany organizations throughout the stages of building PPPs. This notion of continuum is represented by a background arrow (in yellow) in Figure 7.1.

The qualitative interviews unveiled a blatant distrust and skepticism between the public and private sectors. Participants from the public sector expressed great disapproval of the misleading marketing practices undertaken by the restaurants to sell unhealthy products, particularly to children and youth. This finding was consistent with the quantitative survey as well as the literature on PPPs for healthy eating. Overall, the majority of participants from the public sector and NGO/academia reported that *inappropriate use of marketing strategies by a partner organization* was an important factor that hinders the development of PPPs. While this finding was somewhat expected among these two groups, it was surprising to learn that half of the participants representing the private sector also indicated it as a hindering factor for the progress of PPP development. Kraak and colleagues reported that the food industry has not yet publicly conveyed a clear strategy or set clear objectives applicable to its entire business to respond to consumer health concerns, and obesity-related issues in particular (Kraak et al., 2009). Misleading marketing strategies combined with lack of transparency by the industry has created a strong sense of unethical business practices that favour profit over consumers' health.

Another factor considered an important hindrance to progress in building PPPs refers to *conflict of interest* between the public and the private sectors. In this study, around 80% of participants from the public sector and NGO/academia perceived conflict of interest as hindering PPP engagement, whereas only 46.7% representing the private sector indicated it as an important factor. As expected, the difference in perceived importance was more pronounced between the government and the restaurant sector.

Substantial risks exist for PPPs when the two sectors differ in interests, views and accountability mechanisms. The literature raises a number of ways in which conflicts of interest can occur, including the opportunity for the for-profit sector to improve its organizational image by engaging in marketing activities for a social or charitable cause that, in the long term, can involve financial pay offs (Nishtar, 2004). Another potential form of conflict of interest exists when PPPs facilitate access

of the commercial sector to policy makers, allowing the private sector to lobby governments for specific interests (Nishtar, 2004).

Scholars argue that in order to engage in PPPs, partner organizations need to balance commercial interests with public-health goals (Kraak, Swinburn, et al., 2011), and recognize and manage conflict of interest through a number of measures (Omobowale, Kuziw, Naylor, Daar, & Singer, 2010). For example, Kraak and colleagues recommend complying with ethical codes of conduct and ensuring that co-branded activities support healthy products and healthy eating (Kraak, Swinburn, et al., 2011). Omobowale and colleagues highlight a range of good practice in managing conflict of interests. This includes (a) attention to transparent governance structure, including an accountability mechanism that fosters unbiased decision-making; (b) acknowledgement and disclosure of possibility of conflict of interests; (c) abstention and withdrawal from decision-making when a conflict of interest is present; (d) training of employees on how to identify and avoid conflict of interests; (e) public reporting of real or perceived conflict of interest, and (f) independent monitoring to provide unbiased evaluation and to assist in the prevention and declaration of potential conflict of interests (Omobowale et al., 2010).

Opposition or resistance from stakeholders not directly involved in the PPP was perceived as a hindering factor by 74% of all participants. The stakeholder theory explains that groups or individuals, external to the organization, can affect positive or negatively the organization's legitimacy. In this case, the organization should take into account such groups and have an explicit strategy for dealing with them (Freeman, 2005). Contrary to what was expected, the public sector was not as sensitive to opposition from stakeholders as it was to the NGO/academia. One plausible explanation is that the NGO/academia group depends largely on financial support from grants and private donations, and any opposition of external stakeholders would be perceived as affecting their credibility and, therefore, hindering their involvement in PPP development.

A key factor that is known to impede a partnership from the outset is the *lack of trust in the other partner organization*, and was confirmed by 70% to 80% of representatives from the public sector and NGO/academia. The literature on PPPs in public health highlights that without trust, partner organizations cannot overcome many hurdles that will occur throughout the development and management of PPPs (Diarra, 2001; Reich, 2000; Ridley et al., 2001). The lack of trust is often related to the hindering factors discussed above, as well as to the profit motives of the private sector,

its aim to take control over the agendas of government and international organizations, and its intention to seek tax deductions or public subsidies (Reich, 2000). On the other hand, distrust in the public sector refers to the concerns about bureaucracy and inefficiency of government that limit their capacity to effectively support the operation of PPPs (Gutteridge, 2006; Rangan et al., 2004; Ridley et al., 2001). The qualitative interviews captured similar tension. Participants from the private sector indicated mistrust with respect to policy development and government operations. That is, participants alluded to the real intention of the government to partner with the restaurants, criticizing the short-business cycle of government and its apparent lack of interest in considering the private sector's input on policy development.

A last hindering factor examined in this doctoral thesis was *the potential for loss of credibility in the eyes of the public or shareholders*. Although this factor was considered important by approximately two thirds of the participants in the survey, it was the least important hindering factor revealed in this study. Scholars have discussed credibility loss as a potential risk in building PPPs. They found that while some partnerships contribute to the legitimacy of organizations, others might force partners to lose their legitimacy. The authors explained that when organizations work on topics that are traditionally outside their field of expertise or responsibility, or work with new partners, they might experience legitimacy loss (Van Huijstee et al., 2007). The stakeholder theory, on the other hand, offers a moral explanation, as it challenges the notion of stakeholder legitimacy being associated only with groups that represent a source of dividends to the organization. The theory argues that certain stakeholders or stakeholder interests deserve attention regardless of whether doing so would clearly benefit the corporation (Freeman et al., 2010). That is, depending on the nature and partners involved, the perceived potential of organizations to lose their credibility may hinder PPP engagement.

Enabling factors

Despite the recognition of some obstacles that may challenge the process of building PPPs, organizations recognize that there are some enabling factors that could support them throughout this partnership exercise. *PPP guidelines, experience with PPPs and endorsement from a credible institution* seem to have importance in supporting organizations in the process of PPP engagement. This study found that most participants (86.6%) considered the *existence of guidelines on PPP development* a key factor to assist organizations in engaging in PPPs. Participants from the qualitative interviews conveyed the message that such guidelines are needed to support the government. Ideally, those guidelines would be best used if available earlier in the process when ideas about engagement start

flourishing. However, PPP guidelines are not always readily available, don't exist or are developed along the way. Perhaps this is one of the reasons why scholars have called for guidelines on PPP development (Buse & Waxman, 2001; Kraak & Story, 2010; Mrazek & Mossialos, 2003; Nishtar, 2004). They argue that guidelines are helpful to steer relationships between partner organizations, to assist in the selection criteria of organizations and to help specify roles of the public and the private sectors as well as governance structure (Mrazek & Mossialos, 2003; Nishtar, 2004).

A number of organizations, including the Government of Canada, United Nations Standing Committee on Nutrition (UNSCN), PATH (an international non-profit organization), and the WHO have already developed guidelines or principles to guide partnership development with the private sector (Government of Canada, 2006; PATH, 2014; UN Standing Committee on Nutrition, 2007). However, scholars have argued that guidelines should pay more attention to the clarification of conflict of interest; the appropriateness of interacting with individual industries, companies or activities; how to deal with multiparty collaboration, and the types of institutional arrangements governing partnerships (Buse & Waxman, 2001).

In this study, participants from the qualitative interviews raised a number of important issues that relate to this notion of PPP guidelines. First and foremost, any type of collaboration should be guided by public health goals. They highlighted that the public sector should consider the nature of the problem and the type of intervention required to address it before deciding on PPPs. This includes distinguishing whether to use regulations or partnerships, as well as deciding whether to use public money when engaging with the business sector, or even if partnerships are appropriate at all (Widdus, 2001). The criteria should consider partnering with associations representing the business sector rather than individual companies. Second, the government should have control over decisions with regards to communication and policy development, while all parties should be willing to accept trade-offs when engaging in PPPs. With respect to the former, organizations must be willing to set aside personal agendas in favour of the partnership's objectives and goals (Colatrella, 2008). Lastly, guidelines might need to be tailored to the context, and the type and purpose of the PPPs.

With regards to having *experience with PPPs*, most participants (82.1%) across all sectors perceived it as enabling organizations to enter in PPPs. Intuitively, the more experienced and knowledgeable, the easier and more confident one can be to undertake PPP development. This finding might be a reflection of the lack of knowledge and experience that exists in Ontario on PPPs in public health.

Another possible explanation may be the lack of documentation and dissemination of lessons learned on PPPs in public health, and the need to monitor and evaluate the process and outcomes related to PPPs (Buse & Waxman, 2001; Nishtar, 2004). The evidence on PPPs in product development for neglected diseases indicates that the lack of experience on PPPs was, among other reasons, the main cause of unsuccessful PPPs (Ridley et al., 2001).

Endorsement from a credible institution was more likely to be important to the public and private sectors than to NGO/academia. Although many professionals and policy makers have concerns about PPPs, international organizations such as the European Union, UNSCN and WHO, and political figures such as the First Lady of the United States, Michelle Obama, have explicitly called for the involvement of the private sector to address obesity and other challenges related to chronic diseases (Hawkes & Buse, 2011a). Those institutions portray the image of being genuine institutions in which people can trust.

In sum, at this stage, organizations recognize that there are a number of potential obstacles that could hinder the process of building PPPs, which might accompany organizations throughout the subsequent stages. Organizations should address them prior to entering into a PPP. At the same time, they also recognize that there are some enablers that would facilitate the process of engagement.

7.3.3 Stage 3: Contemplation

At this stage, organizations are aware of the complexity of public health issues and other demands that are pressing them to find collaborative solutions. They also recognize the existence of distrust and skepticism between the public and private sectors, while acknowledging some factors that could support them in the process of building PPPs. However, they might feel reluctant to proceed with the engagement idea due to potential unfavourable ramifications of entering in PPPs. This hesitation appears to be linked to the type of partner organization involved and the compatibility of organizational values with PPP goals (Table 7.5). This is believed to influence an organization's decision to consider a collaborative relationship, and calls for stakeholders to proceed with a compatibility assessment prior to establishing PPP dialogue.

Table 7.5 – Compatibility assessment prior to establishing PPP dialogue

Stage	Dimension	Variables
Stage 3: Contemplation	Compatibility Assessment	<ul style="list-style-type: none"> • Selecting and screening potential partner organizations (RL) • Assessing partnership need and compatibility (1)

Compatibility Assessment

Partnerships can be best formulated on a topic that fits well with the core business of the partners (Van Huijstee et al., 2007). The public sector and NGO/academia may be confronted with dilemmas when approached with the idea of engaging in PPPs. Those dilemmas relate to *compatibility of organizational values with partnerships goals* and the risks associated with it. This study found that almost all participants (93.7%) across the public and private sectors as well as NGO/academia, identified this as the most important factor that would facilitate or restrict engagement in a PPP.

Participants from the qualitative interviews raised a number of issues that relate to the notion of assessing compatibility between organizations. First, the public sector should consider the *nature of the public health problem* and *the type of the intervention* required before moving forward with the idea of engagement. These two conditions would influence decisions on whether a collaborative arrangement is appropriate or necessary. Scholars have emphasized that it is only after the public health objectives have been set that the public sector should even consider engaging with the private sector (Hawkes & Buse, 2011a). At this stage, the public sector and NGO/academia should ask themselves whether engagement with the private sector would help achieve the objectives faster or more effectively.

Participants in this study also highlighted that selecting potential partner organizations is a critical step in PPP development, and advised the public sector to *avoid partnerships with potential conflictive companies*. As an alternative, participants suggested *partnering with associations representing a business sector rather than an individual company*. This interpretation is consistent with the literature. Scholars have indicated that carefully selecting and screening potential partner organizations (Buse & Waxman, 2001; Nishtar, 2004; Van Huijstee et al., 2007) and assessing partnership compatibility (Hawkes & Buse, 2011b; Kraak, Harrigan, et al., 2011; Kraak, Swinburn, et al., 2011) are important initial steps in PPP development. Nishtar argues that the selection of partner organizations is a critical issue from an ethical and process-related perspective as it raises the questions of competence and appropriateness (Nishtar, 2004). Buse and Waxman raise concerns about relying on in-house

assessments for the selection of partner organizations. They argue that expertise or capacity is needed to select and screen partner organizations for compatibility and appropriateness (Buse & Waxman, 2001).

The literature has offered a number of frameworks or tools to assess compatibility of partner organizations (Compassion Capital Fund & National Resource Centre, 2010; Hawkes & Buse, 2011a; Kraak, Harrigan, et al., 2011; VicHealth, 2011). These tools can assist the public sector, NGOs and academia to conduct a compatibility assessment, including the selection of partner organizations before moving ahead with the engagement idea. After conducting this assessment, organizations may decide to proceed with the partnership or disengage completely of this exercise.

7.3.4 Stage 4: Dialogue

At this stage, organizations have decided to further pursue dialogue on building a potential PPP. They may realize, however, the need of having a convener to facilitate the engagement process (Table 7.6). This is of particular importance as the public and the private sectors may need to understand and respect each other's paradigms and goals before embarking on a process of building PPPs.

Table. 7.6 – Convener to facilitate PPP dialogue

Stage	Dimension	Variables
Stage 4: Dialogue	Convener	<ul style="list-style-type: none"> • Creating opportunities for dialogue (QUAL) • Finding commonalities between sectors (QUAL)

Convener

A convener is a neutral figure that facilitates dialogue and further negotiation in collaborative arrangements. A convener can be a single person, a group of government officials, a government agency, an alliance of stakeholders, or an advocacy group, which may or may not be a stakeholder from the partnership domain or employee from an organization involved (Wood & Gray, 1991). This figure plays an important role throughout the process of building PPPs. This notion of continuum is represented by a background arrow (in blue) in Figure 7.1.

Participants in the qualitative interviews noted that a key role for the convener would be to *create opportunities for dialogue* and to *find common ground* among potential partner organizations. This is aligned

with the theory of collaboration, which highlights that the primary role of this person or entity is to identify and bring together all the legitimate stakeholders to the table, and exert influence over them to create a collaborative process (Wood & Gray, 1991).

Research in this area has identified a number of challenges regarding the type of a convener needed to create synergy and collaboration (Lasker et al., 2001; Roussos & Fawcett, 2000; Wood & Gray, 1991). Among those challenges, Lasker and colleagues explain that “traditional leaders have a narrow range of expertise; speak a language that can be understood only by their peers; are used to being in control, and relate to the people with whom they work as followers or subordinates rather than partners”(Lasker et al., 2001)p.193.

Thus, PPPs need boundary-spanning individuals who can understand and acknowledge partners’ differences and are comfortable sharing ideas, resources and power while bridging diverse cultures and interests (Lasker et al., 2001). Organizations need to consider a convener that is able to create an environment in which potential partner organizations feel comfortable to have a transparent dialogue. Scholars suggest that a convener must be unbiased, and possess the ability to induce and motivate stakeholders to participate in the collaborative effort. They also underscore that a convener must be able to negotiate and follow an even-handed approach to prevent losing credibility in the eyes of the stakeholders (Roussos & Fawcett, 2000; Wood & Gray, 1991), while helping potential partner organizations identify their “shared fates” and develop common appreciation of a problem domain (Nathan & Mitroff, 1991)(p.166).

7.3.5 Stage 5: Negotiation

Nathan and Mitroff explain that entities can collaborate in constructing their interorganizational collaborations by agreeing with the rules of the game or the terms under which they will interact with one another in the future. These include share perceptions and understanding of their tasks, plans and operations (Nathan & Mitroff, 1991). During this stage, potential partner organizations, with the support from the convener, make explicit their motivations and expected benefits from creating a PPP (Table 7.7). It might be possible that more than one negotiated order exist as some of the organizations can hold incompatible, contradictory or even antagonist views about the problem in question (Nathan & Mitroff, 1991).

Table 7.7 – Negotiation about motivating factors and expected benefits

Stage	Factors	Variables
Stage 5: Negotiation	Motivating Factors	<ul style="list-style-type: none"> • Gaining access to clients or customers' perspective (1) • Reaching out to clients who would not be reached alone (2) • Gaining access to expertise and skills (3) • Gaining access to additional funding (4)
	Benefiting Factors	<ul style="list-style-type: none"> • Influencing food industry to promote healthy eating (1) • Improved performance (2) • Improved corporate image (3) • Creation of differential advantage (4)

Motivating factors

Interorganizational relation theory explains that organizations seek out or are receptive to cooperation when they feel that collaboration will add positive value, or when they face resource scarcity, performance distress or coercive pressure (Schermerhorn, 1975).

This study found that financial and non-financial incentives play a role in motivating organizations to enter into PPPs. The majority of participants from the public and private sectors as well as NGO/academia (89.3%) considered *gaining access to clients' or customers' perspective* the most important factor that motivates them to enter into a PPP. Understanding those perspectives is a practice frequently used by marketing specialists to decipher clients' needs, attitudes and concerns in order to create and promote the use of a product or service (Freudenberg, 2014). This practice has been also extensively applied by health researchers and practitioners as well as public health officials in various areas, ranging from studying clients' perspectives in psychotherapy research (Macran, Ross, Hardy, & Shapiro, 1999), vulnerability and resilience among individuals with HIV (Clarke, Rees, & Hardy, 2004) to health service provision (St John, James, & McKenzie, 2002).

Another example of getting clients' perspectives is creating online platforms to identify the perceived needs of citizens, and engage them to create, analyze and coordinate opportunities to develop solutions to community problems (Freedman Consulting - LLC, 2013). In a review of PPPs for sustainable development, scholars suggest that organizations are motivated to engage in partnerships as a way to understand the views of others, stimulate creativity and generate a wider range of solutions (Van Huijstee et al., 2007). The literature has also shown that gaining access to a global

diabetes coalition, and understanding members' unique talents, resources and perspectives, was pivotal to creating practical solutions for disease awareness (Siegel & Venkat Narayan, 2008). In this study, the second most important motivating factor among all participants was *reaching out to clients or customers who would not be reached by either sector alone* (81.3%). The NGO/academic group, however, was less likely than the other two to view this factor as important. A possible explanation might be that they are the organizations with expertise and knowledge to support low-income, hard-to-reach communities as part of their duties. Scholars have found that one of the most significant motivators in PPPs for drug donation and health service delivery was gaining access to those hard-to-reach populations (Peters & Phillips, 2004; Rummery, 2009).

Gaining access to expertise and skills was the third most important factor that would motivate organizations to enter into PPPs (72.3%). Scholars have indicated that access to private sector skills, talent management resources and research knowledge, as well as other organizations' strengths have been the major motivating factors for organizations within the United Nations system as well as the public sector to enter in PPPs (Buse & Waxman, 2001; Buse & Walt, 2000a; Peters & Phillips, 2004; Pray & Pilsbury, 2012; Reid & Pearse, 2003). However, contrary to this literature on PPPs in public health, this doctoral thesis found that the private sector (86.7%) was more likely than the public sector (72.2%) and NGO/academia (64.0%) to consider *gaining access to expertise and skills* as an important motivating factor. This might reflect the traditional reliance of the government on the expertise and skills of researchers rather than other alternative sources such as restaurants.

In this doctoral study, *gaining access to additional funding* was not perceived as important as the other factors (69.6%) discussed above, particularly among participants from the public sector (65.3%) and private sector (66.7%). The NGO/academia group, however, indicated high importance to this factor (84.0%), which perhaps reflects the nature of their funding structures, which are very dependent on grants, donations and sponsorships. PPPs in public health have been mainly conceptualized for diseases with high prevalence in low-income countries, and for countries facing competing health care needs, insufficient resources and unprofitable markets (Mrazek & Mossialos, 2003; Ridley et al., 2001; Wheeler & Berkley, 2001). Proposals to stimulate PPPs in this context have used economic incentives for stimulating product development/service delivery, as well as incentives for reducing infrastructural and economic barriers to motivate the private sector to engage in PPPs (Asante & Zwi, 2007; Buse & Walt, 2000a; Clasen, 2002; Daems, Del Giudice, & Rappuoli, 2005; Widdus, 2001).

Although gaining access to additional funding was not the primary motive for the public and the private sectors according to this doctoral survey, the qualitative findings suggest that financial incentives are considered necessary to stimulate the business sector to enter into PPPs. Participants explained that restaurants would be willing to create healthier menus if they could generate additional revenues. This argument may indicate that incentives for enhancing business opportunities are more attractive than one-time funding for developing PPPs. Incentives that bring economic advantage for restaurants such as tax breaks or government subsidies for research/evaluation were raised as strong levers among participants.

Benefiting factors

Establishing the benefiting factors or tangible and intangible outcomes from the partnership arrangement is particularly challenging because the expected benefits differ from the public sector, the private sector and civil society organizations (Selsky & Parker, 2005). Potential partner organizations need to make explicit their expected benefits so that they can create a trustworthy, transparent relationship for moving forward with the partnership exercise. “The more one can set forth the expected specific benefits to each partner and to society, the greater guidance the collaboration will have” (Austin, 2000)p.76.

In this study, the great majority of participants across all sectors (92.0%), including the private sector, considered the *ability to influence food industry to promote healthy eating* the most important benefit expected to obtain from a collaborative venture. This finding is supported by literature showing that collaborative partnerships are more likely to happen when the expected changes relate to health (Roussos & Fawcett, 2000). By changing programs, policies or practices that happen in the environment (e.g., creating healthier menus in restaurants, or reformulating food products to offer healthier options), partnerships can affect community and systems change (environmental change).

The last three benefiting factors such as *improved performance* (67.9%), *improved image of the organization* (64.3%), and *creation of differential advantage* (51.8%) were the least important among all other factors examined in this doctoral thesis. These factors are part of the core arguments of resource dependence and institutional theories, which suggest that organizations expect to maximize efficiency, gain competitive advantages, acquire or sustain social approval, or reduce transaction costs when they engage in collaboration (DiMaggio & Powell, 1983; Gray & Wood, 1991; Oliver, 1990; Selsky & Parker, 2005).

Approximately two-thirds of all participants considered *improved performance* as an important benefit of engaging in a PPP. These findings are supported by the literature, particularly in terms of strengthened capacity to meet performance goals, and increased exposure to and appreciation by other groups in the community (Buse & Waxman, 2001; Lasker et al., 2001; Van Huijstee et al., 2007).

In this study, more participants from the private sector (86.7%) than from the public sector (61.1%) and NGO/academia (60.0%) considered as an important benefit an *improved image of the organization*. As anticipated, this finding was also confirmed by the qualitative interviews. Participants representing the restaurant-related associations indicated that restaurants, in seeking social legitimacy, have voluntarily initiated, or at least shown good intention, to engage in healthy eating initiatives. They observed that being recognized as good corporate citizens is a benefit that they seek to obtain at large. This reflects the discussion of social legitimacy and corporate social responsibility available under the perspective of resource dependence, institutional and stakeholder theories (Freeman, 2005; Peters, 1998b; Pfeffer, 2005). These theories predict that businesses become more socially responsible to address stakeholder demands when they perceive that their legitimacy is at risk (Wood & Gray, 1991).

In this study, the *creation of differential advantage* was considered the least important benefiting factor. This finding seems contrary to the literature under the resource dependence platform, which highlights that organizations collaborate to gain competitive advantage. Scholars explain that the private sector can harness comparative advantages over the public sector by generating economic returns in a way that promotes social good (Sturchio & Goel, 2012). Benefits to enhance competitive advantage have included, for example, community building to resolve future local disputes, community recognition as a company of choice, reduced risk from negative publicity, and increased attractiveness to prospective employees (Selsky & Parker, 2005).

In sum, at this stage, partner organizations have jointly agreed to make explicit their motivations and expected benefits associated with entering into a PPP. That is, they recognize their perceived need and willingness to collaborate, and are ready to establish informal interactions to negotiate “the rules of the game”(Nathan & Mitroff, 1991)in(Austin, 2000; Crozier & Friedberg, 1984).

7.3.6 Stage 6: Deliberation

At this point, partner organizations may have found common ground in working together, and may have negotiated their motivations and expected benefits. Despite the assumption that they might enter into a collaborative arrangement, there are still some risks associated with engaging in PPPs (Table 7.8). Those risks could lead partner organizations to withdraw from the engagement exercise due to the impossibility of mitigating the risks.

Table 7.8 – Mitigation measures to reduce or eliminate potential risks of PPP engagement

Stage	Dimension	Variables
Stage 6: Deliberation	Risk Mitigation Measures	<ul style="list-style-type: none"> • Balancing commercial interest with public health goals (RL) • Managing conflict of interest and bias (RL) • Ensuring co-branded activities support healthy eating (RL) • Complying with ethical codes of conduct (RL)

Risk mitigation measures

The interorganizational relation theory explains that there is a set of costs incurred in engaging in partnerships, and organizations may need to balance them against the expected benefits and outcomes. These include potential loss of decision-making autonomy, unfavorable ramifications for organizational image, and resource requirements for implementation (Schermerhorn, 1975).

Several scholars studying collaboration and partnerships have reported similar risks. These include blurring of tasks and responsibilities; excluding certain stakeholders from decision-making processes; diversion of time and resources from organizational priorities; loss of competitive advantage in obtaining funding or providing services; negative exposure due to association with other partners; neglecting to address conflicts of interests effectively; raising insufficient resources to implement partnership activities; uncertain outcomes, and cultural differences among partner organizations (Kraak, Harrigan, et al., 2011; Lasker et al., 2001; Van Huijstee et al., 2007).

PPPs for healthy eating inevitably involve risks for the public and the private sectors. For example, PPPs may deflect the public policy agenda, taking away potentially effective actions to encourage healthy eating (Hawkes & Buse, 2011b). PPPs may also not guarantee that the food industry would stop from engaging in activities opposed to public health goals; that the public sector may experience potential loss of legitimacy in the eyes of the public and media; and that tensions within

public bodies and civil society may emerge due to differing perspectives about PPPs. For the private sector, PPPs may yield negative outcomes on the core business of companies (i.e., reducing sales of core products); may not prevent government action to oppose business interest; and may lead to loss of legitimacy in the eyes of shareholders if such PPPs fail to achieve their objectives (Hawkes & Buse, 2011b).

These identified risks may undermine the appropriateness, effectiveness and credibility of PPPs in public health. However, scholars have expressed that there are ways to mitigate and manage certain risks, while building trust to openly assess where the profit-driven activities and public health benefits overlap or conflict (Kraak, Harrigan, et al., 2011). To achieve this, it is essential to identify and assess areas not amenable to engagement given the inability to mitigate risks. This involves discussing and developing measures that *balance commercial interests with public health goals* to achieve a win-win outcome. Organizations, in particular those from the public sector and NGO/academia, should ask whether those interests would enhance or threaten the likelihood of achieving the short- and long-term public health objectives (Hawkes & Buse, 2011a). This first mitigation measure is, probably, the most important one as commercial interests often conflict with public health.

Mitigation measures can also take the form of guidelines to *manage conflicts of interest and biases* to make PPP terms, outcomes and benefits more transparent and explicit, facilitating the creation of clearly written contracts. Conflicts of interest may arise, for example, when the public sector and NGO may receive gifts or get sponsorships from companies to influence decision-making, or when researchers receive funding from corporations (Kraak, Harrigan, et al., 2011).

Mitigating potential negative effects of marketing strategies by the private sector is another important measure. In PPPs, it is fundamental to *ensure that co-branded activities support healthy eating goals*. The public sector and NGO/academia should, for example, develop criteria for marketing strategies that adhere to standards of healthy nutrition, promote healthy eating and support local markets (Kraak, Harrigan, et al., 2011). Another important strategy is to ensure *compliance with ethical codes of conduct*. Critics of PPPs within the food industry have pointed at a number of questionable marketing practices of global food companies (Brownell, 2012; Freedhoff & Herbet, 2011; Kraak, Harrigan, et al., 2011). They argue that in spite of being part of international treaties or voluntary standards, food companies have undermined children's rights to a healthful diet (Kraak, Harrigan, et al., 2011).

Despite those risks, the literature has reported a number of PPP initiatives that have achieved commercial balance and managed conflicts of interest, including PPPs for the development of new food products and marketing campaigns for malnutrition; PPPs for new drugs and vaccines to tackle neglected diseases; PPPs for the delivery of humanitarian assistance; and a PPP for innovation in R&D for food products (De Pinho Campos et al., 2011; Kraak, Harrigan, et al., 2011). In sum, applying risk mitigation strategies can help potential partner organizations assess whether the risks of engagement can be eliminated or reduced, and whether a PPP is a viable option to pursue.

7.3.7 Stage 7: Engagement Decision

In this stage, potential partner organizations may have already reached a clear understanding of the motivating factors and expected benefits involved in creating PPPs. They have identified risks, and discussed or created mitigation strategies to prevent potential threats. They may have pondered the benefits of engaging in a PPP against the costs, risks, or potential outcomes. Based on this exercise and the level of complexity to prevent, reduce or avoid the risks, organizations may decide to enter into a PPP or disengage from further collaboration (Table 7.9). If PPPs become a viable option, a governance structure must be created so that, in itself, it takes into account and addresses all the risks involved (Hawkes & Buse, 2011b).

Table 7.9 – Engagement decision about building PPPs

Stage	Dimension	Variables
Stage 7: Engagement Decision	Decision-making	<ul style="list-style-type: none"> • Yes - Engage in building PPPs (RL) • No - Disengage from the PPP idea (RL)

7.3.8 Stage 8: Preparation

At this stage, organizations have decided to create a PPP initiative. The discussion now progresses to what form of governance structure and practices are required to effectively achieve the partnership's objectives (Table 7.10). This may take distinct organizational formats, varying from horizontal engagement (i.e., agreements between two or more organizations), multidisciplinary teams working together across formal organization boundaries (Axelsson & Axelsson, 2006) or a more hybrid structure in which organizations create an independent, non-profit organization to run the partnership (De Pinho Campos et al., 2011). Independent of the format, governance practices remain an important factor for successful collaboration. When well established, a governance mechanism can ensure synergy among partner organizations, transparency in decision-making and

accountability for specific outcomes (Kraak, Harrigan, et al., 2011). Indeed, governance is key to partnership operations and it is likely to have a profound influence on the partnership's synergy level (Lasker et al., 2001).

Table 7.10 – Governance factors for operationalizing PPPs

Stage	Factor	Variables
Stage 8: Preparation	Governance	<ul style="list-style-type: none"> • Clarity and openness in decision making (1) • Transparent process for monitoring and evaluation (1) • Formal accountability system (2) • Equal decision-making authority (3) • Equal representation of partner organizations (3)

Governance factors

Evaluation of PPP initiatives has indicated serious governance-related issues stemming from inadequate oversight mechanisms, including lack of openness and effective communication; limited transparency; inability to define partners' roles and responsibilities; imbalanced representation of stakeholders in decision-making processes; and limited, independent monitoring and evaluation conditions (Asante & Zwi, 2007; Buse & Tanaka, 2011; Buse & Harmer, 2007; Buse & Walt, 2000b; Hawkes & Buse, 2011b; Kraak et al., 2009; Nishtar, 2004).

In this study, *clarity and openness in decision-making*, and *transparent process for monitoring and evaluation* were considered the most important governance factors for almost all participants (97.3%). Scholars have indicated that openness and effective communication are particularly critical to create trust (Buse & Harmer, 2007), generate public credibility, exchange knowledge, and foster motivation and a strong relationship among partner organizations (De Pinho Campos et al., 2011). The lack of clarity and openness, for example, presents challenges for assessing what PPP targets have been set and who should be held accountable for achieving them (Asante & Zwi, 2007). It also undermines the operations, measurements, communications and long-term planning in partnerships (Magee, 2003). On the other hand, clarity of partners' obligations and rights as well as expectations about deliverables is important to avoid ambiguities that can lead to termination of partnerships. It also fosters mutual accountability, which is believed to promote high performance standards and greater value creation (Austin, 2000; Nishtar, 2004). Clarity and openness have been stressed as fundamental in PPPs due to the complexity of having many different stakeholders from different sectors, requiring a "new language to re-present governance issues" (Selsky & Parker, 2005)p. 863.

Another governance-related challenge is transparency. Often, PPPs are not open to public scrutiny, leaving the process of selecting partner organizations, setting up partnership's targets and developing management guidelines as anything but transparent (Asante & Zwi, 2007). A review showed that five of eight evaluations of PPPs in global health had inadequate transparency either in decision-making or performance reporting (Buse & Tanaka, 2011).

Nearly, all participants in this study considered *transparent process for monitoring and evaluation* an important governance factor in PPPs. Indeed, transparency can highlight operational gaps and facilitate input and feedback among partners on how to maximize impact (Buse & Tanaka, 2011), and help hold organizations to account (Buse & Tanaka, 2011; Buse & Harmer, 2007). This is consistent with the findings of the qualitative interviews, as participants expressed that a transparent governance structure is an integral part of a trustworthy accountability system.

A formal accountability system was third in terms of the governance factors considered important by participants (96.4%) in this study. In simple terms, accountability refers to the process and mechanism that holds an organization responsible for its actions to those empowered with the authority to assess how well they have met their proposed goals (Buse & Walt, 2000b; Kraak, Swinburn, Lawrence, & Harrison, 2014). This requires clear specifications of roles and responsibilities, and well-defined objectives and activities. Consistent with the literature, the qualitative interviews confirmed the importance of having accountability mechanisms that underpin the values, focus and goals of the partnership. Scholars, however, have identified challenges in relation to ensuring partners' accountability in PPPs due to the differences in approaches followed by the participating organizations (Asante & Zwi, 2007; Buse & Walt, 2000b). In the public sector, the administrative structure reports to a political hierarchy that is ultimately accountable to a political power, which in turn has obligations to the population. In the private sector, the administrative structure is accountable to the company's shareholders, who are normally more concerned about profits than promoting health. That is, the main underlying challenge is to determine to whom the partnerships are accountable to, and who sets priorities based on what criteria. With this in mind, scholars have shed light on the direction to guide voluntary partnerships between the government and the food industry to promote healthy eating (Kraak et al., 2009; Kraak et al., 2014). Kraak and colleagues, for example, have developed an accountability framework that stresses the importance of an independent body to be in charge of developing clear objectives, governance process and performance standards (Kraak et al., 2014). That independent body takes account (assessment),

shares the account (communication), holds to account (enforcement) and responds to the account (improvements) related to the partnership (Kraak et al., 2014).

The last two governance factors - *equal representation of partner organizations on committee boards* and *equal decision-making authority among partner organizations* - were also given a high level of importance by participants in this study (85.7% for each). These two factors, perhaps, reflect the power balance among partner organizations. Power, after all, represents an integral part of change, and is a necessary ingredient for collaboration (Casey, 2008). Yet, if imbalanced, power can be a major impediment to the development of successful relationships (Nishtar, 2004).

Scholars studying global PPPs have written about unequal representation of partner organizations in the board of directors of the partnership or decision-making (Buse & Tanaka, 2011; Buse & Harmer, 2007; Buse & Walt, 2000a; Nishtar, 2004). Limited representation of partners from low-income countries in global PPPs for health has raised questions about “who is deciding the international policy agenda and how much say is being given to recipient nations (Buse & Walt, 2000b)p. 706. Casey asserts that although partnership arrangements cannot be expected to be equal on all levels, as different skills and expertise exist among partner organizations, equality among partners, at least in terms of decision-making, seems to be necessary and possible; otherwise, trust can be jeopardized due to lack of adequate power sharing (Casey, 2008).

Furthermore, participants also expressed that partnerships require compromise, and that both sectors need to come up with an arrangement that accounts for a balanced decision-making process, taking into consideration the level and kind of expertise of each of the partners. For example, equal representation of partner organizations and decision-making can be manifested by a fair, transparent and inclusive process of selecting board members, and a clear mechanism to enable partner organizations to properly represent their constituencies (Buse & Tanaka, 2011).

In sum, governance is a means for creating shared goals; defining roles and responsibilities; identifying and implementing partnership strategies; ensuring accountability and balanced power relations; promoting synergies, and facilitating exchanges in terms of partners' resources and skills. If well structured, the formalization of these governance mechanisms and related procedures may position the partnership for long-term success (Bazzoli et al., 1997).

The Framework ends at this stage noting, however, that the implementation, management, and monitoring & evaluation are other equally important stages for the success of a collaborative engagement. These, however, were not discussed in this thesis.

7.4 Specific Findings for PPPs for Healthy Eating in Restaurants

This final section presents specific findings related to operational aspects of PPPs for healthy eating in restaurants in Ontario not captured in the discussion above. It integrates the quantitative and qualitative findings that examined four operational aspects: (i) type of organization from the public sector to partner with the restaurants; (ii) the role of the government and the restaurants in a potential PPP; (iii) requirements for planning healthy eating interventions; and, (iv) the types of interventions to promote healthy eating in restaurants.

7.4.1 Type of organizations from the public sector to partner with the restaurants

In the context of PPPs in public health, the public sector is often represented by the health sector. However, in PPPs with the food industry, it is possible that an organization from outside the traditional health context represents the private sector interest. In this study, for instance, most participants (87.2%) across all sectors (the public and private sectors, and the NGO/academia) indicated the *Ontario Ministry of Agriculture and Food* (provincial government) as the preferred public sector organization to partner with the restaurant sector. This could be explained by the close relationship of this Ministry with the restaurant sector, and its understanding and experience in the food realm. However, this could be seen as a drawback for the health sector as this Ministry promotes and supports the economic interest of the food industry rather than the health of the population. In this sense, having the Ministry of Agriculture and Food as the main public sector organization may raise considerable ethical questions. In addition to deciding the specific partner organization to represent the public sector, it is essential to ensure that, whatever the choice, the organization is accountable to public health goals and has the capacity to strengthen the partnership.

The literature on PPPs involving the food industry is not very explicit or clear about which organization should partner with the industry. It is assumed, nevertheless, that partnerships between the government and the food industry would involve an independent body with clear charge to accomplish public health goals (Kraak et al., 2014). Interestingly, both the government group (76.9%), represented in this study by public sector organizations with legislative mandate, and the

restaurant-related associations (80.0%) indicated that *an independent organization established for the purpose of the partnership* would be the most suitable organization to partner with the restaurant sector. This finding was confirmed by the qualitative interviews. It became clear throughout the qualitative analysis that *a health-related, independent organization representing the public interest* is perhaps the most appropriate organizational structure to consider when partnering with the restaurant sector, as it would be able to overcome the bureaucratic processes and enforcement roles that constrain government bodies, giving them little flexibility and resource capacity to create a governance structure “within their walls” capable of engaging with unusual stakeholder groups. Therefore, *a health-related, independent organization* might be a feasible organizational structure for partnerships with the restaurant sector to promote healthy eating in Ontario.

7.4.2 The role of government and the restaurants in PPPs

Although much has been written about the importance of defining roles and responsibilities for good governance practice, the literature on PPPs in public health is limited in clarifying the roles that partner organizations are supposed to play and their responsibilities. This study examined six different roles for the public and the private sectors including: *developing PPP guidelines; participating in the design of the partnership; coordinating the implementation of the partnership; monitoring the partnership operation; being accountable for the partnership* and *contributing funding to the partnership*.

All the examined roles, with exception for *developing PPP guidelines*, were regarded as shared responsibilities between the government and the restaurant sector. Developing PPP guidelines, which may also include guidelines for healthy eating, was not considered an equivalent role for both government and restaurants but rather a role to be performed by the government. This was evident throughout the qualitative interviews. Participants believe that this is government’s responsibility, and that the government should hold decision-making authority with regards to communication in order to develop consistent messaging, and align consumers’ demands for healthy eating with communications from the government. Scholars have also stated that the government has the main role in developing and communicating guidelines for individuals and communities on healthy eating as well as establishing targets for the food industry on food composition, marketing to children and food claims (Gortmaker et al., 2011).

Monitoring the partnership operation was also perceived as a shared task for the government and restaurants with a slight tendency of the responses to favour a dominant government responsibility.

Recent literature suggests that an independent body should monitor and evaluate policies that promote healthy food environments (Kraak et al., 2014). Many food companies have been highly criticized because of misleading advertising to children, de-emphasizing the role of food quality and portion size, and in some cases (when companies sponsor their own studies) influencing research results to hide potential adverse health effects (Kraak et al., 2009). An independent monitoring body could collect, review, monitor and evaluate the operations of PPPs for healthy eating, while the restaurant sector could participate in monitoring activities by sharing relevant data (Gortmaker et al., 2011).

Contributing funding to the partnership was another role deemed to be similarly shared between the government and the restaurant sector with a predominant role for the latter. Scholars have noted that the public sector contribution, particularly in relation to PPPs on drug development, tends to account for the lion's share of the cost, while the corporate sector tends to assume a modest share, considering the substantial gains in public relations, tax-deductions or profit gains from a particular product (Buse & Walt, 2000b). The qualitative interviews, however, highlighted the opportunity for the restaurant sector as the main contributor of resources in PPPs related to healthy eating. However, resources, in this case, referred primarily to expertise and capacity of restaurants in developing and implementing healthy eating interventions. Many participants argued that restaurants are better positioned to lead the implementation of healthy eating initiatives.

7.4.3 Planning for healthy eating interventions in restaurant settings

Once the partnership is established, partner organizations face the task of preparing and planning the intervention. Participants in the qualitative interviews noted that PPPs should account for *long-term benefits* as improving healthy eating will not occur overnight. Participants also expressed concerns in approaching the government with “big ideas” due to its limited operational flexibility. Instead, they suggested taking an *incremental approach for implementing healthy eating interventions* as a way to explore, learn and possibly scale up those interventions.

Throughout the qualitative analysis, the *tension with respect to government regulations on healthy eating* became evident. Participants from the government indicated a preference for regulations, particularly in regards to banning food marketing to children and restricting access to unhealthy food. The restaurant sector, on the other hand, expressed disapproval of government regulations or interference in restaurant business. They argued that restaurants are being overregulated, and most

independently owned restaurants have trouble in interpreting regulations. This tension, which reflects the underlying mutual distrust between the public health and business sectors, can undermine engagement in joint efforts to orchestrate the diverse skill sets that exist across partner organization (De Pinho Campos et al., 2011), and the value that each partner could bring to the relationship (Casey, 2008).

Another important aspect captured by the qualitative interviews was the role of *consumers' demands and incentives as driving forces* for healthy eating. Commercial marketing is a powerful force that can shape or influence our eating behaviour (Kraak et al., 2009). Consumer behaviour and preferences are influenced not only by cultural aspects, but also by what is convenient and available. In this study, participants from the restaurant sector noted that dining-out decisions are far from based on healthy menu options. Rather, consumers seek a dining experience in which taste, and often price, are decisive for choosing where to go and what to eat. This finding is consistent with the literature (Canadian Council of Food & Nutrition, 2008; Wansink & Huckabee, 2005). In the context of PPPs for healthy eating, partner organizations are advised to dedicate time to *engaging consumers in planning healthy eating interventions*, taking into consideration their diversity.

Planning healthy eating interventions in restaurants may require *engagement of the players earlier in the process*. Participants commented that engagement with restaurants should start from the inception of the partnership to get the buy-in required for implementing healthy eating interventions.

It was consistent throughout the qualitative interviews that including *small, medium and large restaurants* is essential to expand the reach of healthy eating interventions. Similarly, participants noted that *engaging food distributors or suppliers* is necessary for the provision of healthier food products in restaurants, in particular to small, privately-owned food establishments. This is aligned with the literature that calls for a systems approach to address diet-related chronic diseases in which solutions need to be multifaceted (Glanz & Hoelscher, 2004; Gortmaker et al., 2011).

7.4.4 Types of interventions for healthy eating in restaurants

The public and private sectors diverge in opinions about the importance of the type of intervention that would yield better healthy eating outcomes without affecting business interests. The literature on restaurant-based strategies for healthy eating suggests a number of interventions that are deemed to promote better nutrition, including menu labelling, promotional/marketing strategies, economic

incentives, healthier menu options, and small portion sizes (Glanz & Hoelscher, 2004). These interventions were examined in this study and were considered important for a majority of participants across all sectors. However, most interventions, except for the promotional/marketing strategies, presented significant differences, with the public sector and NGO/academia more likely to give higher importance than those from the private sector.

The most controversial interventions relate to *menu labelling* and *smaller portion size*. In the qualitative interviews, participants representing the restaurant sector reported great hesitation to accept the former as a strategy to help consumers make healthier choices. They expressed different reasons against this approach and challenged their effectiveness. This outcry might reflect the effects of several consultations on menu labelling that the Ontario government was undertaking during the time of data collection (Ministry of Health and Long-Term Care, 2013b). At that time, the Government of Ontario was expected to pass the Bill 162 on menu labelling, requiring restaurants that have more than 20 locations in the province and generate more than \$5 million of business annually to post nutrition information on their menus and menu boards.

Communicating nutrition information on menus or menu boards, food products or food shelves certainly helps consumers to make informed food choices. In contrast to menu labelling, food labelling policies have been adopted by at least half of the countries surveyed by the WHO (Hawkes, Jewell, & Allen, 2013). Data on the effectiveness of menu labelling are limited, probably because it is mostly voluntary. Restaurants Canada, the national association representing the food service sector in the country developed, in partnership with the provincial government of British Columbia, the Informed Dining Program in May of 2012. This is a voluntary nutrition information program in which participating restaurants provide their guests with nutrition information for all standard menu items. Restaurants can choose where to display the information (e.g., supplemental nutritional menu, nutrition brochure, or pamphlet, etc.), on menus or menu boards. In the United States, menu-labelling policy has been introduced in the State of California and other local municipalities such as New York City; Seattle/King County, Washington; and Multnomah County, Oregon (Centers for Disease Control and Prevention, 2010). Menu labelling is an important step because an increasing amount of today's food is consumed in restaurants (Huybrechts et al., 2011).

Portion sizes served in restaurants and fast-food outlets have also increased substantially over decades (Freudenberg, 2014). Targeting *smaller portion sizes of food and beverages* was raised by

participants from the public sector and NGO/academia as an important strategy for promoting health. However, there was a significant difference in opinions between the government and restaurant sectors about the importance of this strategy. This was confirmed by the qualitative interviews, which revealed the tension that exists with regards to reducing the super-sizing trend. Participants from the government and NGOs noted that reducing portion sizes might be a way of controlling calorie intake, while preserving the desire of eating foods high in salt, fat and sugar. They underlined the need to make normal portion sizes more commonplace so that they could become a norm in our society. However, the restaurant sector contested this approach arguing that is an idealistic goal to have because consumers perceive large portion sizes as value and this shapes their choice of restaurant.

Large portion sizes, fast-food value-meal bundling (a single price for several food items) and ‘all you can eat’ meals were introduced in the 80s’ and 90s’ as a new food marketing strategy, each contributing to the increase in consumption of high fat, sugar and salt products (Freudenberg, 2014; Huybrechts et al., 2011). Today, these strategies are well instituted in the market. Imposing limitations on portion sizes and meal composition would undoubtedly face opposition from the restaurant sector as well as individuals who reject any involvement of the government in personal choices (Young & Nestle, 2012). Alternatively, price incentives, in this case, might be a starting point as evidence has indicated that it could be attractive for consumers to order half-size portions (Young & Nestle, 2012).

Food reformulation, which includes preparing foods with less fat, sodium and sugar, has been considered a valued intervention to increase healthy eating (Centers for Disease Control and Prevention, 2010; Glanz & Hoelscher, 2004). In this study, most participants across all sectors (93.6%) indicated *creating or expanding healthier menu options* as an important strategy. However, a significant difference was observed particularly between the public sector (e.g. governments and community health agencies) and the private sector (e.g., restaurant-related associations), even though it was considered the most important intervention for all sectors. According to the qualitative interviews, many restaurants are already offering healthier menu options, which underscore the opportunity to align the interests of both sectors, and ultimately the consumers for whom food reformulation does not need to mean restricting options, but creating healthier alternatives for the same type of food.

Offering economic incentives such as discount coupons to make healthier food options more affordable than unhealthy options was considered an important intervention to promote healthy eating in restaurants. However, the private sector was less likely to consider it as important. Studies have demonstrated that income is a variable that transcends several social groups such as children, seniors and Aboriginal people (Raine, 2005). Reducing prices or offering coupons have proved effective to increase the consumption of healthier foods (Glanz & Hoelscher, 2004; Huybrechts et al., 2011). It might be possible that if some financial incentive is provided to the restaurants, the sector might be willing to consider reducing prices or using discount coupons as a potential strategy to increase healthy eating in their premises.

Last but not least, *consumers' education for healthy eating* emerged from the qualitative interviews as the basis for increasing healthy eating. Participants indicated that educating children, parents and consumers in general is an essential component for any successful healthy eating intervention, particularly on how to prepare healthier food and make healthier choices, and the important role of parents in shaping children's eating behaviour. This finding is consistent with studies indicating that nutrition knowledge and healthy dietary behaviours are positively correlated (Hawkes et al., 2013), and that nutritional knowledge is an integral part of personal food choices and eating behaviour (Hawkes et al., 2013; Raine, 2005). Participants in this study believe that the Ontario government should be more engaged in educating consumers about healthy eating at a time during which the province is facing a massive challenge to control calorie intake.

7.5 Final Remarks

This chapter presented the integration of the quantitative and qualitative findings as well as relevant literature into a theoretical framework that explains the initial stages of building PPPs in public health. The Framework explains there are eight stages in which organizations may require going through prior deciding on creating a PPP. At any point throughout the stages, organizations may decide to disengage from the partnership initiative.

In the context of Ontario, the structure of a public-private partnership may take the form of a health-related, independent organization representing the public's interest. The government and the restaurants share roles and responsibilities with the exception of developing guidelines, which is believed to be the government's role. With regards to healthy eating interventions, the public and

private sector have fundamental differences particularly with menu labelling, portion sizes and some form of economic incentives for promoting healthy eating. Finally, healthy eating interventions in restaurants must consider a multi-stakeholder approach, engaging consumers and other players from the food chain early in the planning stage.

Chapter 8

Discussion and Conclusion

8.0 Discussion

To the best of knowledge, this thesis represents the first systematic effort to examine empirically the factors that influence the process of building PPPs in public health, using healthy eating in restaurants in Ontario as the context for the study.

The literature on PPPs in public health, albeit limited, has signaled critical elements that influence their formation, development and management. The majority of the literature consists of conceptual papers, commentaries or expert opinion based on the authors' practical experience, theoretical understanding, or both, in a fragmented and atheoretical fashion (Asante & Zwi, 2007; Buse & Harmer, 2007; Buse & Walt, 2000b; Casey, 2008; Hawkes & Buse, 2011a, 2011b; Kickbusch & Lister, 2006; Kraak & Story, 2010; Kraak, Swinburn, et al., 2011; Nishtar, 2004; Reich, 2002; Richter, 2004; Ridley et al., 2001; Widdus, 2001, 2005).

Existing theoretical perspectives and theories, as those discussed in this thesis, articulate constructs that help explain a trend towards interorganizational cooperation (Gray & Wood, 1991; Patterson, 2005; Pfeffer, 2005; Schermerhorn, 1975; Trist, 1983; Wood & Gray, 1991). Selsky and Parker reviewed project-based partnerships that addressed social issues using four domains (i.e., business-non-profit; business-government; government-non-profit, and trisector). They identified key elements in the formation (e.g., identification of the problem and motivation); implementation (e.g., governance, leadership characteristics and behavioural dynamics), and outcomes of partnerships (e.g., measurable project results and outcomes such as capacity for learning and change) (Selsky & Parker, 2005). Roussos and Fawcett examined collaborative partnerships in community health. They found factors that influence the effectiveness of partnerships, including the conditions that give rise to partnerships; the socio-economic factors that may create competition for scarce resources; the community control or power relations in agenda setting, and social ties and trust among community members (Roussos & Fawcett, 2000).

Although limited, frameworks or integrated ideas that explain important aspects of multisectoral partnerships exist. They comprise models that discuss critical elements pertaining to the planning, design and management of PPPs in product development for neglected diseases (De Pinho Campos et al., 2011); steps for achieving collaborative action in partnerships for population health (i.e., from analyzing information about the problem/goals, establishing vision and mission, developing a logic model to sustaining the partnership) (Fawcett, Schultz, Watson-Thompson, Fox, & Bremby, 2010);

aspects of partnership functioning that impact on partnership synergy (Lasker et al., 2001), and factors that refer to the environmental context in which PPPs operate, the structure and configuration of participating organizations, and the nature of the potential activities (Bazzoli et al., 1997).

Austin's model of collaboration between non-profits and the business sector perhaps is the most comprehensive framework that discusses the dynamics of collaboration in four components. The first component is collaboration as continuum, which provides a framework for categorizing different types of partnerships (i.e., philanthropic, transactional and integration). The second refers to value constructs (i.e., value definition, value creation, value balance and value renewal) in different types of collaborations. The third component contains a set of drivers (i.e., strategy, mission and values alignment; personal connection and relationships; continual learning) that explain the nature and functioning of the partnerships. Finally, the fourth refers to enablers (i.e., focused attention, communication, organizational system, and mutual expectations and accountability) that contribute to the effective management of partnerships (Austin, 2000).

Lacking in these works, however, is an explanation of the stages and related factors through which organizations progress as they intend to create PPPs. Previous works thus far do not integrate the process (i.e., stages) and mechanisms (i.e., factors and associated variables) that facilitate or hinder engagement in PPPs. In addition, existing frameworks discuss elements from the perspective of already-built PPP initiatives, with limited explanation of the leading factors that influence their formation.

This gap might explain, at least in part, why many partnerships fail to thrive (Lasker et al., 2001), perhaps in part because of the absence of a transparent, dialogue-based process. Scholars argue that up to half of partnerships that are formed do not survive their first year; and that of those that do, many struggle in the development plan and implementation phases (Lasker et al., 2001).

The results of this thesis attempt to fill this gap by offering an empirically-based, theory-driven framework that explains the process and mechanisms required when building PPPs in public health. The Framework highlights the factors and associated variables that facilitate or hinder PPP formation, and identifies decision-points for PPP engagement or disengagement.

This dissertation confirmed that many factors considered important for PPP development in different contexts and in other areas of public health, are also important for PPPs in Ontario. The majority of the factors and associated variables examined in this thesis were highly rated as important for building PPPs. All organizations from the public and private sectors as well as NGOs/academia are more likely to be motivated to enter into PPPs when they recognize certain practical gains from this collaborative arrangement such as *reaching out to 'hard to reach' clients or customers* and *understanding of clients or customers' perspectives*.

Taken together, *inappropriate marketing strategies, conflicts of interest, opposition of stakeholders, and potential for loss of credibility* create enough resistance among organizations to trust each other or to feel comfortable with the idea of partnerships. Along with these hindering factors, there are a number of enabling factors that may facilitate organizations in the process of engagement, including *PPP guidelines, experiences with PPPs, and endorsement from credible institutions*.

All organizations indicated that the most important benefit to enter into a PPP is the *ability to influence food industry to promote healthy eating*. Organizations need to outweigh the benefits with the risks and may decide to move forward or disengage from the partnership idea. If the engagement is decided, partner organizations equally agree on the importance of good governance such as *clarity and openness in decision making, transparent process for monitoring and evaluation and formal accountability system*.

In the context of Ontario, the structure of a PPP may take a form of a health-related, independent organization representing the public's interest. This doctoral thesis acknowledges that partnerships between the government and restaurants inevitably involve risks and conflicts of interest. In particular, the results support initial assumptions about divergence in opinions between the government and the restaurant sector on items related to *improved image of your organization, conflict of interest, and menu labelling and portion size reduction*.

The Framework proposed in this thesis offers important elements to fuel this discussion and guide potential partner organizations in their process of PPP engagement. Organizations open to entering into a PPP might benefit from using the Framework.

The following section of the chapter discusses practice implications for building PPPs for healthy eating in Ontario, followed by a brief discussion of the uniqueness of PPPs for healthy eating. The

remaining sections cover the contribution that this dissertation makes to the literature, strengths and limitations of the work, and suggestions for future research. A final section provides an overall conclusion of this doctoral study.

8.1 Practice Implications for Building PPPs for Healthy Eating in Restaurants

There is a body of evidence suggesting that multisectoral partnerships in public health are promising mechanisms for improving the health of the population (Axelsson & Axelsson, 2006; Easton, 2009; Mays & Scutchfield, 2010; Roussos & Fawcett, 2000). This thesis captured some key findings that may facilitate PPP engagement involving the government and the restaurant sector. However, it also revealed some disagreement that is likely to create resistance for collaboration.

8.1.1 Agreement on the importance of selected factors for building PPPs

This dissertation revealed that there are critical factors considered equally important by both the government and the restaurant sector in the process of building PPPs for healthy eating. If one were to build PPPs for healthy eating, both groups would likely share opinions, understanding or interests, which could potentially advance the dialogue throughout the negotiation and preparation stages of PPP development.

Motivating factors:

Gaining access to clients or customers' perspectives as well as *reaching out to clients who would not be reached by either sector alone* were considered equally important factors for motivating both the government and the restaurant sector to engage in PPPs (83.3% for each). This finding was also observed across the public and private sectors as well as NGO/academia. This result elicits two possibilities. It may indicate that both the government and the restaurant sector may have limited knowledge of consumers' attitudes and beliefs towards healthy eating (The European Food Information Council, 2005), and need their collective insights to develop better policies, to tailor healthy eating interventions or to create products that respond to consumers' needs and tastes. Another plausible explanation might be that organizations are seeking to expand the implementation of healthy eating interventions to reach a larger population and multiply the benefits of healthy eating.

Benefiting factor:

The most important and shared benefit associated with a PPP for healthy eating is the *ability to influence food industry to promote healthy eating*. Interestingly, both the government and the restaurant sector indicated it as most important benefiting factor (88.1%). This finding might be a sign, on one hand, of the escalating pressure on the government to tackle more effectively diet-related chronic disease, including obesity prevention (Gortmaker et al., 2011; Lang & Rayner, 2007; Nestle & Jacobson, 2000; World Health Organization, 2004a). On the other hand, it may reflect the urge of the restaurant sector to legitimate its own actions to avoid government regulations, while recognizing potential economic opportunities in promoting healthy eating. As the literature explains, organizations look for social legitimacy by their external stakeholders to acknowledge how well organizations are meeting the demands of the various groups that are concerned with their activities (Oliver, 1990; Peters, 1998b; Pfeffer & Salancik, 1978). This shared interest might facilitate dialogue between organizations, allowing them to find common grounds for negotiating PPP outcomes.

Governance factors:

Governance provides the mechanisms for successful PPP operation. In this dissertation, the factors related to governance were considered similarly important across all sectors. In potential PPPs for healthy eating, the government and the restaurant sector would highly agree on the importance of promoting *clarity and openness in decision making* as well as *creating transparent processes for monitoring and evaluation* (95.2% for each); *having a formal accountability system* (92.9%); and *ensuring equal representation on PPP boards of directors* as well as *equal decision-making authority* (81.0% for each). This shared understanding of the importance of establishing and promoting good governance in PPPs may facilitate progress during the preparation stage of PPP engagement, when the rules to guide the partnership's operation have to be defined.

Roles of the government and the restaurant sector in PPPs for healthy eating:

This thesis examined six different roles that the government and the restaurant sector would play in potential PPPs for healthy eating. The roles refer to *developing PPP guidelines*; *participating in the design of the partnership*; *coordinating the implementation of the partnership*; *monitoring the partnership operation*; *being accountable for the partnership* and *contributing funding to the partnership*.

The findings indicate that both groups expect to exert similar roles when engaging in PPPs. Two exceptions, however, seemed to emerge. *Coordinating the implementation of the partnership* appears to be a

more appropriate role for the government while *being accountable for PPP performance* would be better suited for the restaurant sector. The apparent agreement on roles and responsibilities may enable successful negotiation during the preparation stage, when governance needs to be defined and agreed upon.

8.1.2 Disagreement on the importance of selected factors for building PPPs

Overall, the results of this study exposed some disagreement on the importance of selected factors that can likely increase tension between the government and the restaurant sector during the process of building PPPs for healthy eating. The disagreement was observed in limited, but significant domains of motivation, benefit and hindering factors as well as in the types of healthy eating intervention available in restaurants.

Motivating factor:

One of the greatest advantages of working together to tackle complex public health problems is the greater variety of expertise, perspectives and resources brought to the table when multiple sectors convene (Pray & Pilsbury, 2012). The synergy of those elements is considered the proximal outcome of an effective collaboration (Lasker et al., 2001). In this doctoral thesis, the government seems less interested than the restaurant sector in *gaining access to different expertise or skills* (51.9% and 86.7% respectively; $p\text{-value} = .021$), which might indicate that the government does not perceive advantageous restaurants' expertise and skills to strengthen its work.

In the case of PPPs for healthy eating, both the government and the restaurant sector can play complementary roles in creating or modifying food menus. The restaurant sector, which has the knowledge and expertise to create and modify food menus, can generate important information about what, how, and why people eat out. The government, on the other hand, has expertise in public health, insights into issues of which the restaurant may be unaware (Pray & Pilsbury, 2012), and the power to develop policies and regulations.

Recognizing synergies of expertise is a key ingredient to form collaborative engagement. It requires transparency and mutual respect for the domain of each partner organization. This includes clarity in the level of resources involved, the level of engagement of partner organizations, and the leadership and governance ruling the partnership (Lasker et al., 2001; Skelcher & Sullivan, 2008).

Benefiting factor:

Another important aspect that may create tension during the negotiation process refers to *improving corporate image* as a benefit for engaging in PPPs for healthy eating. The restaurant sector perceives this benefiting factor as one of the most important for PPP engagement; yet it is considered one of the least important among the government (86.7% and 44.4% respectively; $p\text{-value} = .016$).

Besides seeking economic opportunities in promoting healthy eating, restaurants recognize that projecting an image of good corporate citizens, particularly in times of much criticism and blame of being responsible for the rise of obesity, is important for their business sustainability, as they might want to generate good will (Pray & Pillsbury, 2012). The government, on the other hand, seems less interested in improving its image as a benefit of engaging in PPPs, and might have some concerns in allowing the restaurant to obtain credit for the use of corporate social responsibility (CSR) as tool to improve their reputation, or to cultivate brand loyalty to influence consumer intent and product purchase (Kraak, Swinburn, et al., 2011).

In the context of this dissertation, CSR on its own might not have much influence on restaurant practices absent from a deeper transformation of the government-market relationship. The government should be open to discussing ways of operationalizing CSR programs, including endorsing those restaurants that follow dietary and healthy food guidelines. Corporate values of social responsibility represent an attractive factor in PPP development. If it is not harnessed properly, it could profoundly damage the credibility of organizations involved in PPPs.

Hindering factor:

There seems to be a disagreement as to whether *conflict of interest* would hinder PPP engagement. Conflict of interest is defined as a "set of conditions in which professional judgments concerning a primary interest (e.g., a public's health or consumers' healthy diet) tends to be unduly influenced by a secondary interest (e.g., financial gain) (Thompson, 1993). Conflict of interest can refer to individuals or to entire organizations, and can be financial or non-financial (Omobowale et al., 2010).

In the context of this doctoral thesis, the government is significantly more likely than the restaurant sector to consider conflict of interest as a barrier to enter into PPPs (85.2% and 46.5% respectively; $p\text{-value} = .012$). Potential conflict of interest can exist when restaurants that make unhealthy food products want to associate their brands with public health or health care institutions. Concerns lie in

the food marketing strategies that increase brand loyalty for a restaurant's unhealthy food product. Risks also arise when governments facilitate restaurant access to "hard to reach" populations or to influential professional groups without proper oversight to protect consumers' health. These are relevant concerns, in particular for consumers who are vulnerable to persuasive marketing practices, such as children and youth. Another case is when restaurants want to partner with the government to influence public health policy and program decisions. To minimize potential risks, Kraak and colleagues recommend complying with ethical codes of conduct, ensuring that co-branded activities support healthy products and healthy eating (Kraak, Swinburn, et al., 2011).

There are other situations that may present conflict of interest. For example, there is a conflict of interest when members of the board of directors of a potential PPP, or PPP employees, own stocks in restaurants or companies related to the PPP. In this case, those individuals should disclose such holdings, and eventually withdraw from any key decision (Omobowale et al., 2010).

Other measures to deal with conflict of interest include creating a transparent governance structure that fosters accountability through unbiased decision-making (Kraak, Swinburn, et al., 2011). For example, the Human Hookworm Vaccine Initiative of the Sabin Vaccine Institute (Sabin-HHVI) - a PPP for neglected diseases - has instituted a policy that requires two meetings annually between representatives of SABIN and George Washington University (GWU). This policy was introduced to review potential or perceived conflicts of interest that may rise from the involvement of one of its board members who holds decision-making roles in both organizations (Omobowale et al., 2010).

Invariably, PPPs for healthy eating raise issues of conflict of interests, and managing them is a critical governance and management function of the partnership itself (Omobowale et al., 2010). Guidelines and policies have been suggested to minimize, prevent or avoid conflict of interest in PPPs, particularly in the case of industry-sponsored research and its commercial application (Rowe et al., 2009) as well as in PPPs for product development and for access to health services (Omobowale et al., 2010).

In general, conflict of interest should not preclude the discussion of PPPs for healthy eating in restaurants. As mutual trust and open communication are essential to assess whether profit-driven activities of restaurants and public health goals can overlap or conflict (Kraak, Swinburn, et al., 2011),

PPPs should be prepared for public scrutiny. In all cases, the government must develop mechanisms that promote transparency and deal with conflicts of interest.

Menu labelling and portion size:

Another area of significant disagreement between the government and the restaurant sector pertains to *menu labelling* and *portion size reduction*. In both cases, the restaurant sector significantly disagreed with the government about implementing menu labelling and portion size reduction as interventions for promoting healthy eating (menu labelling: 60.0% and 92.3% respectively; p -value= .012); (portion size: 53.3% and 80.8% respectively; p -value= .036).

Menu labelling:

Up to now, menu labelling in Canada has been a voluntary practice implemented by restaurants or restaurant chains, or as part of British Columbia's voluntary Informed Dining program. The latter has been a collaborative effort between the government of British Columbia (BC) and Restaurants Canada - the national association representing restaurants and food services (Ministry of Health, 2012).

In Ontario, the government introduced the Bill 162, the *Making Healthier Choices Act, 2014* (McMahon & Dufresne, 2014). This proposed legislation is intended to increase awareness by posting the calorie content of food or beverage on menus and menu boards. Bill 162 requires restaurants that have more than 20 locations in the province and generate more than \$5 million of business annually to post nutrition information (Ministry of Health and Long-Term Care, 2013b). The Bill 162 has yet to pass the second reading to be implemented in the province (McMahon & Dufresne, 2014).

Criticism on the current voluntary menu labelling system revolves around the lack of clear, easily accessible, consistent nutrition information. With some exception, this voluntary approach has been restricted to nutrition information provided in pamphlets or on the back of plate mats, and on the websites of restaurants. Such information is often available to consumers upon request.

In the context of this dissertation, disagreement regarding menu labelling is perhaps a reflection of the recognition that disclosing the nutrient content of food products would reveal the poor nutritional quality of most restaurants' food options and affect the sales of the most popular items.

Often restaurants' popular menu items are those that are highly palatable (i.e., high in fat, sodium or sugar), and often least healthy (Roberto, Schwartz, & Brownell, 2009).

In this thesis, participants from the restaurant sector claim that menu labelling adds major costs not only to cover analysis of nutrition content of items but also the need to update their menu listings. This argument was also observed by other scholars (Roberto et al., 2009). Although it might be true for small, independent restaurants, it does not apply to a vast majority of restaurant chains, which most likely have already analyzed the nutrition content of the food items they offer and list (Roberto et al., 2009).

Restaurant owners claim that healthy food options are not appealing to consumers. However, in reality, consumers are unable to choose the healthiest products due to lack of key information (Roberto et al., 2009). Without menu labelling, consumers can make choices inconsistent with their preference, sending inaccurate signals of consumers' preference to the restaurant owners. This market imbalance is detrimental not only to the consumers, but also to the transparency of restaurant business (Roberto et al., 2009).

Furthermore, when there is lack of easy access to point-of-purchase information about the nutrition content of food, consumers are not experiencing a free-market economy. Without key information about the nutrition content of food, consumers could not estimate the calorie and sodium content of foods, especially nutrient-poor foods. The Canadian Obesity Network found that only one in 10 Canadians could correctly guess the calories in a typical lunch salad (about 1,200 calories). Two out of three thought that the salad would contain less than 1,000 calories, and almost one in two thought this to be a good "low-calorie" option (Caulfield & Sharma, 2012).

Smaller portion size:

In this doctoral study, there was a significant disagreement between the government and the restaurant sector on the importance of creating standard options for smaller portion size of meals (80.8% and 53.3% respectively; $p\text{-value} = .036$). The restaurant sector argues that consumers demand large portion size and that the restaurants are giving consumers more value for their money.

Restaurants use this argument as a marketing strategy to attract consumers, particularly because pricing is one of the top influences of food choices (Dachner, Ricciuto, Kirkpatrick, & Tarasuk, 2010).

There is sufficient evidence indicating that large portion size of energy-dense foods available in restaurant and fast-food chains contribute to increased energy intake (Ledikwe, Ello-Martin, & Rolls, 2005; Young & Nestle, 2002, 2012), encouraging people to consume more food than is required for physiologic needs (Ello-Martin, Ledikwe, & Rolls, 2005; Young & Nestle, 2002).

8.1.3 Feasibility of PPPs for healthy eating in restaurants

PPPs for healthy eating may offer opportunities for the government and the restaurant sector to find common ground in which profitability and public health goals overlap, or at least, where public health is not compromised (Brownell & Warner, 2009).

PPPs for healthy eating could promote food reformulation and subsidy policies that encourage nutritious food ingredients and healthier eating. Those PPPs could also support research & development for healthful products and harness industry expertise and resources to market nutritious meals.

In addition, PPPs for healthy eating present opportunities to strengthen menu-labelling practices, and the restaurant sector could take advantage of any support available. For example, government could support small, independent restaurants in nutrient analysis of their standard menu items, as well as develop guidelines for food reformulation. Many consumers are still struggling to use and interpret menu labels as they may lack the numeracy skills to do so (Howard & Brichta, 2013). PPPs can leverage or expand existing food literacy initiatives to improve the understanding and use of nutrient information on menus or menu boards.

PPPs can also create a more comprehensive response to or strengthen existing efforts of reducing overconsumption of energy-dense foods due to large portion sizes. For example, PPPs can generate incentives for restaurants to make a modest reduction of 10% to 15% in the portion of energy-dense food. Reduction at this level is unlikely to affect customer satisfaction if palatability is not compromised and cost is not increased (Condrasky, Ledikwe, Flood, & Rolls, 2007; Ledikwe et al., 2005).

PPPs with small, independently owned restaurants may present great opportunities to promote healthy eating. This group represents the majority of the restaurant operators (~65%) in Ontario. They are often less likely to receive attention from public health policies promoting healthy eating, in

part because of their size and capacity to assume the required changes. They might welcome support that boosts their business even though it would focus on healthy eating. PPPs involving this group can foster an inclusive approach and sustainable markets for healthy eating. For example, it could promote local agriculture by establishing pricing incentives and fostering transparent procurement of healthier food ingredients and food alternatives. Having a PPP that supports food reformulation and nutrition analysis would be of great benefit to those restaurants as well. It could also include working directly with culinary training centres to educate chefs on food reformulation and portion sizes. Furthermore, PPPs with this group can also support socially responsible business, encouraging others “to jump on the bandwagon”.

Above all, the full potential of PPPs to advance healthy eating is only fulfilled when supportive policy frameworks are in place. Otherwise PPPs could worsen the most basic role of the government in protecting the health of the public, as it would allow more self-serving business power to influence health-related and political practices.

Public policy and PPPs should be viewed as complementary, not mutually exclusive approaches. Regulation should not be considered the only policy option to address food-related health challenges. Even if a government decides to apply a stringent regulatory approach to reduce high-calorie food consumption (e.g. menu labelling, advertising restrictions, unhealthy food taxes, restrictions on sodium, sugars, fat and trans-fat contents of food), problems such as accessibility and affordability of healthy food, poor consumption of fruit and vegetables, and low levels of nutrition literacy will remain.

The government has the ability to bring different partners to the table; create incentives for industry’s participation; set standards for healthy eating, and promote consistent public messages. It has been argued that sustained progress and benefits to the public will occur when all food competitors make changes at the same time (Harris, Pomerantz, Lobstein, & Brownell, 2009; Mello, Pomeranz, & Moran, 2008; Popkin, 2009). Otherwise, some players could take advantage to persuade consumers to change brands, or to launch cheap, high-energy dense food in order to increase market share (Popkin, 2009). PPPs can target competitors equally and at the same time by creating the incentives that increase business opportunities, while fostering restaurants’ adherence to healthy eating interventions.

Restaurants as points of purchase are part of the physical environment where people make healthy (or unhealthy) eating choices, and they are widely visited daily. Public-private partnerships offer opportunities to create collaborative environments for capitalizing on the strengths of each sector, develop creative solutions that satisfy all players, and more importantly expand healthful food choices to a large clientele.

8.2 The Uniqueness of PPPs for Healthy Eating in Restaurants

The results of this thesis seem to indicate that PPPs for healthy eating in restaurants entail a unique mode of conceptualization that differs from some other types of PPPs in public health. In the latter, it is common to find an organization in one sector adopting or capturing a role or function traditionally associated with another sector (Selsky & Parker, 2005). For example, governments may contract out social welfare functions or health care services to a non-profit or business entity. In this doctoral study, PPPs for healthy eating in restaurants are not perceived as involving a third party providing services. Rather, PPPs in this field seem to entail changes within the industry by creating, improving or adapting the core business of restaurants to one that helps improve healthy eating. Indeed, most of the participants (92.0%) expect, as a benefit, to influence the food industry to promote healthy eating.

Another unique feature of PPPs studied in this thesis refers to the motivations to enter into a partnership. The formation of many PPPs in public health has been driven by the possibility to access additional funding to overcome the unattractive commercial return on the investments of pharmaceutical companies in low and middle-income countries, or to provide public goods due to lack of resources or to competing priorities faced by governments (De Pinho Campos et al., 2011). In the context of Ontario, additional funding seems to be less important for motivating PPPs for healthy eating. Rather, organizations seem to be more interested in *gaining access to clients' or customers' perspectives* of which they would not be able to get on their own as well as *reaching out to clients or customers who would not be reached by either sector alone*.

Last, in the multisectoral partnership literature, some PPPs present blurred boundaries, as new relationships between governments, businesses and civil society organizations are intertwined, with one sector assuming functions of the other sector (Selsky & Parker, 2005). In this thesis, the results point to another direction. Participants believe that a health-related, independent organization

representing the public interest should run the operation of the partnership. The government should continue playing a leadership role in developing healthy eating guidelines and standards, while the restaurant sector should lead the implementation of healthy eating interventions. An independent entity perhaps can reduce the sectorial boundary blurring by being responsible for the operations of PPPs and accountable to the population that PPPs serve. This independent arrangement may also allow clearer distinction on the roles and responsibilities of each sector involved.

In sum, PPPs for healthy eating in restaurants seek to influence the sector through creating, improving or adapting the core business of restaurants to one that helps improve healthy eating. The motivation to enter in such collaborative arrangements is to expand the understanding about the needs of clients or consumers and to reach a large clientele for improving the impact of healthy eating interventions. To do so, PPPs may be structured as a health-related, independent entity, representing the public interest.

8.3 Contribution to the Literature

8.3.1 Methodological contributions

This dissertation was able to extract from a multidisciplinary literature the critical elements influencing the formation of PPPs. This effort yielded the integration of five distinct though interrelated factors that are likely to have a substantial influence on the process of PPP engagement. They are: hindering, enabling, motivating, benefiting and governance factors. Scholars have observed that the consolidation of the literature on collaboration is required because of the growing number of multisectoral collaborations, the need to address complex social problems, and the significant impact of those collaborations at local and global levels (Selsky & Parker, 2005). The value of integrating conceptual underpinnings identified in the literature was important to create a group of factors and corresponding variables related to the process of building PPPs in public health.

In addition, a survey instrument was developed and empirically tested to determine the importance of each factor influencing the process of building PPPs. To the best of knowledge, this instrument is the first of its kind. The factor analysis provided evidence that nearly all items were appropriately grouped into the five pre-determined factors initially proposed. This is likely the first attempt in the

literature to examine correlations among variables in a survey instrument capturing factors that influence the initiation of PPPs in public health.

8.3.2 Theoretical contributions

This doctoral thesis also makes theoretical contributions to the field of PPPs in public health. It is probably one of the first empirical examinations of PPPs for healthy eating from the perspective of interorganizational theories. Previous methodological appraisal using interorganizational theories applies mostly to the business and public administration literature (Whetten, 1982). This theoretical approach helped explain why the public and the private sectors seek PPPs, and the importance of temporal and historical conditions influencing consideration for PPP development.

The theories, in particular, resource dependence theory, stakeholder theory and institutional theory provided the basis for understanding the motivations and expected benefits to enter into PPPs. In addition, the seminal work of Donna J. Wood and Barbara Gray toward the development of a theory of collaboration (Wood & Gray, 1991) helped position the importance of a convener to facilitate dialogue for PPP development. Further studies in the field of public health may benefit from these theoretical underpinnings.

This doctoral thesis also developed the first theory-driven, empirically based framework that explains the stages of building PPPs in public health. Perhaps, this is the most important contribution of this thesis to the literature. The generalized absence of theory-driven studies on PPPs in public health has led to a limited explanation or understanding of the underlying dynamics of building PPPs. Current literature on PPPs in public health, in particular for healthy eating, pays little attention to integrating critical elements into a cohesive framework that helps explain the domains of building PPPs. The proposed Framework may fill these gaps.

8.3.3 Practical contributions

The proposed Framework has the potential to support the process of building PPPs in public health. Its relevance relies on a transparent tool that uncovers relevant stages with associated factors that organizations can consider, enabling them to discuss, negotiate, eventually deliberate and prepare openly for successfully creating a PPP.

Specially, the Framework is flexible to adjust to different types of PPP arrangement as it encompasses the opinion of the public sector, including the government (local, provincial and federal), community health agencies, NGOs, academia as well as associations representing the agri-food sector.

The Framework can be not only adapted to PPPs in areas other than healthy eating, but also in other geographical contexts as the stages and associated factors are comparable within the realm of public health.

The Framework may also serve as a reference for organizations, including the government, seeking to develop PPP guidelines. It highlights the pressing issues that make organizations consider partnerships in the first place as well as critical elements that could affect the reputation of such organizations. It also offers guidance on assessing partnership compatibility; on what motivates organizations to enter into a PPP, and on what organizations expect to obtain from the partnership. Specifically, the Framework may assist organizations to develop guidelines related to governance structure and practices.

The significance of this Framework to guide the process of building PPPs is reflected in the fact that most participants (86.6%) considered *existence of PPP guidelines* a key factor to assist organizations in engaging in PPPs. This is of particular importance in the context of Ontario where limited knowledge and empirical work on PPPs exist. The Framework may be a starting point for organizations in Ontario that seek guidance on partnership development.

Lastly, the Framework may also offer researchers a frame of reference for investigating each factor, independently or in combination, and its relationship with partnership outcomes. In addition, it may also serve as a tool for evaluating PPP engagement with the goal of enhancing the process of building PPPs.

8.4 Study Strengths

This dissertation used mixed methods research to examine the field of PPPs in public health, enlarging the small body of original studies (both qualitative and quantitative research designs) with a well-described methodology, while addressing complementary research questions (Johnson et al., 2007). It allowed the integration of multiple realities by exploring divergence of opinions, gaining complementary insights and discovering new themes. The results transcended individual methods and disciplines and provided strengths that offset the weakness of both quantitative and qualitative studies. For example, this dissertation was able to not only determine the importance of several factors in the process of building PPPs with a certain level of generalizability and statistical significance, but also to provide an enhanced understanding of several aspects of PPPs for healthy eating. The proposed framework represents an integration of these findings, substantiated by relevant constructs of interorganizational theories and relevant research articles.

Another strength of this dissertation is the representativeness of the sample. With a response rate (55.4%) above the average of online surveys, and limited or non-apparent evidence of non-response bias, participants represented the voice of the public and private sectors in Ontario. They represented the most important agri-food associations in the province; the local, provincial and federal governments; the largest NGOs in Ontario working in the area of chronic diseases associated with diet and nutrition; and prominent academics in the area of public health policy, obesity and chronic disease prevention. Therefore, it may be inferred that the results of this dissertation could be generalized to contexts similar to Ontario.

Lastly, the theory-driven approach used in this thesis contributed to the establishment of a strong foundation for explaining the process of building PPPs. The theoretical underpinning spanned from the identification and analysis of critical factors in the formation of multisectoral partnerships to the development of the theoretical framework that explains the process of PPP engagement.

8.5 Study Limitations

8.5.1 Methodological limitations

First, this doctoral thesis was conducted in Ontario where limited empirical evidence of PPPs in public health exists. This lack of empirical PPPs might have influenced the knowledge and experience of participants about the topic of this dissertation. Their views and experiences may differ from those who have been involved in or have studied PPPs in public health. One strategy used to minimize this limitation was to select individuals in senior level positions who might have led a form of collaboration at any point in their work or, at least, might have a good notion of the complexities of engagement between the public and private sectors.

Second, due to the cross-sectional nature of the quantitative study, only a snapshot of participants' views was captured. As changes over time were not captured, the use of a longitudinal design to re-evaluate the importance of some factors observed in the study would have provided valuable information for understanding PPP engagement and updating the Framework.

Third, the sample size of the quantitative phase was small ($n=112$). Initially, the analysis showed that approximately 80% of cells within cross-tabulation of groups versus variables had frequencies lower than five. This was addressed by grouping organizations (e.g., NGO/Academia) and scale responses (e.g., Important/Somewhat important). Cells with less than 5 observations were reduced to approximately 40% and 50%. In addition, Fisher's test was used to compare the response distributions across groups rather than Pearson chi-square test (Munro, 2005).

Fourth, the analysis of non-response bias using respondents' and non-respondents' characteristics was not comprehensive, as limited respondent demographic and other characteristics as well as work-related information was collected from the participants. This limited focus intended to keep the length of the questionnaire short. Participants were individuals with high profile roles, holding leadership positions such as chairs of boards, presidents, chief executive officers, executive directors, and senior scholars among others. They were expected to have little time available to respond to the questionnaire. It was possible, however, to assess non-response bias by looking at the differences in distributions of gender and career level between respondents and non-respondents. Reassuringly, the analysis demonstrated no statistical difference in either gender ($p\text{-value} = .862$) or position level ($p\text{-value} = .862$).

value= .707). In addition, a wave analysis (Atif et al., 2012), which compared response distributions across three weeks, did not show statistical differences.

Fifth, the instrument used in the quantitative phase was novel and developed exclusively for the purpose of this PhD research. While novel, this original instrument presents some limitations regarding construct validity (i.e., content validity and face validity) and reliability. This dissertation was unable to gather expert opinions to critique the translation of the constructs into measures or whether the factors and respective variables were associated with each other. To improve face validity, this instrument was pilot tested with key senior level staff from the Ministry of Health and Long-Term Care. This step was helpful to assess the clarity and understanding of the questions, including the proposed scale, the logic order of the questions and the overall satisfaction with the survey. In addition, a description of each factor was provided (Chapter 4) to obtain a sound understanding of the content domain being measured.

Ideally, this dissertation should have been able to include evaluations of test-retest reliability to assess the consistency of the instrument from one time to another. However, estimation of reliability was not possible because of the sampling strategy used, which surveyed the entire population (N=214) rather than a sample of it. However, to get an initial sense of the level of consistency, exploratory factor analysis was conducted to assess whether the pre-determined factors were united by the proposed set of variables. The results showed that all factors had a relatively high internal consistency, ranging from $\alpha = .64$ to $\alpha = .88$, and that nearly all items were appropriately grouped into the pre-determined factors initially proposed in the survey instrument.

Sixth, the qualitative phase used a purposive sampling strategy to recruit participants. Those who completed the survey were asked to indicate whether they were interested in participating in a follow-up interview. This approach might have skewed the sample toward individuals who might be more familiar with the topic area, who felt more articulate to express their point of view, or who felt they had more positive or negative experiences or concerns to share about PPPs in public health.

Lastly, the lack of previous original studies on the topic may have limited the evidence for discussion and comparisons of results. Despite all these limitations, the information obtained is likely to provide useful guidance about factors influencing the process of building PPPs and insights to support healthy eating interventions in restaurants in Ontario.

8.5.2 Framework limitations

A number of limitations of the Framework are worth noting. First, the Framework has not been tested or validated among researchers. Therefore, it might be valuable to assess whether the proposed Framework and its concepts make sense to other scholars as a reasonable theoretical perspective for studying PPPs engagement in public health. It would also be critical to seek validation among policy-makers, public health professionals and the members of the business sector as to whether this is a practical tool to guide the process of building PPPs.

In addition, the development of the Framework is inevitably influenced by the experience and knowledge of who created it. This may result in some issues being given prominence and others being ignored. Once again, this could be addressed through efforts to validate the Framework with other stakeholders.

Second, the Framework is limited in the level of guidance provided, particularly to organizations seeking more practical information about specific stages of building PPPs. The Framework lacks guidance on how to operationalize the factors influencing PPP engagement. For example, organizations may want to have more guidance in how to deal with conflicts of interest or have a tool to conduct the compatibility assessment for potential PPP engagement. Clearly, further work is needed to enhance the use and practicability of this Framework.

Third, the Framework has limited capacity to reflect graphically the importance of having the public interest at the core of PPPs. Organizations, particularly from the public sector, should ensure that the public's health is served and safeguarded when building PPPs. Furthermore, the Framework was also weak in depicting the real-world complexity of building relationships. Rather, the design of the Framework took a linear and progressive approach to facilitate the understanding of relevant factors involved in the formation of PPPs.

Fourth, the Framework attempts to explain only the stages and respective factors influencing the process of building PPPs. Once the partnership is established, the relevant organizations face the task of implementing, managing, monitoring and sustaining the partnership. Issues such as securing adequate resources; ensuring good practice management (e.g., open and transparent communication, and participatory management); documenting ongoing feedback on PPP progress; and having

comparative partnership performance metrics are fundamental to ensure optimal results and inform best practices (Buse & Tanaka, 2011; De Pinho Campos et al., 2011; Roussos & Fawcett, 2000).

Lastly, as happens with any theoretical model, the proposed Framework is a static representation of a dynamic multisectoral field. Rethinking the Framework might be required from time to time to reflect new insights and experiences in order to enlarge its theoretical perspective and practical application.

8.6 Future Research

This thesis has provided a foundation for examining further the process of building PPPs. First, the survey instrument developed for this dissertation needs further validation. The factor analysis provided evidence that nearly all items were appropriately grouped according to the existing sections of the survey instrument (i.e., 5 factors). However, the solution with 7 factors yielded technically adequate and congruent grouping of items from the survey instrument. Further research could assess whether the solution with 7 factors is valid and improve the questionnaire's ability to examine factors influencing the process of building PPPs in public health.

Second, the Framework requires external validation among researchers, policy-makers, NGOs leaders and business representatives. This validation should occur not only in the context of Ontario but elsewhere. This would help assess the robustness of the Framework's conceptualization and enhance its effectiveness towards a well-grounded model for guiding PPP engagement.

Clearly, a closer examination of each stage of PPP engagement is necessary to generate a better understanding of successes and failures in the process of building PPPs. This includes the development of indicators to assess not only the formation process, but also to compare different experiences, improve understanding and inform best practices.

Third, the field of interorganizational cooperation lacks a well-grounded conceptualization of the term public-private partnership. It is often difficult to distinguish in the literature the meaning of partnerships from other forms of engagement such as alliances, cooperation, networking and joint ventures (Huxham et al., 2000). Whether an initiative that involves the private sector is defined as PPPs will depend on who is defining it. Further work on developing a consensus on terminology

would help establish key differences and understand better the factors affecting each type of engagement. In that case, the concept of comparative partnership performance metrics (Buse & Tanaka, 2011) would be more precise in terms of having a common language, clarity and structure to measure PPP performance.

Additionally, the literature on PPPs in public health lacks a theoretical perspective and rigorous description of methodologies. Future research in public health would benefit from using the interorganizational theories, distinguishing the types of engagement and the stages of development.

Fourth, empirical research on PPPs in public health is limited. Perhaps it is because PPPs do not represent a simple intervention that can be developed in a controlled environment for the sole purpose of investigation. There are innumerable ethical, political, and value-based aspects embedded in the creation of a PPP that may hinder any attempt to develop one. This might explain the limited research conducted in the field. Scholars may benefit from using the proposed Framework as a supportive tool to foster the creation and evaluation of empirical PPPs in public health.

Fifth, this dissertation acknowledges that there are risks associated with engaging restaurants, particularly when they belong to large, multinational fast-food chains. These food establishments, also known as Big Food have “huge and concentrated market power” (Stuckler & Nestle, 2012), and have created a business practice that maximizes profits while endangering the public’s health (Freudenberg, 2014). Scholars have compared Big Food with Big Tobacco, suggesting that food companies are using tactics similar to those used by tobacco industry (Brownell & Warner, 2009; Dorfman, Cheyne, Friedman, Wadud, & Gottlieb, 2012; Stuckler, McKee, Ebrahim, & Basu, 2012).

This thesis has not examined PPPs for healthy eating using a critical lens either. Further research should focus on studying how conflicts of interest and other risks play out in a potential PPP for healthy eating involving the food industry; what is needed to legitimize the food industry as partners in PPPs for promoting healthy eating; and whether, and under what circumstances it should be viewed as partners or as part of the solution to rising rates of obesity and other diet-related chronic diseases (Stuckler & Nestle, 2012).

Voluntary self-regulation is often promoted by the industry when they feel under threat by government action (Brownell & Warner, 2009). Despite some successful examples in other sectors

(i.e., marine fisheries and forests) (Brownell & Warner, 2009), the food industry seems to have turned it into an opportunity to sell more unhealthy products (Brownell, 2012), claiming no need for further involvement of the public health community (Stuckler & Nestle, 2012). It would be worth to compare healthy eating interventions using voluntary, self-regulation approaches with those using PPPs, as the latter are designed to foster closer involvement of both sectors, operating under clear conditions and rules.

Sixth, public health interventions to address healthy eating are often intended to reduce the consumption of products that are high in salt, fat or sugar. Those interventions may reduce sales of these products, and are perceived as limiting the expansion of restaurant and fast-food chains as well as the value of investments at any point in the food supply chain (Thow & McGrady, 2014). Further research should investigate whether, and under what conditions, PPPs may offer incentives for the restaurant sector to modify their food menus and offer healthier meals, without compromising restaurants' sales.

Seventh, although the implementation, management and monitoring of PPPs were out of scope in this dissertation, they are certainly relevant, and research is warranted to provide directions on PPP development, operationalization and evaluation. This will advance the understanding of how to operationalize the elements presented in the Framework.

Last, knowledge and best practice would enhance and benefit from a more complete picture of PPPs in public health. The development of a PPP database, containing quantitative and qualitative data would lead to a more systematic, instead of anecdotal, understanding of the PPP phenomenon (Van Huijstee et al., 2007).

8.7 Conclusion

Many governments are striving to address complex public health problems such as obesity prevention and diet-related chronic diseases. However, there are strong market pressures working against governments trying to respond to those health problems, compounded by great financial constraints and a market-based economy, in which the central tenet of the government tends to be economic growth. Also, neo-liberal arguments against government interventions have focused on the already excessive regulatory burden on business (Lang, 2006). In addition, the size and

importance of the food industry to the economy make it challenging for the government to restrict their unhealthy products. This pressure can lead governments to feel “trapped in a cage”, preventing them from acting upon and taking steps to work with the food industry.

There might be a great potential in partnerships that enable the government and the restaurant sector to combine efforts and expertise to make transformative changes towards increasing the availability and consumption of healthy food.

Increasingly, the food industry, including the restaurant sector, is permeating the health arena. They are rebranding themselves as nutritious companies, offering healthier food and beverages, participating in public debates related to obesity prevention, and providing business acumen and knowledge to government programs.

Public policy and PPPs should be viewed as complementary, not mutually exclusive approaches. Together, they can level the playing field and create the equal conditions for restaurants and fast-food chains to promote and deliver healthy food menus. Even if a government decides to apply a stringent regulatory approach to reduce high-calorie food consumption, problems such as accessibility and affordability of healthy food, poor consumption of fruit and vegetables, and low levels of nutrition literacy will remain.

This thesis provides guidance for organizations, and introduces the first empirically based, theory-driven framework that explores, from a public health perspective, the stages for building PPPs, and their influencing factors. While limited to a certain extent, the Framework offers a structured foundation for organizations to reflect on PPP engagement. Organizations can assess the likelihood of the factors according to their context and identify additional ones that better reflect their realities.

Before embarking on the process of PPP engagement, it is important to acknowledge that an inescapable difference in paradigms between the public and the private sectors exists. A key element, particularly when organizations have clearly divergent interests, value different incentives and experience different pressures, is the presence of a convener.

To facilitate decision-making, a partnership compatibility assessment is recommended so that organizations, particularly those representing the public sector and NGO/academia could improve

their chances of successful engagement, or at least prevent initial controversies or risks associated with the partnership.

The insights outlined in this thesis, and the resulting Framework offer important elements to stimulate discussion and guide potential partner organizations in their process of PPP development in public health, and possibly beyond.

Moving forward, more – not less – attention should be paid to PPPs involving restaurants to help curb the deleterious effects of unhealthy diet on major health challenges such as obesity and other diet-related chronic diseases. Public health might need a shake up or revitalization to include a clear and strong interorganizational collaboration perspective during the development of policies and programs.

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Appendices

Appendix 2_a – Example of a search strategy for PPPs in public health

MeSH Terms for Medline, April 2009

1. exp Public Health/ - MeSH
2. public sector/ MeSH
3. exp Social Environment/ or exp Health Promotion/ or exp Risk Factors/ or exp Health Policy/ or exp Obesity/ or exp Health Services Accessibility/ or exp Health Status/ or exp Socioeconomic Factors/ or exp Social Conditions/ MeSH
4. social* determina*.mp. keyword
5. 3 or 4
6. Private Sector/ MeSH
7. private sector.mp. key word
8. private for profit.mp.
9. 6 or 7 or 8
10. public-private partnership*.mp.
11. (public and private partner*).mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer name]
12. (public and private collab*).mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer name]
13. (public and private mix*).mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer name]
14. (public and private and sector* and role*).mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer name]
15. 10 or 11 or 12 or 13 or 14
16. social* responsib*.mp.
17. exp social responsibility/
18. 1 and 9 and 15
19. 2 and 9 and 15
20. 5 and 9 and 15
21. (16 or 17) and 15
22. 21 or 18 or 19 or 20
23. limit 22 to (english language and humans and yr="1990-2009")

Key words for Scholars Portal, April 2009

KW=((public health) or (social determinants of health) or (health promotion)) and KW=((public and private and sector* and (cooperation or collaborat* or partnership*)) or (private sector*))

The following databases were consulted:

- Health and Safety Science Abstracts
- CSA Illustrata: Natural Sciences
- Public Administration Abstracts
- PAIS International
- Physical Education Index
- Management & Organization Studies: A SAGE Full-Text Collection
- Health Sciences: A SAGE Full-Text Collection
- Urban Studies & Planning: A SAGE Full-Text Collection

Appendix 2_a – Example of a search strategy for PPPs in public health – Cont'd

MeSH Terms for Embase, April 2009

1. exp public health/
2. public sector/
3. exp "Organization and Management"/
4. private sector/
5. private sector.mp.
6. private for profit.mp.
7. 3 or 4 or 5 or 6
8. exp Social Status/ or exp Health Status/ or exp Health Care System/ or exp Health Care Delivery/ or exp Health Care Policy/ or exp Public Health/ or exp Socioeconomics/ or exp Social Aspect/ or social determinants of health.mp. or exp Health Behavior/ or exp health promotion/
9. (public and private partnership*).mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer name]
10. (public and private partner*).mp.
11. (public and private collab*).mp.
12. (public and private mix*).mp.
13. (public and private and sector* and role*).mp.
14. social responsibilit*.mp.
15. 9 or 10 or 11 or 12 or 13
16. 1 and 15 and 7
17. 2 and 15 and 7
18. 8 and 15 and 7
19. 14 and 15
20. 16 or 17 or 18 or 19
21. limit 20 to (english language and humans and yr="1990-2009")

Appendix 2_b – Example of a search strategy for the systematic review

Search Strategy from Medline (OVID), 2010

1. exp Public Health/
2. public sector/
3. Private Sector/
4. private sector.mp.
5. private for profit.mp.
6. 3 or 4 or 5
7. public-private partnership*.mp.
8. (public and private partner*).mp. [mp=title, original title, abstract, name of substance word, subject heading word, unique identifier]
9. (public and private collab*).mp. [mp=title, original title, abstract, name of substance word, subject heading word, unique identifier]
10. (public and private mix*).mp. [mp=title, original title, abstract, name of substance word, subject heading word, unique identifier]
11. (public and private and sector* and role*).mp. [mp=title, original title, abstract, name of substance word, subject heading word, unique identifier]
12. 7 or 8 or 9 or 10 or 11
13. social* responsib*.mp.
14. exp social responsibility/
15. exp pharmaceutical preparations/ or exp pharmacology/ or exp drug industry/ or exp vaccines/
16. product develop*.mp.
17. 1 and 6 and 12
18. 2 and 6 and 12
19. (13 or 14) and 12
20. 15 or 16
21. (17 or 18 or 19) and 20
22. limit 21 to (english language and humans and yr="1990-2010")

Note: A search of 12 computerized major databases was conducted via MEDLINE via OVID (1950-2010), EMBASE via OVID (1980-2010), and Health and Safety Science Abstracts; Illustrata: Natural Sciences; Expanded Academic ASAP; ABI/INFORM Global; Pharmaceutical News Index; Public Administration Abstracts; PAIS International; Management & Organization Studies; Health Sciences, and Political Science via SCHOLAR PORTAL. The search strategy used similar MeSH terms for Medline and Embase (as presented in table above) and keywords for Scholars Portal: drug dev* or drug manufactur* or vaccin* or pharmacal* or pharmaceutical dev* or pharmaceutical manufactur*.

Appendix 2_c – Checklist tool for eligibility criteria, systematic review

Selection Criterion	Yes	No	Unclear
Is this article about PPP for drug & vaccine development?	33	5	12
Is this article about an empirical-based descriptive initiative in PPP for drug & vaccine development?	31	13	6
Is the private-for profit sector (i.e., corporations, private manufactures, private donors, pharmaceutical industry) involved in the partnership?	45	0	5
Is there any relevant information concerning to the development and management stages of the PPP?	35	9	6
Does the article provide sufficient discussion about critical aspects of the development and/or management stages?	10	39	1
Is the health of the population the focus of the partnership?	49	0	1
Overall appraisal			
Include	10	n/a	n/a
Exclude	40	n/a	n/a

Appendix 2_d – Example of a search strategy for PPPs for obesity prevention

MeSH Terms - Ovid MEDLINE, January 2012

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1  food consumption.mp. (7184)
2  exp Food Supply/ (6489)
3  exp Nutrition Policy/ (4912)
4  exp Diet, Reducing/ (8585)
5  exp Diet, Carbohydrate-Restricted/ (549)
6  exp Diet, High-Fat/ (46)
7  exp Diet, Sodium-Restricted/ (5129)
8  exp Nutritional Requirements/ (15913)
9  exp Energy Intake/ (29232)
10 diet formula.mp. (29)
11 dietary formulation.mp. (24)
12 formulated food.mp. (17)
13 exp Food Packaging/ (3854)
14 exp Food-Processing Industry/ (3920)
15 exp Food Industry/ (86240)
16 exp Legislation, Food/ (1752)
17 exp Food Labeling/ (1842)
18 food technology.mp. (3602)
19 exp Carbonated Beverages/ (1446)
20 exp Dietary Sucrose/ (1997)
21 High-fructose corn syrup.mp. (157)
22 glucose fructose beverage*.mp. (2)
23 flavoured drink*.mp. (24)
24 flavored drink*.mp. (65)
25 exp Food Habits/ (16988)
26 exp Food Habits/ (16988)
27 healthy eating.mp. (1645)
28 exp Fast Foods/ (297)
29 exp Restaurants/ (2238)
30 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24
or 25 or 26 or 27 or 28 or 29 (162715)
31 obesity.mp. (143966)
32 exp Body Weight/ (301799)
33 exp Weight Loss/ (22823)
34 body weight management.mp. (39)
35 exp Obesity, Morbid/ (8648)
36 exp Overweight/ (113817)
37 obese.mp. (57423)
38 31 or 32 or 33 or 34 or 35 or 36 or 37 (341260)
39 exp Public Sector/ (4155)
40 exp Government Agencies/ (11968)
41 exp Government Programs/ (6505)
42 exp Private Sector/ (6360)
43 private for profit.mp. (219)
44 private for-profit.mp. (219)
45 private-for-profit.mp. (219)
46 public-private partnership*.mp. (549)
47 public-private partner*.mp. (551)
48 public-private collab*.mp. (64)
49 public-private mix*.mp. (108)
50 exp Public-Private Sector Partnerships/ (481)
51 exp Cooperative Behavior/ (21529)
52 exp Partnership Practice/ (1134)
53 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 (49153)
54 30 and 38 and 53 (85)
55 30 and 38 and 53 (85)

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Appendix 2_d – Example of a search strategy for PPPs for obesity prevention – Cont'd

MeSH Terms - CAB Abstracts, January 2012

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1  food consumption.mp. (19450)
2  exp Food Supply/ (7582)
3  exp Nutrition Policy/ (504)
4  exp Energy Intake/ (13379)
5  diet formula.mp. (38)
6  dietary formulation.mp. (55)
7  formulated food.mp. (52)
8  exp Food Packaging/ (3047)
9  food technology.mp. (4563)
10 High-fructose corn syrup.mp. (472)
11 glucose fructose beverage*.mp. (2)
12 flavoured drink*.mp. (86)
13 flavored drink*.mp. (32)
14 healthy eating.mp. (1573)
15 exp Fast Foods/ (581)
16 exp Restaurants/ (2626)
17 obesity.mp. (52923)
18 exp Body Weight/ (58635)
19 body weight management.mp. (47)
20 exp Overweight/ (10050)
21 obese.mp. (26532)
22 exp Public Sector/ (1753)
23 exp Private Sector/ (2427)
24 private for profit.mp. (111)
25 private-for-profit.mp. (111)
26 private-for-profit.mp. (111)
27 public-private partnership*.mp. (645)
28 public-private partner*.mp. (646)
29 public-private collab*.mp. (39)
30 public-private mix*.mp. (53)
31 cooperation.sh. (5104)
32 partnership.mp. [mp=abstract, title, original title, broad terms, heading words] (4999)
33 food industry/ (7725)
34 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 (51066)
35 17 or 18 or 19 or 20 or 21 (105591)
36 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 (20484)
37 34 and 35 and 36 (46)

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Advanced Google Search – Search Terms, January 2012

Advanced search: food, diet, obesity "partnership" "public-private partnership" OR "public sector" OR "private sector" OR food industry.

Appendix 2_d – Example of a search strategy for PPPs for obesity prevention – Cont'd

Screenshot of Google Advanced Search, 2012

Screenshot of Search Result, 2012

Appendix 2_c – Description of the qualitative analysis for the systematic review

Qualitative content analysis was conducted by interpreting elements with regard to the development and management aspects of PD PPPs. This process is also called conventional content analysis, which uses an inductive process of analysis, allowing the themes and names for the themes flow from the data rather than bringing preconceived categories (H. & S., 2005).

The student investigator codified and categorized the information in multiple stages. The first stage involved identifying sentences or phrases in the article that referred to critical aspects of the development and management of PD PPPs. These phrases were underlined and then re-written into a spreadsheet in a condensed manner, preserving the core meaning of the text (Graneheim & Lundman, 2004). These were given codes and assembled into a condensed meaning unit. The condensed meaning units were identified as part of the texts that shed light on a specific phase (i.e., development and management) of the PD PPPs. Units were then compared and re-assembled into tentative sub-themes. Sub-themes were further compared, reorganized and merged into overarching themes according to each phase of the PD PPP. The three authors agreed on the final set of sub-themes and themes.

Appendix 2_c – Description of the qualitative analysis for the systematic review – Cont'd

Example of the Coding Process of a Selected Theme

Theme	Win-win agreement						
Sub-theme	Commitment to long-term collaboration		Defining goals, responsibilities, intellectual property rights and management aspects			Balancing risks and benefits for satisfying partners' interests	
Condensed meaning unit	Adequate provision of funding and other resources by partners involved	Partners committed for long-term period	Definition of and agreed upon goals, responsibilities, and operational aspects	Development of formalized agreement among partners	Crucial to define IP among all parties	Discussed and shared benefits and risks	Meeting partners' interests
Codes	Resource committed	Long-term commitment	Definition of goals, responsibilities, and management	Formal Agreement	Intellectual Property Rights	Risks & Benefits	Partners' Interests
Gutteridge, 2006	√		√	√	√		
Nwaka, 2005	√	√	√	√	√	√	√
Nwaka & Ridley, 2003	√	√	√	√	√	√	√
Croft, 2005	√	√	√				√
Wheeler & Berkley, 2001	√		√	√	√	√	√
Levine et al., 2004	√		√			√	√
Ridley, 2003							
Lang & Greenwood, 2003			√	√	√		
Bottazzi & Brown, 2008	√		√	√	√	√	√
Hanlin et al., 2007			√		√		√

Appendix 2_f – Examples of initiatives described as PPPs for Obesity Prevention

Name	Description	Location	Partners	Source
The “5 A Day” Program	A PPP formed to increase public awareness of the importance of eating 5 servings of fruits & vegetables per day and to provide consumers with specific information to incorporate more servings into their daily eating partners.	Initially launched by California – the United States - the “5 Day” Program was adopted federally in 1991.	Primary funding from the United States Department of Agriculture (USDA) Food Stamp Program and the fruit & vegetable industry in the U.S. Government.	Out of balance: http://www.consumersunion.org/pdf/OutofBalance.pdf National Cancer Institute http://dcccps.nci.nih.gov/5ad_3_origins.html
European Union Platform on Diet, Physical Activity and Health	A forum for European stakeholders to explain their plans about healthy nutrition & physical activity; to explore best practices and encourage voluntary action on consumer information and labelling; advertising and marketing and product development.	33 member EU organizations ranging from food industry to consumer protection NGOs.	Public authorities, food manufactures, retailers, the catering industry, advertisers, consumer, health NGOS, and health professionals.	http://ec.europa.eu/health/ph_determinants/life_style/nutrition/platform/platform_en.htm
European Ensemble, Prevenons, l’Obesite des Enfants (EPODE)	A PPP to prevent childhood obesity and implement sustainable educational practices on healthy lifestyle among children and their families.	Initially implemented in France and currently expanded to several other countries (e.g. Belgium, Greece, Spain, Australia, Mexico)	Government, food corporations such Nestlé, Fondation internationale Carrefour in France, Ferrero, Mars, , Orangina, Schweppes, Unilever, European Universities and community partners, among others.	http://www.epode-european-network.com/en/partners.html http://elibrary.zdrave.net/document/EU/Commission%20of%20the%20EC/eure_1.pdf
“Food For Life”	A PPP structured as a platform for sharing food innovation, facilitating research, education and training to strengthen innovation and competitiveness of the European food and beverage sector, in particular regarding nutritional benefits.	European countries (details nor provided)	Hosted by the Confédération of the Food and Drink Industries in the EU. It is a industry-led, public-private partnerships encouraged by the European Commission.	http://etp.ciaa.eu/documents/general_presentation.pdf http://etp.ciaa.eu/asp/groups/index.asp?doc_id=604
Food Deserts	Another existing example in the U.S. refers to partnerships for improving healthy food access in underserved communities with the goals of attracting fresh-food retail investment through financing mechanisms.	Several states/cities in the U.S., such as California, Pennsylvania, New York city, San Diego, Philadelphia and Washington DC City	Partners vary according to each location. Usually it involves government departments (Health, Financing, Urban Development), and the industry association such as the Local Initiative Support Corporation.	The Food Trust, 2004 http://www.commerce.state.il.us/NR/rdonlyres/1C40652A-90FD-4606-823A-68B786463273/0/ilreport.pdf http://www.dhcs.ca.gov/dataandstats/reports/Documents/CaliforniaFoodGuide/17HealthandDietaryIssuesAffectingAfricanAmericans.pdf
“I drink”	A PPP to promote the consumption of milk.	Chile	Milk sector pays the campaign and the health sector regulates the use of the logo.	Agurto et al., 2011
“The 5 a Day” Consortium	A PPP to promote the consumption of fruits and vegetables	Chile	Agricultural sector representative (both public and private), including agricultural export groups, and Health sector,	Agurto et al., 2011

Appendix 3_a – Description of theories not included in the dissertation

Theory	Description	Author
Social Exchange Theory (SET)	SET studies actions that maximize economic or psychological benefits for exchange transactions. It is limited to actions that are subject to rewarding primarily material or symbolic. It has been used to study exchange transactions such as individual exchange, group process and intergroup relations. Exchanges occur when the benefits of cooperation exceed the costs.	Emerson R, 1976 Smith et al, 1995. Gergen, 1980
Negotiated Order Theory (NOT)	NOT depicts organizations as active members in the social spectrum in which people negotiate with each other. The theory places emphasis on the constant interaction between individuals and institutions. NOT highlights emergence, change, and temporality. It focuses on the symbolic and perceptual aspects of IORs, primarily on the process and structures in which shared understandings evolve.	Nathan & Mitroff, 1991; Gray & Wood, 1991.
Agency Theory (AT)	AT refers to the relationship of one party (the principal) who delegates work to another party (the agent), who then performs that work. AT is concerned with studying the conflictive desires or goals of the principal with those of the agent. The theory reflects on efficiency, sharing risks, alignment of interests and successful contracting. The theory is about joint value maximization and what self-interested parties can do to remedy obstacles to achieve such maximization.	Fleisher, 1991

Appendix 4_a –List of stakeholder organizations invited to participate in the online survey: by type of organization, group and sector

Organization	Group	Sector
Ontario Public Health Association	Health Professional	NGO
Dietitians of Canada (Ontario Chapter)	Health Professional	NGO
The Ontario Society of Nutrition Professionals in Public Health	Health Professional	NGO
Ontario Medical Association	Health Professional	NGO
Ontario Society of Nutrition Management	Health Professional	NGO
Registered Nurses' Association of Ontario	Health Professional	NGO
Canadian Obesity Network	Health Professional	NGO
Association of Ontario Health Centres	Health Professional	NGO
Association of Local Public Health Agencies	Health Professional	NGO
Ontario Nurses Association	Health Professional	NGO
Canadian Paediatric Society	Health Professional	NGO
Registered Practical Nurses Association of Ontario	Health Professional	NGO
Ontario Public School Board Association	Health Professional	NGO
Ontario Catholic School Trustees' Association	Health Professional	NGO
Council of Ontario Medical Officers of Health	Health Professional	NGO
Heart and Stroke Foundation (Ontario Chapter)	Not-for-Profit	NGO
YMCA Ontario	Not-for-Profit	NGO
United Way Ontario	Not-for-Profit	NGO
Ontario Healthy Communities Coalition	Not-for-Profit	NGO
Ontario Healthy School Coalition	Not-for-Profit	NGO
Ontario Chronic Disease Prevention Alliance	Not-for-Profit	NGO
Consumers' Association of Canada	Not-for-Profit	NGO
Community Food Centres Canada	Not-for-Profit	NGO
Canadian Partnership Against Cancer	Not-for-Profit	NGO
Sustain Ontario	Not-for-Profit	NGO
FoodShare	Not-for-Profit	NGO
Greenbelt Fund	Not-for-Profit	NGO
Farm and Food Care Ontario	Not-for-Profit	NGO
Ontario Agri-Food Education Inc.	Not-for-Profit	NGO
Foodlink Waterloo	Not-for-Profit	NGO
Canadian Cancer Society	Not-for-Profit	NGO
Canadian Diabetes Association	Not-for-Profit	NGO
Ontario Collaborative Group on Healthy Eating and Physical Activity	Not-for-Profit	NGO
Chiefs of Ontario	Not-for-Profit	NGO
Metis Nation of Ontario	Not-for-Profit	NGO
Ontario Federation of Indian Friendship Centres	Not-for-Profit	NGO
Ontario Native Women's Association	Not-for-Profit	NGO
Association of Municipalities of Ontario	Not-for-Profit	NGO
Ontario Association of Community Care Access Centres	Not-for-Profit	NGO
Propel Centre for Population Health Impact, University of Waterloo	Research	Academia
Department of Nutritional Sciences, University of Toronto	Research	Academia
Ontario Agricultural College, University of Guelf	Research	Academia
The Centre for Science in the Public Interest	Research	Academia
Canadian Health Research Institute (CHIR), Institute of Nutrition, Metabolism, and Diabetes (INMD).	Research	Academia
Ontario's Healthy Kids Panel	Research	Academia
Conference Board of Canada – Centre for Food in Canada	Research	Academia

Organization	Group	Sector
Public Health Policy Division, Dalla Lana School of Public Health, University of Toronto	Research	Academia
Vineland Research and Innovation Centre	Research	Academia
School of Health Services Management, Ryerson University	Research	Academia
Agri-food @ Ivey, University of Western Ontario	Research	Academia
Food Policy Research Initiative, Ontario Tobacco Research Unit, University of Toronto	Research	Academia
University of Ottawa Heart Institute, Division of Prevention and Rehabilitation	Research	Academia
The District of Algoma Health Unit	Local health promotion	Public
Brant County Health Unit	Local health promotion	Public
Chatham-Kent Health Unit	Local health promotion	Public
Durham Region Health Department	Local health promotion	Public
Eastern Ontario Health Unit	Local health promotion	Public
Elgin-St. Thomas Health Unit	Local health promotion	Public
Grey Bruce Health Unit	Local health promotion	Public
Haldimand-Norfolk Health Unit (away until august 12)	Local health promotion	Public
Haliburton, Kawartha, Pine Ridge District Health Unit	Local health promotion	Public
Halton Region Health Department	Local health promotion	Public
City of Hamilton – Public Health Services	Local health promotion	Public
Hastings & Prince Edward Counties Health Unit	Local health promotion	Public
Huron County Health Unit	Local health promotion	Public
Kingston, Frontenac and Lennox & Addington Health Unit	Local health promotion	Public
Lambton Health Unit	Local health promotion	Public
Leeds, Grenville & Lanark District Health Unit	Local health promotion	Public
Middlesex-London Health Unit	Local health promotion	Public
Niagara Region Public Health Department	Local health promotion	Public
North Bay Parry Sound District Health Unit	Local health promotion	Public
Northwestern Health Unit	Local health promotion	Public
Ottawa Public Health	Local health promotion	Public
Oxford County – Public Health & Emergency Services Department	Local health promotion	Public
Peel Public Health	Local health promotion	Public
Perth District Health Unit	Local health promotion	Public
Peterborough County-City Health Unit	Local health promotion	Public
Porcupine Health Unit	Local health promotion	Public
Renfrew County & District Health Unit	Local health promotion	Public
Simcoe Muskoka District Health Unit	Local health promotion	Public
Sudbury & District Health Unit	Local health promotion	Public
Thunder Bay District Health Unit	Local health promotion	Public
Timiskaming Health Unit	Local health promotion	Public
Toronto Public Health	Local health promotion	Public
Region of Waterloo, Public Health	Local health promotion	Public
Wellington-Dufferin-Guelph Health Unit	Local health promotion	Public
Windsor-Essex County Health Unit	Local health promotion	Public
York Region, Public Health Branch, Community and Health Services Department	Local health promotion	Public
Ontario Ministry of Health and Long-Term Care	Provincial - Federal	Public
Ontario Ministry of Agricultural and Food	Provincial - Federal	Public
Ontario Ministry of Economic Development, Trade and Employment	Provincial - Federal	Public
Ontario Ministry of Children and Youth Services	Provincial - Federal	Public
Ontario Ministry of Finance	Provincial - Federal	Public
Ontario Ministry of Education	Provincial - Federal	Public

Organization	Group	Sector
Cancer Care Ontario	Provincial - Federal	Public
Ontario Agency for Health Protection and Promotion	Provincial - Federal	Public
Canadian Food Inspection Agency	Provincial - Federal	Public
Health Canada – Food and Nutrition	Provincial - Federal	Public
Public Health Agency of Canada	Provincial - Federal	Public
Canadian Restaurant and Foodservices Association	Restaurant-related	Private
Ontario Restaurant, Hotel and Motel Association	Restaurant-related	Private
Canadian Culinary Federation	Restaurant-related	Private
Canadian Beverage Association	Restaurant-related	Private
Alliance of Ontario Food Processors	Restaurant-related	Private
Canadian Produce Marketing Association	Restaurant-related	Private
Food & Consumer Products of Canada	Restaurant-related	Private
Canadian Marketing Association	Restaurant-related	Private
Canadian Association of Broadcasters	Restaurant-related	Private
Ontario Fruit and Vegetable Growers' Association	Restaurant-related	Private
Canadian Federation of Independent Business (CFIB)	Restaurant-related	Private
Canadian Association of Foodservice Professionals	Restaurant-related	Private
Retail Council of Canada	Restaurant-related	Private
Canadian Federation of Independent Grocers	Restaurant-related	Private
Ontario Produce Marketing Association	Restaurant-related	Private
Dairy Farmers of Ontario	Restaurant-related	Private
Ontario Greenhouse Vegetable Growers	Restaurant-related	Private
Ontario Independent Meat Processors	Restaurant-related	Private
Ontario Pork	Restaurant-related	Private
Egg Farmers of Ontario	Restaurant-related	Private
Holland Marsh Growers' Association	Restaurant-related	Private
Farmes' Market Ontario	Restaurant-related	Private
Ontario Farm Fresh Marketing Association	Restaurant-related	Private
Guelph Food Technology Centre	Restaurant-related	Private
Savour Stratford	Restaurant-related	Private
Ontario Convenience Store Association	Restaurant-related	Private
Ontario Culinary Tourism Alliance	Restaurant-related	Private
Crestview Opinion Changes	Restaurant-related	Private
Advertising Standards of Canada	Restaurant-related	Private
Distribution Canada Inc.	Restaurant-related	Private
N'Mninoeyaa: Community Health Access Centre	Local health promotion	Public
De dwa da dehs nye>s	Local health promotion	Public
Gizhewaadiziwin Access Centre	Local health promotion	Public
Noojmowin Teg Health Centre	Local health promotion	Public
Shkagamik-Kwe Health Centre	Local health promotion	Public
Mohawk Council of Akwesasne	Local health promotion	Public
Wassay-Gezhig Na-Nahn-DahWe-Igamig	Local health promotion	Public
Ganaan De We O Dis^Yethi Yenahwahse (SOAHAC)	Local health promotion	Public
Wabano Centre for Aboriginal Health	Local health promotion	Public
Anishnawbe Mushkiki	Local health promotion	Public
Access Alliance Multicultural Health and Community Services	Local health promotion	Public
Anishnawbe Health Toronto	Local health promotion	Public
Anne Johnston Health Station	Local health promotion	Public
Barrie Community Health Centre	Local health promotion	Public
Belleville and Quinte West Community Health Centre	Local health promotion	Public
Black Creek Community Health Centre	Local health promotion	Public
Bramalea Community Health Centre	Local health promotion	Public

Organization	Group	Sector
Bridges Community Health Centre	Local health promotion	Public
Brock Community Health Centre	Local health promotion	Public
Carlington Community Health Centre	Local health promotion	Public
Central Community Health Centre	Local health promotion	Public
Central Toronto Community Health Centres	Local health promotion	Public
Centre de santé communautaire Chigamik	Local health promotion	Public
Centre de santé communautaire de Kapuskasing et région	Local health promotion	Public
Centre de santé communautaire de l'Estrie	Local health promotion	Public
Centre de santé communautaire de Sudbury-Est	Local health promotion	Public
Centre de santé communautaire du Grand Sudbury	Local health promotion	Public
Centre de santé communautaire du Témiskaming	Local health promotion	Public
Centre de santé communautaire Hamilton-Niagara	Local health promotion	Public
Centre Francophone de Toronto	Local health promotion	Public
Centretown Community Health Centre	Local health promotion	Public
City Centre Health Care Community Health Centre	Local health promotion	Public
Chatham Kent Community Health Centres	Local health promotion	Public
Community Care City of Kawartha Lakes	Local health promotion	Public
Country Roads Community Health Centre	Local health promotion	Public
Davenport-Perth Neighbourhood and Community Health Centre	Local health promotion	Public
East End Community Health Centre	Local health promotion	Public
Flemingdon Health Centre	Local health promotion	Public
Gateway Community Health Centre	Local health promotion	Public
Grand Bend Area Community Health Centre	Local health promotion	Public
Grand River Community Health Centre	Local health promotion	Public
Guelph Community Health Centre	Local health promotion	Public
Hamilton Urban Core Community Health Centre	Local health promotion	Public
Kingston Community Health Centres	Local health promotion	Public
Kitchener Downtown Community Health Centre	Local health promotion	Public
Lakeshore Area Multi-Service Project (LAMP)	Local health promotion	Public
Lanark Health and Community Services	Local health promotion	Public
Langs Farm Village Association	Local health promotion	Public
London InterCommunity Health Centre	Local health promotion	Public
Mary Berglund Community Health Centre	Local health promotion	Public
Misiway Milopemahtesewin Community Health Centre	Local health promotion	Public
Niagara Falls Community Health Centre	Local health promotion	Public
North Hamilton Community Health Centre	Local health promotion	Public
North Lambton Community Health Centre	Local health promotion	Public
NorWest Community Health Centres	Local health promotion	Public
Oshawa Community Health Centre	Local health promotion	Public
Parkdale Community Health Centre	Local health promotion	Public
Pinecrest-Queensway Community Health Centre	Local health promotion	Public
Planned Parenthood of Toronto	Local health promotion	Public
Port Hope Community Health Centre	Local health promotion	Public
Quest Community Health Centre	Local health promotion	Public
Rainbow Valley CHC	Local health promotion	Public
Regent Park Community Health Centre	Local health promotion	Public
Rexdale Community Health Centre	Local health promotion	Public
Rideau Community Health Services	Local health promotion	Public
Sandy Hill Community Health Centre	Local health promotion	Public
Scarborough Centre for Healthy Communities	Local health promotion	Public
Seaway Valley Community Health Centre	Local health promotion	Public
Somerset West Community Health Centre	Local health promotion	Public

Organization	Group	Sector
South East Grey Community Health Centre	Local health promotion	Public
South-East Ottawa Community Health Centre	Local health promotion	Public
South Georgian Bay Community Health Centre	Local health promotion	Public
South Riverdale Community Health Centre	Local health promotion	Public
Stonegate Community Health Centre	Local health promotion	Public
TAIBU Community Health Centre	Local health promotion	Public
The Four Villages Community Health Centre	Local health promotion	Public
The Youth Centre	Local health promotion	Public
Unison Health and Community Services- Lawrence Heights Site	Local health promotion	Public
Vaughan Community Health Centre	Local health promotion	Public
West Elgin Community Health Centre	Local health promotion	Public
West Nipissing Community Health Centre	Local health promotion	Public
Windsor Essex Community Health Centre	Local health promotion	Public
Women's Health in Women's Hands CHC	Local health promotion	Public
Woodstock and Area Community Health Centre	Local health promotion	Public
Woolwich Community Health Centre	Local health promotion	Public

Appendix 4_b – Self-administered survey to stakeholder organizations

UNIVERSITY OF TORONTO
DALLA LANA SCHOOL OF PUBLIC HEALTH

For the purpose of this study, please consider the following:

1. The term "public-private partnership" (PPP) refers to a form of collaboration between the GOVERNMENT (or non-governmental organization or academia) and an organization/association presenting the interest of the restaurant sector.
2. "Healthier food options" represent fruit & vegetables, as well as food and beverage that are low in fat, low in sugar, high in fibre, and low in sodium.
3. The term "PPPs for healthy food" means PPPs for increasing availability and consumption of healthier food and beverage options in restaurant chains.

SECTION 1 – The following five questions ask your opinion about the factors that influence the development of public-private partnerships (PPPs) for increasing availability and consumption of healthier food options in restaurant chains.

1. How important would the following factors be in MOTIVATING your organization to enter into a PPP for healthy food?

	<i>Important</i>	<i>Somewhat important</i>	<i>Not at all important</i>	<i>I don't know</i>	<i>Not applicable to my organization</i>
To gain access to additional funding					
To gain access to client or customer's perspectives					
To gain access to expertise or specialized skills					
To reach out to clients or customers who would not be reached by either the public or private sector alone					
Other (please specify):					

2. How important would the following factors be in ENABLING your organization to enter into a PPP for healthy food?

	<i>Important</i>	<i>Somewhat important</i>	<i>Not at all important</i>	<i>I don't know</i>	<i>Not applicable to my organization</i>
Experience with public-private partnerships					
Support from an individual champion					
Compatibility of organizational values with PPP goals					

	<i>Important</i>	<i>Somewhat important</i>	<i>Not at all important</i>	<i>I don't know</i>	<i>Not applicable to my organization</i>
Endorsement from credible institutions					
Existence of guidelines on PPP development					
Other (Please specify)					

3. How important would the following factors be in the GOVERNANCE of PPPs for healthy food??

	<i>Important</i>	<i>Somewhat important</i>	<i>Not at all important</i>	<i>I don't know</i>
Equal representation from partner organizations on board committees				
Clarity and openness in decision making				
Formal accountability system (e.g., goals, roles & responsibilities and performance measures)				
Equal decision-making authority among partner organizations				
Transparent process for monitoring and evaluation				
Other (Please specify):				

4. Which of the following institutional BENEFITS would your organization expect to obtain from a PPP for healthy food?

	<i>Yes</i>	<i>Maybe</i>	<i>No</i>	<i>I don't know</i>	<i>Not applicable to my organization</i>
Improved image of your organization					
Improved performance of your organization					
Able to Influence food industry to promote healthy eating					
Creation of differential advantage for your organization					
Other (Please specify)					

5. To what extent would the following factors represent a BARRIER for your organization to enter into a PPP for healthy food?

	<i>Yes, it is a barrier</i>	<i>Somewhat a barrier</i>	<i>Not at all a barrier</i>	<i>I don't know</i>	<i>Not applicable to my organization</i>
Potential conflict of interests (e.g., inadvertently promote unhealthy food)					

	<i>Yes, it is a barrier</i>	<i>Somewhat a barrier</i>	<i>Not at all a barrier</i>	<i>I don't know</i>	<i>Not applicable to my organization</i>
Potential for inappropriate use of marketing strategies by one of the partner organizations					
Opposition or resistance from stakeholders not directly involved in the PPP					
Lack of trust in the other partner organization					
Potential for loss of legitimacy in the eyes of the general public or shareholders					
Other (Please specify)					

SECTION 2– The next two questions ask your opinion about partnerships for increasing the availability and consumption of healthier food options between the **GOVERNMENT** and the **RESTAURANTs** (e.g., McDonald's or Swiss Chalet).

6. In your opinion, which of the following organizations from the PUBLIC SECTOR would be suitable to partner with the RESTAURANT CHAINS (e.g., McDonald's or Swiss Chalet) for healthy food?

	<i>Yes</i>	<i>Maybe</i>	<i>No</i>	<i>I don't know</i>
Ontario Public Health Units				
Ontario Ministry of Health and Long-Term Care				
Ontario Ministry of Agricultural and Rural Affairs				
Ontario Ministry of Economic Development, Trade and Employment				
Ontario Ministry of Education				
Ontario Ministry of Children and Youth Services				
Health Canada				
Public Health Agency of Canada				
An independent organization established for the purpose of the partnership				
Your own organization				
Others (Please specify):				

7. In the case of a partnership between the GOVERNMENT and the RESTAURANT CHAINS (e.g., McDonald's or Swiss Chalet), what should their roles be?

	<i>Role of the Government</i>				<i>Role of the Restaurant Chains</i>			
	<i>Yes</i>	<i>Maybe</i>	<i>No</i>	<i>I don't know</i>	<i>Yes</i>	<i>Maybe</i>	<i>No</i>	<i>I don't know</i>
Develop PPP guidelines								

	<i>Role of the Government</i>				<i>Role of the Restaurant Chains</i>			
	Yes	Maybe	No	I don't know	Yes	Maybe	No	I don't know
Participate in the design of the partnership								
Coordinate the implementation of the partnership								
Monitor the partnership operation								
Be accountable for partnership performance								
Contribute funding to the partnership								
Others (Please specify):								

SECTION 3 – This section ask you about STRATEGIES that may be implemented in RESTAURANT CHAINS to increase availability and consumption of healthier food options.

8. Do you agree or disagree with the following STRATEGIES?

	<i>Agree</i>	<i>Undecided</i>	<i>Disagree</i>	<i>I don't know</i>
<i>Menu labelling</i> : inform consumers about the nutritional and calorie content of food and beverage				
<i>Marketing</i> : make healthier food and beverage options more attractive for consumers				
<i>Economic incentives</i> : make healthier food and beverage options affordable than unhealthy options				
<i>Healthier Menu</i> : create or expand healthier menu options, making them more accessible for consumers				
<i>Portion size</i> : create or expand standard options for smaller portion sizes				
Others (Please specify):				

SECTION 4 - We would like to extend an INVITATION to you to participate in a 30-minute follow-up INTERVIEW that will take place within a month of completing this survey. The purpose of this interview is to gain additional insights on the survey results.

The follow-up interview will be held in person (Toronto only) or via telephone at a time convenient to you. We will share the preliminary analysis of the survey prior to the interview so that you can anticipate what will be asked.

9. Would you be willing to participate in a 30-minute follow-up interview in-person or via telephone? (This question has skip logic. If checked “yes” or “maybe”, it goes to question # 10. Otherwise, it goes to question # 11)

- a. ☐ Yes
- b. ☐ Maybe
- c. ☐ No

10. If yes or maybe, please provide your contact information:

Name: _____

Email: _____ telephone: () _____

SECTION 5 - These final questions ask about your AFFILIATION and whether your organization has entered into a PPP for healthy food.

11. Please indicate your current career level

- ☐ Executive (e.g. CEO, President, Vice-President)
- ☐ Senior Management level (e.g., Director, Manager level)
- ☐ Mid-senior level (e.g. senior advisor, senior policy analyst, senior coordinator)

12. Please indicate the type of organization you represent: (This question has skip logic. If checked “ restaurant-related groups”, it goes to the “thank you” page)

- ☐ Health Professional Groups (e.g., Ontario Public Health Association, Canadian Obesity Network)
- ☐ Not-for Profit or Charity Health Groups (e.g., Heart and Stroke Foundation, YMCA)
- ☐ Research Groups
- ☐ Local Health Promotion Provider (e.g. Public Health Units, Community Health Centres, etc.)
- ☐ Provincial Government/Agencies
- ☐ Federal Government/Agencies
- ☐ Restaurant-related groups/Associations

13. Has your organization entered into a PPP for healthy food with the food and beverage industry? (This question has skip logic. If checked “yes”, it goes to question # 14. Otherwise, it goes to the thank you page)

- ☐ Yes
- ☐ No
- ☐ I don't know

14. Please indicate the sector within the food and beverage industry that has partnered with your organization:

- ☐ Growers and Producers (e.g., fruits and vegetables, crops, grains)
- ☐ Processors/Manufacturers (e.g., confectioneries, fish and seafood, snack, eggs, soft drink, etc.)
- ☐ Retailers (e.g., grocery stores, convenience stores, farmers market, etc.)
- ☐ Food services (e.g., restaurants, fast-food chains, catering)
- ☐ Food distributors
- ☐ Others? (please specify) _____

Thank you very much for completing this questionnaire

Appendix 4_c – Letter of invitation to participate in the survey

University Health Network

Toronto General Hospital Toronto Western Hospital Princess Margaret Hospital

Subject: Public-Private Partnerships to increase the availability and consumption of healthy foods in restaurants in Ontario.

Dear Mr. (name),

I am pleased to write this letter in support of an innovative project that seeks to improve our understanding of **public-private partnerships (PPPs) to increase the availability and consumption of healthy foods in restaurants in Ontario** (abbreviated as “PPPs for healthy food” hereafter). This effort is being conducted by Katia de Pinho Campos as a core element of her doctoral program in the Dalla Lana School of Public Health at the University of Toronto.

Ms. De Pinho’s proposal aims to identify and understand factors that might enable or restrict partnerships between the public sector and restaurant chains. Specifically, the study focuses on the role of PPPs to increase the availability and consumption of healthier food and beverage options in restaurant chains in Ontario.

This research will provide important insights to strengthen the agenda of obesity prevention and related chronic diseases in our province, and may support future decisions with regards to the development of public-private partnerships in Ontario and elsewhere.

This study can be only successful with the generous participation of organizations like yours. We would like to request 15 minutes of your time to fill out an online survey. In the next few days, Ms. De Pinho will send you an email with detailed instructions about the questionnaire.

If you have any questions regarding this request, please contact Ms. De Pinho directly at (647) 996-2309 or by email: katia.depinhocampos@utoronto.ca

We appreciate your support in advance.

Yours sincerely,

Alejandro (Alex) R. Jadad, MD DPhil FRCPC FCAHS

Chief Innovator and Founder, Centre for Global eHealth Innovation

Canada Research Chair in eHealth Innovation

Senior Scientist; Centre for Health, Wellness and Cancer Survivorship

Professor, Department of Anesthesia; Institute of Health, Policy, Management and Evaluation; and Dalla Lana School of Public Health

University Health Network and University of Toronto

Toronto, Canada

Appendix 4_a – Introductory email sent by the student investigator to research participants with information about the online survey

Subject: Details to participate in the research study about PPPs for healthy food

Dear Mr./Ms. (name)

We hope you agree to participate in the online survey that is part of my PhD study. This study is seeking to identify and understand factors that facilitate the development of public-private partnerships for increasing availability and consumption of healthier food and beverage options in restaurant chains in Ontario (hereafter referred to as PPPs for healthy food).

We would like to hear your opinion as a key representative from the (name of the organization). Your response, however, will not be analyzed and reported individually. Responses to the survey will be examined and reported in aggregate form. In addition, your response will not represent a position of your organization, and will be ANONYMOUS and will be kept completely CONFIDENTIAL.

The survey can be accessed by CLICKING HERE: <https://www.surveymonkey.com/s/PPP0141>

Your participation is truly appreciated! We hope you will be able to assist us **by completing the survey by August 14 2013**. Only one participant per organization is required to complete the online questionnaire.

This study is unique and represents the first ever effort of its kind being pursued in Ontario.

The results from this study will represent the opinions from key stakeholders from the non-governmental sector, academia, government and the restaurant sector on factors that influence the development of PPPs for healthy food.

If you have any questions about this study or if you have difficulties answering the questionnaire on the Internet, I will be happy to assist you. I can be reached by telephone at: (647) 996-2309 or by email: katia.depinhocampos@utoronto.ca.

This study is being completed as part of a PhD thesis at the University of Toronto and has been approved by the University of Toronto Research Ethics Board.

If you decide not to participate in this study, please reply this email to: katia.depinhocampos@utoronto.ca with the subject: opt-out of participating in the survey study.

Many thanks in advance for your participation!

Katia

Katia de Pinho Campos, MBA, MHSc, PhD Candidate

Dalla Lana School of Public Health
University of Toronto
Centre for Global eHealth Innovation
R. Fraser Elliott Building, 4th floor
Toronto General Hospital
190 Elizabeth Street
Toronto, ON M5G 2C4

Appendix 4_e – Example # 1 of a reminder email sent to participants to complete the online survey

Subject: Reminder to participate in an online survey about PPPs for healthy food

Dear Mr./Ms. (name)

We recently sent you an email asking you to respond to a brief online questionnaire about your opinion on public-private partnerships (PPPs) for increasing the availability and consumption of healthier food and beverage options in restaurant chains in Ontario.

Your responses to this questionnaire are truly appreciated and will help in understanding the factors that would facilitate PPPs for healthy food in Ontario and beyond.

We hope you agree to participate in this study.

This questionnaire is short and should take maximum 15 minutes to complete.

Please click on the link below to go to the questionnaire (or copy and paste the link into your Internet browser). Link: <https://www.surveymonkey.com/s/PPP0192>

We hope you will be able to assist us by completing this questionnaire **by August 14th**.

Thank you in advance for your support.

Sincerely,

Katia

Katia de Pinho Campos, MBA, MHSc, PhD Candidate

Dalla Lana School of Public Health
University of Toronto

Centre for Global eHealth Innovation
R. Fraser Elliott Building, 4th floor
Toronto General Hospital
190 Elizabeth Street
Toronto, ON M5G 2C4
Canada

Appendix 4_e – Example # 2 of a reminder email sent to participants to complete the online survey

Subject: Reminder to participate in the research study about PPPs for healthy food

Dear Mr./Ms. (name):

We sent you an email inviting you to participate in an online survey about public-private partnerships (PPPs) for healthy food. **To the best of our knowledge, we have not received your completed survey yet. You can click on the link to access your survey again:**

Link: <https://www.surveymonkey.com/s/PPP0198>

We value your opinion as the Executive Director of (name of the organization) and would like to urge you to complete the survey by this coming Friday, August 23rd, 2013.

Your responses will not be analyzed and reported individually. **Responses to the survey will be examined and reported in aggregate form, and will not represent a position of your organization.**

Your responses will be ANONYMOUS and will be kept completely CONFIDENTIAL.

Attached is a **fillable PDF form of the questionnaire for your reference. If you prefer, you can complete the questionnaire using this PDF form**, and send it back to me via email to:

katia.depinhocampos@utoronto.ca

Or

You can also complete it by telephone. If you prefer this option, please send me your telephone number via email to katia.depinhocampos@utoronto.ca. I will contact you to arrange a time that is convenient for you to respond to the survey.

It is only by hearing from nearly everyone in our sample that we can be sure that the results truly represent the opinions of key organizations like yours.

Thank you for your help in completing the survey.

Sincerely,

Katia

Katia de Pinho Campos, MBA, MHSc, PhD Candidate
Dalla Lana School of Public Health
University of Toronto
Centre for Global eHealth Innovation
R. Fraser Elliott Building, 4th floor
Toronto General Hospital
190 Elizabeth Street
Toronto, ON M5G 2C4

Phone: (416) 340-4800 ext. 8321

Appendix 4_e – Example # 3 of a final reminder sent to participants to complete the online survey

Subject:

Dear Mr./Ms. (name),

Early this summer I sent you an email inviting you to participate in an online survey about public-private partnerships for healthy food in restaurant chains in Ontario.

The survey will be closed to further entries on Saturday August 31st, and will no longer be accessible.

I am reaching out to you before that date because each additional response makes the data more significant. A number of organizations from the public, private, academic and not-for-profit sectors have already completed the survey. Your participation is truly appreciated.

Please take a moment to answer the survey by clicking on the link below. It might take you less than 15 minutes to complete it.

Link: <https://www.surveymonkey.com/s/PPP0141>

I want to ensure you that your responses to the survey will be examined and reported in aggregate form and will not be used to represent the official position of your organization. In addition, responses will be anonymous and will be kept completely confidential.

I hope you can participate!

With much appreciation

Katia

Appendix 4_r – Example of a “thank you” email sent to participants who did not meet the criteria for the interview

Subject: thank you again for your interest in the study about PPPs for healthy food

Dear Mr./Ms. (name)

Hope this email finds you well. I want to thank you kindly for having taken the time to answer the online survey about public-private partnerships for increasing availability and consumption of healthy food in restaurant chains in Ontario.

Certainly, this study could only have been successful with the generous participation of organizations like yours.

A large number of participants expressed interest in taking part in the follow-up interviews. Unfortunately, I am unable to interview every person in that list not only because of limited resources and time, but also because of the need to keep a fair representation of different organizations across sectors. I truly value your interest in this study. However, I will not be able to interview you at this time.

On behalf of my PhD committee, I want to extend our appreciation for your participation in the online survey.

Kind regards
Katia

Appendix 4_g – Example of the email sent to participants to schedule a follow-up interview

Subject: follow-up interview on PPPs for healthy food

Dear Dr. (name)

Thank you kindly for having taken the time to answer the online survey about public-private partnerships for increasing availability and consumption of healthy food in restaurant chains in Ontario. Your participation is truly valued.

Survey responses were very good across all sectors, including the non-governmental organization, academia, and the public and the private sectors. Certainly, this study could only have been successful with the generous participation of organizations like yours.

I am also contacting you because **you expressed interest in participating in the follow-up interview**. I am planning to conduct the interviews during mid November/December. I would be happy to work with your office to find a convenient time to arrange an in-person interview with you (a skype or telephone interview is also an option). Alternatively, you can send me some potential dates and times you are available.

The interview is expected to take no more than an hour of your time. Prior to the interview, I will send a reminder as well as the interview questions so that you can prepare for our meeting.

I am available at (647) 996-2309 if you or your staff has any question.

Looking forward to hearing from you

With much appreciation,

Katia

Appendix 4_n – Selected factors indicated as important/somewhat important and based on the criteria for constructing the interview questions

PPP dimensions of selected issues	Complementary insights	Divergence of opinions	Emerging themes
Development	<p><i>Gaining access to client or customer's perspectives:</i> What kind of perspective is needed? Why? For what purpose?</p> <p><i>Compatibility of organizational values with PPP goals:</i> What would a shared goal be for a potential partnership for healthy food in restaurant chains that government and the restaurant sector could possibly agree with?</p> <p><i>Able to influence food industry to promote healthy eating:</i> How would a PPP for healthy food influence restaurant chains to promote healthy eating? What kind of intervention would be the most appropriate for achieving this benefit?</p> <p><i>Potential inappropriate use of marketing strategies by one of the partner organizations:</i> To what extend a collaborative mechanism such as a PPP would be able to resolve the issue of marketing of unhealthy food and beverage by the restaurant sector to children?</p>	<p><i>Improved image of your organization:</i> To what extend is the government prepare for accepting the restaurant sector to capitalize on the partnership to improve its image?</p> <p><i>Potential conflict of interest:</i> How would the restaurant sector ensure that the promotion of unhealthy food (i.e., food and beverage high in sugar, fat and sodium) would not conflict with goals of a PPP for healthy food?</p>	<p><i>Supportive environment for healthy eating</i> Improving access to nutritious food choices Enhancing current local food initiatives Influence on health outcome/indicators Producing benefits to clients</p> <p><i>Conflict of interest</i> Taxpayer dollars being spent on supporting private sector goals Private sector undermining best-practices in public health Power difference between players with more financial influence Potential link of own organization's to private sector's own brand / products</p> <p><i>Positive influence of PPPs</i> Mitigating the risk of negative impact on the image of organizations Restaurants would benefit by the ability to say they were healthier choices restaurant based on guidelines</p> <p><i>PPPs for healthy food in restaurant chains should not happen</i></p>
Operations	<p><i>Equal decision-making authority among partner organizations:</i> In what circumstances should the government hold decision-making authority in a partnership with the restaurant chains? Why? Why equal decision-making authority is</p>	<p><i>Ontario Ministry of Agriculture and Food:</i> Why doesn't the Ontario Ministry of Agriculture and Food seem to be the right partner from the perspective of the government (health) in a PPP for healthy food?</p> <p><i>Developing guidelines:</i> How would the restaurant sector react on the</p>	<p><i>Protection of public sector credibility:</i> Create mechanisms to control potential loss of credibility (i.e. avoid taxpayers dollars for partnering with the private sector) Agreement between the parties to mitigate any negative impact</p>

PPP dimensions of selected issues	Complementary insights	Divergence of opinions	Emerging themes
	<p>the preferred model for a PPP for healthy food?</p> <p>Ministry of Health and Long-Term Care:</p> <p>Why wasn't the Ontario Ministry of Health and Long-Term Care chosen as the most suitable partner for a PPP for healthy food in restaurant chains?</p> <p>Potential risks for the government?</p> <p>Developing PPP guidelines:</p> <p>What kind of policies/rules/direction should be included in a PPP guideline for healthy food with restaurant chains?</p>	<p>government leading the development of PPP guidelines?</p>	<p>Agreement on purpose, respect, trust are most important</p> <p>Legislative policy that supports healthy policy and partnerships with the private sector to minimize negative public opinion and conflict of interest</p> <p>Guidelines for partnership termination - ethics process.</p> <p>Decision-making</p> <p>Private sector being a consultative member on policy development and messaging, but not part of the decision making</p> <p>Decision-making regarding implementation can be shared</p> <p>Decision-making by consensus not majority</p> <p>Transparency to ensure balanced and equal representation and outcomes</p> <p>Restaurant should be consulted/provide expertise</p> <p>The partnership is more of a way to develop a solid implementation relationship with the chains rather than affording them any decision making authority in the public interest</p> <p>Reasonable process for making decisions</p> <p>It is not appropriate for private corporations to be represented on Boards of Health.</p> <p>Government led PPPs for healthy food</p> <p>Government should take the leadership in the PPP</p> <p>Government should assert full authority</p> <p>Associations or representatives as the private sector counterpart</p> <p>Not individual restaurant chain</p> <p>Streamline process for PPP development</p> <p>Do not create another government bureaucracy</p>

PPP dimensions of selected issues	Complementary insights	Divergence of opinions	Emerging themes
Healthy eating strategies		<p>Menu labelling: There was a statistical difference between respondents from the private sector (60.0%, n=9) and the public sector (92.8%, n= 64) about implementing menu labelling in restaurant chains</p> <p>Economic Incentives: There was a statistically significant difference in the responses from the private sector (60.0%, n= 9) with respect to the NGO-Academia and the public sector about implementing economic incentives to make healthier food and beverage options affordable in restaurant chains</p> <p>Healthier Menu: There was a statistical difference found in responses between the private sector (80.0%, n= 12) and the public sector (97.1%, n= 67) about creating or expanding healthier menu options as a strategy to make healthy food more accessible in restaurants.</p> <p>Portion Size: There was statistically significant difference between respondents from the private sector (53.3%, n= 8) and the public sector (85.5%, n= 59) about creating or expanding standard options for smaller portion sizes of food and beverage in restaurant chains.</p>	<p>Point-of sale provision of nutrition information Menu labeling only if supported by research as effective Education handouts, websites, but not directly on menus Indicate how long to work off calorie intake</p> <p>Incentives, portion size and healthier menu Low fat, reduced salt, reduced sugar options Smaller portion of calorie dense food (i.e., portion of entrée) Encourage the sale of more real/whole food Increase veg & fruit portion of the entree</p> <p>Legislative policy to support healthy eating strategies in restaurant chains Poor compliance of voluntary measures by the food industry Ban food advertising of unhealthy food and beverages to children under the age of 13</p> <p>No PPP is needed for implementing all these healthy eating strategies</p>

Note: Colour-coded factors indicate communalities or patterns among selected factors based on the criteria discussed previously.

Appendix 4_i – Example of the interview guide for representatives from the government and NGO

Interview script

Hello: May I speak to: [Name]

This is Katia de Pinho Campos from the University of Toronto. How are you today?

Let me begin by thanking you for completing the online survey as well as for accepting to participate in this follow-up interview. I very much appreciate your time.

As you know, this research is a core element of my doctoral program at Dalla Lana School of Public Health.

The purpose of this interview is to gain additional insights and to expand the understanding of factors considered important by online survey respondents with regards to the development and operations of public-private partnerships (PPPs).

This interview will be audio-taped for data-recording accuracy and analysis purposes.

I want to assure you that your responses will not represent a formal position of your organization and your responses will be held confidential.

Your name and that of your organization will not be identified in any reports, publications, or presentations that may come from this study.

Any identifying information that might refer to you and of that your organization will be removed from the interview transcript.

I sent an email last week with the consent form for you to review and sign. If you prefer, you can give your verbal consent now.

Do you agree to take part in this follow-up interview?

() yes

() no

There are only 8 questions, which were informed by the analysis of the online survey.

From now on, when I refer to PPP for healthy food or healthy eating, I mean public-private partnerships for increasing the availability and consumption of healthier food and beverages options.

Appendix 4_i – Example of the interview guide cont'd

Interview guide

Development Dimension

Influencing restaurants to promote healthy eating:

1. Most people said that the main benefit of developing a PPP is to influence food industry to promote healthy eating.
In your opinion, how could a PPP influence the restaurant chains to promote healthy eating?
Probe for:
 - Improving access to nutritious food choices;
 - Enhancing current local food initiatives;
 - Influence on health outcome/indicators;
 - What kinds of information related to client's perspective;
 - What kinds of benefits to clients/population.
2. From the survey, we learned that the majority of people from the restaurant-related associations indicated that one expected benefit of being associated with the government in a PPP would be *improved corporate image*.
In your opinion, what would enable the government to feel comfortable with being publicly associated with the restaurant sector in a partnership to promote healthy eating?
Probe for:
 - Restaurants to benefit from the ability to say there were healthier choices available based on guidelines.

Conflict of interest:

3. *We also learned that conflict of interest* such as promoting food and beverages high in sugar, fat or sodium was considered an important barrier for PPP development.
In your opinion, how could this barrier be overcome?
Probe for:
 - Through an agreement/ guidelines for avoiding any potential association of unhealthy food and beverages with the PPP and banning food advertising of unhealthy food and beverages to children.

Operational Aspects

Decision-making:

4. Another important aspect that emerged from the survey refers to differences in opinions between the government and the restaurant-related associations with regards to the importance of *equal decision-making among partner organizations*. For example, people from the government were less likely to agree with the importance of equal decision-making authority in PPPs.
In what circumstances should the government hold decision-making authority in a partnership with the restaurant chains?
Probe:
 - Why? Policy and messaging?
 - Should the industry in any circumstances hold authority?

Public sector credibility

5. Some people in the survey said that partnerships between the government and restaurant chains should be developed under a legislative mandate so that the government could maintain its credibility and limit potential conflict of interest.
Do you feel the same about this suggestion?
Probe for:

- Mechanisms to control potential loss of credibility (i.e. avoid spending taxpayers dollars in partnerships with the private sector);
- Agreement among the parties to mitigate any negative impact;
- Agreement on purpose, respect, trust are most important;
- Guidelines for partnership termination - ethics process.

Public sector partner

6. We learned that people from the government sector (i.e., local, provincial and federal health) were less likely to choose the Ontario Public Health Units, Health Canada, and Ontario Ministry of Health as suitable organizations to partner with the restaurant sector.

In your opinion, what are the drawbacks of having these organizations partnering with the restaurant sector for promoting healthy eating?

Probe:

- Independent organization established for the purpose of the partnership and the Ministry of Agriculture were the first two in the list

Strategies for healthy eating in restaurants

Healthier menu options

7. Most people agreed with creating or expanding *healthier menu options* to make healthy food more accessible in restaurant chains. Ideas such as “*reducing portion size of calorie dense food, promoting nutritious food/ whole food, and increasing portions of fruit & vegetables*” were suggested as ways of increasing consumption of healthy food.

What do you think about these suggestions?

8. My final question: Do you have any other suggestions about how to enable a partnership between the government and restaurant sector for healthy eating in Ontario?

Appendix 4, – Abbreviated instructions for the transcriber when listening to the interviews

- Transcripts have to be *verbatim* accounts of what transpired in the interview;
- Transcripts should *not* be edited or tidied up to make them sound better;
- Do not use **boldface** or underlining because it is often lost when text files are imported into qualitative analysis software programs.

Additional instructions:

Symbol	Purpose	Explanation
(...)	Short pause	Denote short pauses during talking by a series of dots (...)
(pause)	Longer pause	Denote longer pauses (4 or more seconds) during talking by the word “pause” in parenthesis
(laughing)	Laughing	Indicate in the parenthesis when laughing occurs during the interview
(coughing)	Cough, sigh, sneeze, silence	Indicate in the parenthesis, for example (sigh), (cough), (sneeze) or (silence)
(-)	Interruptions	Indicate when someone’s speech is broken off midsentence by including a hyphen at the point where the interruption occurs.
(overlapping)	Overlapping speech	Use hyphen to indicate when one speaker interjects into the speech of another and include the speech of the other with “overlapping” in parentheses, then return to where original speaker interrupted (if they continue). Example: R: He said that was impo- I: (overlapping) who, Bob? R: No, Larry.
[?]	Unclear words	Flag words that are not clear with square brackets and question mark. If guessing what was said, write the guessing word. For example: At that, Harry just [doubled? glossed?] over.
x	Unclear passages	Use “x” to denote passages that cannot be deciphered at all (number of xs should denote approximate number of words that cannot be deciphered). For example: Gina went xxxx xxxx xxxx, and then [came? went?] home.
WHAT	Emphasis	Use caps to denote strong emphasis, for example: he did WHAT?
WHAT -	Intonation (disagreement)	Use caps following a – sign to denote intonations representing disagreement
WHAT +	Intonation (agreement)	Use caps with a + sign to denote intonations representing agreement
No-o-o-	Repeated sounds	Repeat the sounds that are held, separated by hypens. If they are emphasized, them capitalize as well. For example: “No-o-o-o, not exactly” or “I was VER-r-r-y-y happy”.
(mimicking voice)	Paraphrasing others	When the interviewees assume a voice that indicates they are parodying what someone else said or an inner voice in their heads, indicate with (mimicking voice)
Uh-huh	Affirming responses	Indicate uh-huh for receipt or assent
mm -	Doubt or thinking	Indicate mm with a – sign when interviewees denote doubt or thinking

Source: **Source:** Adapting from (Poland, 1995)

Appendix 4_k – Open codes and their respective description

Code	Description
Acknowledging the impact of unhealthy diet on the health care system	It refers to arguments that recognize the impact of unhealthy diet on our health and health care system.
Acknowledging the industry's voluntary approach for healthy eating	It refers to acknowledgements about voluntary approaches (i.e., rather than regulatory) led by the restaurant sector to promote healthy eating or provide nutrition information at point of sale.
Acknowledging the profit motive of restaurants	It refers to respondents acknowledging the need of the restaurant sector to make profit to be able to keep it in the market. Business existence is to turn profit.
Agreeing with menu label as a good initiative	It refers to statements that acknowledge menu label as a good intervention to provide nutrition information to consumers.
Aligning demands of consumers with that of the government	It refers to different demands that exist between what consumers want and what government is looking for in terms of public health benefits.
Avoiding association with a conflictive food company	When deciding on a type of partnership or type of partner, government should avoid those that may imply conflict of interest or should create mechanisms to avoid conflicts.
Avoiding the distinction between healthy and unhealthy food products or menu options	It refers to government avoiding the distinction between healthy and unhealthy food or menu options as it may create stigmatization among those individual who consume 'unhealthy food' or may create controversial debate (e.g. eating two slices of pizza is not bad to your health).
Avoiding interventions that affect profits of restaurants	It refers to avoiding interventions that may restrain the consumption of certain foods, which in turn may affect restaurants' profits.
Banning food marketing to children	It refers to banning food promotion or marketing to children
Being aware of misleading messages about healthier food choices	It refers to potential misleading messages about certain food products that are advertised or perceived to be healthier.
Being endorsed by the government	It refers to arguments about restaurants seeking for being endorsed by the government as promoting healthy food choices
Being guided by public health goals and outcomes	It refers to arguments that any partnership or collaboration with the food industry has to have public health goals as the backbone of the partnership.
Being influenced by restaurants' marketing strategies on what to eat	It refers to efforts that the restaurants do to influence our food habits or what consumers want to eat.
Being overregulated by the government	It refers to a feeling of being "targeted" by government regulations, limiting the capacity of the small restaurants do their business.
Being willing to engage in collaboration with the restaurant sector due to political reasons	It refers to government willingness or reasons to engage in collaboration with the restaurant being influenced by political reasons
Being pushed to engage in collaboration due to complex problems that cannot be solved alone	It refers to organizations or institutions seeking for collaboration due to emergency or urgency to solve complex problems that cannot be solved alone as a way of survival.
Being ready to engage in collaboration with the government	It refers to the restaurant sector being willing or ready engage in collaboration with the government for promoting healthy eating
Being transparent with consumers about healthy food sold in restaurants	It refers to restaurants using certain strategies that mislead consumers about healthy food choices.
Blaming poor eating habits at home rather than at restaurants	It refers to arguments that the big problem of poor eating habits is at home as the majority of people still eat at home rather than in restaurants. People buy unhealthy food at grocery stores or make bad choices when eating at home.
Choosing restaurants for eating out not based on healthy options available	It refers to arguments that when people choose dining out, they choose restaurants because of the type of food that is served and not because the restaurants offers healthier food options.
Considering an independent organization representing the public interest to partner with restaurants	It refers to arguments favouring an independent organization (i.e., NGO or government arms' length) representing the public interest to partner with the restaurants.
Considering different types of consumers when promoting healthy eating	It refers to taking into consideration different types of consumers when developing healthy eating strategies.
Considering food pricing effects on healthier food choices	It refers to considering food pricing formulas or approaches to facilitate access to healthier food choices (i.e., attract consumers to choose, and buy healthier choices).
Considering government with less flexibility to run a PPP	It refers to government (i.e. local, provincial and federal) having less flexibility to run a PPP due to its bureaucratic process and its regulatory mandate with regards to food safety.
Considering incremental government approach for healthy eating	It refers to arguments about considering an incremental approach (i.e. small steps or small projects rather than whole

Code	Description
	government approach) when developing healthy eating initiatives.
Considering long-term goals for improving healthy eating	It refers to the long period of time that takes to see changes in healthy eating.
Considering public opinion to guide government's decision	It refers to the importance of public opinion (i.e., population and advocacy groups) in government's decision with respect to PPPs for healthy food or other public policies.
Considering research evidence to guide government's decision	It refers to research and evidence as a resource for making informed decision with regards to interventions for healthy eating.
Considering taste as a determinant of food choices	It refers to the discussion about people making their choices based on "taste". It also refers to changes on food reformulation and how this has impacted the taste of food and consequently people's choice.
Considering consumers' demand for creating menu options	It refers to restaurants being willing to create healthier food options only in response to the demands of consumers.
Considering the nature of intervention before deciding on a PPP	It refers to a 'thinking exercise' that government should be doing before deciding on a PPP, considering the nature of the partnership and its contribution to public health goals.
Creating menu options with healthier food alternatives	It refers to suggestions of creating healthier food alternatives (i.e., healthier side dishes or healthier substitute) to promote healthy eating.
Creating opportunities for dialogue between the restaurant sector and the government	It refers to arguments about creating opportunities for transparent, opened conversation among organizations from the public and the private sectors.
Creating tools to facilitate healthier food choices	It refers to tools or other mechanisms (not regulations) to facilitate healthier food choices or to make healthy eating more attractive.
Deciding on the approach for using public money on healthy eating interventions in restaurants	It refers to arguments about government approach (es) on using public money for healthy eating interventions in restaurants.
Deciding on what to eat is a consumer's choice	It alludes to consumers having the ultimate decision-making on what to eat. The arguments refer to decisions of individuals despite having or not access to healthy food options.
Defining success in healthy eating interventions in restaurants	It refers to defining indicators of success when establishing an intervention in restaurants to promote healthy eating.
Defining the type of collaborative arrangement	It refers to different types of arrangements that exist - in the continuum of collaboration from less formal (i.e., network) to more formal (partnership), which will depend on the nature of the healthy eating intervention.
Disapproving government regulations or interference in restaurant business	It refers to arguments against government regulation on interventions related to unhealthy food products or government interference on deciding what people should eat through regulation
Distinguishing when using regulations or partnerships	It refers to arguments that government need to make a clear distinction when using regulation or partnerships in a potential intervention.
Seeking a dining experience when eating out	It refers to arguments that consider eating out as a treat or nice experience. People usually don't go to restaurants because of the healthy options. They go to have a nice experience.
Educating children about healthy eating	It refers to arguments to educating children about healthy eating.
Educating consumers about healthy food	It refers to arguments to educating consumers about healthy eating.
Educating parents about healthy eating	It refers to arguments that educating parents about healthy eating so that they can make better choices for their own and of their children.
Educating restaurants about healthier food preparation	It refers to the notion of educating restaurants about healthier food preparation.
Engaging food distributors or suppliers for the provision of healthier products	It refers to engaging food distribution or food suppliers in healthy eating intervention to facilitate the provision and access of healthier food products among small restaurants.
Engaging the restaurant sector in developing healthy eating interventions	It refers to engaging the restaurants in the process of developing healthy eating interventions.
Engaging consumers to figure out healthy eating strategies	It refers to listening to the consumers when developing food products or healthy eating interventions that address taste, needs, etc.
Engaging the municipalities for restricting access to unhealthy food	It refers to arguments about engaging or supporting municipalities to implement interventions for restricting unhealthy food access.

Code	Description
Experimenting with interventions in other settings	It refers to experimenting with interventions related to healthy eating or access to healthy food in other settings such as convenience stores.
Finding commonalities between the two sectors	It refers to the importance of finding common grounds or commonalities between the public and the private sectors so that they can work towards developing, providing, or promoting healthy food choices.
Finding reasons against menu labelling policy	It refers to arguments against menu labelling policy highlighting its inefficacy of providing nutritional information to consumers.
Formalizing an agreement between the public and the private sectors	It refers to the need of having an agreement in place that describes roles & responsibilities, and the legal and communications implications associated with it.
Having health-related government organization running the PPP	It refers to arguments of having the health-related public organization (i.e., local, provincial or federal) running the partnership due to its role of protecting public's health.
Having a trustworthy governance structure and processes in place for PPPs	It refers to the importance of a governance structure that brings neutrality and fairness among partners as well as accountability so that trust is built within the partnership.
Having a well-known individual or a political figure to facilitate the development of PPPs	It refers to having the right individual (s) such as a political figure, a famous person, a champion or a combination of individuals with different skills to be able to facilitate a PPP for healthy food.
Having consistent food definitions, guidelines and messages	It refers to the importance of having definitions, guidelines and consistent messages with regards to what is healthy and unhealthy.
Having core values, focus and clear goals	It refers to the importance of having core values, focus and shared goals to be able to keep partners engaged and committed towards achieving the goals.
Having government guidelines to enter into a PPP	It refers to having or developing guidelines that guide government's decision on whether and how to enter into a partnership so that to protect government's credibility.
Having legislation to promote healthy eating	It refers to arguments that only through legislation, government can promote healthy eating or restricting consumption of unhealthy food.
Having restaurants leading the implementation of healthy eating initiatives	It refers to restaurant-related companies holding decision making with regards to implementation of PPPs.
Having shared decision-making among partner organizations	It refers to both sectors sharing similar power or authority while differentiating their roles and responsibilities.
Having government controlling decision-making with regards to PPPs.	It refers to the importance of government holding decision-making particularly in areas of public messages or communications related to PPPs for healthy eating
Having government leading guidelines for healthy eating	It refers to arguments about government leading the development of guidelines or being responsible for providing guidelines on healthy eating.
Including small or individual owned restaurants for promoting healthy eating	It refers to arguments about including small or independent owned restaurants when considering interventions to promote healthy eating.
Involving other sectors to collectively address healthy eating and obesity	It refers to arguments about including other sectors within and outside the restaurant sector when addressing healthy eating and obesity (i.e., shared responsibility)
Lacking understanding or consistent interpretation of government policies	It refers to arguments about small restaurant having trouble in understanding regulations or consistently interpreting government policy.
Leading healthy eating initiatives by example in public building or government facilities	It refers to arguments about government showing leadership by applying similar policies or programs related to healthy eating to restaurants in public buildings or government facilities.
Listening to the position of the restaurant sector about healthy eating initiatives	It refers to arguments about government listening to the position of the restaurant sector with regards to healthy eating before making any decision.
Mistrusting government's intention to collaborate with restaurants	It refers to arguments about lack of trust on government's intention to collaborate with the restaurant sector on healthy eating
Mistrusting the restaurant sector's intention to promote healthy eating	It refers to arguments about fear or mistrust from the public sector on the intention of the restaurant sector to promote healthy eating.
Partnering with associations representing the food-related sector rather than an individual food company	It refers to partnering with an association representing the food service rather than individual restaurants or chains.
Possessing resources and capacity to promote healthy eating	It refers to arguments about large restaurants or big chains having the resource and capacity to promote healthy eating (i.e.,

Code	Description
Promoting local food choices	from food reformulation to marketing).
Providing financial attractiveness for restaurants to promote healthy eating	It refers to arguments about promoting local food choices in conjunction with healthy eating.
Providing support to small restaurants on healthier menu options	It refers to arguments about government providing incentives (i.e., funding, tax reduction, branding, public relations) to motivate restaurant to promote healthy eating.
Recognizing good corporate intention of some restaurants offering healthier food options	It refers to arguments about supporting small, independent restaurants to create healthier menu options.
Recognizing the expertise of the restaurant sector on healthy eating interventions	It refers to arguments about some restaurants showing good intention or already supporting healthy eating initiatives.
Requiring the government to provide consumer education about healthy eating	It refers to arguments about recognizing restaurant sector' expertise that could be leveraged in initiatives to promote healthy eating.
Reformulating food products for healthier options	It refers to arguments about the role of the government in providing food education or nutritional knowledge to the consumers.
Restricting display of unhealthy food in front of shelves	It refers to suggestions about reformulating food products with healthier ingredients (i.e., whole grain) or by reducing unhealthy ingredients (i.e., fat, sodium and sugar) to offer healthier food options.
Sharing the credits of the partnership	It refers to arguments about having restriction about displaying unhealthy food in front of the shelves.
Showing evidence of business opportunity for healthy eating interventions	It refers to partner organizations sharing the credits or gains from the PPP.
Devoting time for planning before entering into a PPP	It refers to arguments about restaurants being assured of business opportunities when developing healthy eating interventions.
Targeting smaller portion sizes of food and drink	It refers to the time required for planning and defining the rules to guide the development of the partnership.
Understanding how government decisions are made	It refers to arguments about the positive aspects of targeting smaller portion sizes of food and beverages as part of a healthy eating intervention while acknowledging the opposing response from the restaurant sector.
Willing to accept trade-off when engaging in PPP	It refers to arguments about restaurant sector understanding how government decisions are made so that more tolerance in accepting government bureaucracies.
	It refers to arguments about partner organizations willing to accept trade-off in order to engage in collaborations for healthy eating interventions.

Appendix 4_k – Sub-categories and their respective description

Sub-category	Description	Open Codes
Beyond restaurant settings for reinforcing healthy eating	It refers to considering other settings and sectors beyond the restaurants when developing initiatives to promote healthy eating	<ul style="list-style-type: none"> • Blaming poor eating at home • Involving other sectors to collectively address healthy eating and obesity
Complementary interventions for healthy eating in restaurants	It refers to considering multiple interventions such as menu labels and small portion sizes, among others, to complement interventions for promoting healthy eating in restaurants.	<ul style="list-style-type: none"> • Agreeing with menu label as a good initiative • Promoting local food choices • Targeting smaller portion sizes of food and drink
Complex problems that cannot be solved by government alone influencing decision-making	It refers to complex challenges that governments face that cannot be solved by the public sector alone, which influence government to collaborate with other sectors, including the private sector.	<ul style="list-style-type: none"> • Being pushed to engage in collaboration due to complex problems that cannot be solved alone
Consumers' education for healthy eating	It refers to the need for the government to educate consumers, including parents and their children about healthy eating so that they have knowledge to make healthier food choices.	<ul style="list-style-type: none"> • Educating children about healthy eating • Educating consumers about healthy eating • Educating parents about healthy eating • Requiring the government to provide consumer education about healthy eating
Consumers' dining-out decision-making	It refers to the central role of consumers in deciding what to eat and where to go for dining out.	<ul style="list-style-type: none"> • Choosing restaurants not based on healthy menu options • Deciding on what to eat is a consumer's choice • Seeking a dining experience when eating out
Corporate voluntary approach for the development of healthy eating initiatives	It refers to restaurants acting as good corporate citizens by voluntarily leading or supporting healthy eating initiatives.	<ul style="list-style-type: none"> • Acknowledging the industry's voluntary approach for healthy eating • Recognizing good corporate intention of restaurants offering healthier food options
Criticism of government regulations on restaurant business	It refers to criticism from small or independent restaurants as having to deal with and understand many different regulations, including menu labelling policy, as well as disagreement about government interference in the restaurant business.	<ul style="list-style-type: none"> • Being overregulated by the government • Disapproving government regulations or interference in restaurant business • Finding reasons against menu labelling policy • Lacking understanding or consistent interpretation of government policy
Emphasis on the consumers for the creation of healthier menu options	It refers to the fundamental role of consumers in influencing restaurants to create healthier and tasty menu options that respond to the demands of different types of consumers.	<ul style="list-style-type: none"> • Considering consumers' demand for creating menu options • Considering different types of consumers when developing healthy eating interventions • Considering taste as a determinant of food choices

Sub-category	Description	Open Codes
Food chain distribution for supporting healthier menu options	It refers to engaging food distributors or food suppliers when considering healthy eating interventions in small, independent restaurants	<ul style="list-style-type: none"> Engaging consumers to figure out healthy eating interventions Engaging food distributors and suppliers for the provision of healthier food products
Food reformulation for healthier food choices in restaurants	It refers to promoting food reformulation for healthier food alternatives, while supporting independent restaurants to create healthier menu options.	<ul style="list-style-type: none"> Creating menu options with healthier food alternatives Reformulating food products for healthier options
Formal commitment and transparent governance in PPPs	It refers to formalizing collaboration between the government and restaurant sector by creating trustworthy governance structure, decision-making processes and definitions of roles and responsibilities.	<ul style="list-style-type: none"> Formalizing an agreement between the public and the private sectors Having a trustworthy governance structure and processes in place for PPPs Having core values, focus and clear goals Having shared decision-making among partner organizations Sharing the credits of the partnership
Government leadership in healthy eating guidelines and standards	It refers to government taking the leadership and decision-making with respect to developing healthy food definitions, guidelines, standards, and outcome measures for healthy eating in restaurants.	<ul style="list-style-type: none"> Aligning demands of consumers with that of the government Avoiding distinction between healthy and unhealthy food Defining success in healthy eating interventions in restaurants Having consistent food definitions, guidelines and messages Having the government developing guidelines for healthy eating
Groundwork for planning PPPs	It refers to government undertaking a diligent thinking and planning prior to engaging in a partnership with the private sector	<ul style="list-style-type: none"> Distinguishing when to use regulations or partnerships Deciding on the approach for using public money on interventions involving restaurants Considering the nature of the intervention before deciding on PPP development Defining the type of the collaborative arrangement Avoiding partnerships with potential conflictive food company Devoting time for planning before entering into a PPP Partnering with associations representing the food-related sector rather than an individual food company

Sub-category	Description	Open Codes
		<ul style="list-style-type: none"> • Being guided by public health goals and outcomes • Having government guidelines to enter into a PPP • Having the government controlling decision-making with regards to PPPs
Health-related, independent organization leading PPPs	It refers to having health-related, an independent organization representing the public interest leading the partnership with the restaurant sector.	<ul style="list-style-type: none"> • Considering an independent organization representing the public interest to partner with the restaurants • Considering government with less flexibility to run a PPP • Having a health-related government organization running the PPP • Understanding government decision-making processes
Incentives for consumers to engage in healthy eating	It refers to creating incentives for consumers to facilitate their decision or influence their consumption towards healthier food	<ul style="list-style-type: none"> • Considering food pricing effects on healthier food choices • Creating tools to facilitate healthier eating initiatives
Financial incentives for the restaurants to promote healthy eating	It refers to creating financial incentives to make attractive for the restaurants to engage in collaboration with the government for promoting healthy eating.	<ul style="list-style-type: none"> • Providing financial attractiveness for the restaurants to promote healthy eating • Showing evidence of business opportunity for healthy eating interventions
Non-financial incentives for the restaurant to promote healthy eating	It refers to creating non-financial incentives to make attractive for the restaurants to engage in collaboration with the government for promoting healthy eating.	<ul style="list-style-type: none"> • Being endorsed by the government
Incremental approach for healthy eating policy and program	It refers to considering gradual steps for developing and implementing healthy eating interventions with the restaurant sector.	<ul style="list-style-type: none"> • Considering incremental government approach for healthy eating initiatives • Experimenting with interventions in other setting such as convenience stores
Political forces influencing government decision-making	It refers to political factors, including the influence of public opinion on the decision of collaborating with the private sector	<ul style="list-style-type: none"> • Being willing to engage in collaboration by political reasons • Considering public opinion to guide government's decision
Research evidence supporting decision making	It refers to research evidence as a way to support to the government decision on collaborating with the government	<ul style="list-style-type: none"> • Considering research evidence to guide government's decision
Leverage restaurant sector's expertise and resources for healthy eating initiatives	It refers to making use of restaurant expertise and resources to strengthen healthy eating initiatives promoted by the government.	<ul style="list-style-type: none"> • Having restaurants leading the implementation of healthy eating initiatives • Possessing resources and capacity to promote

Sub-category	Description	Open Codes
		<p>healthy eating</p> <ul style="list-style-type: none"> Recognizing the expertise of the restaurant sector for healthy eating interventions
Long-term economic benefit of healthy eating	It refers to the economic impact of poor diet in the health care system and the long-term approach to improve healthy eating.	<ul style="list-style-type: none"> Acknowledging the impact of unhealthy diet on the health care system Considering long-term goals for improving healthy eating
Openness to common interests	It refers to creating opportunities for being open to dialogue and identifying areas of common interest, accepting trade offs.	<ul style="list-style-type: none"> Being ready to engage in collaboration with the government Creating opportunities for dialogue between the restaurant sector and the government Finding commonalities between the government and the restaurant sector Willing to accept trade-offs when engaging in PPP
Preference for government regulation on healthy eating	It refers to preference for government regulations when there is a need for restricting unhealthy food or promoting healthy eating	<ul style="list-style-type: none"> Banning food marketing to children Engaging municipalities for restricting access to unhealthy food Having legislation to promote healthy eating Restricting display of unhealthy food in front shelves
Profit motives of the restaurant sector	It refers to avoiding any intervention that may affect negatively the profit of restaurants.	<ul style="list-style-type: none"> Acknowledging the profit motive of restaurants Avoiding interventions that affect profits of restaurants
Skepticism from the government on misleading marketing practices of restaurants	It refers to the lack of trust of governments in the restaurants due to their marketing practices in misleading consumers about the healthier food choices or healthy menu options	<ul style="list-style-type: none"> Being aware of misleading messages about healthier food choices Being influenced by restaurants' marketing strategies Being transparent with consumers about healthy food sold in restaurants Mistrusting the restaurants' intention to promote healthy eating
Skepticism from the restaurants on government policies and processes	It refers to mistrust of the restaurant sector about government policies being unbalanced (e.g. targeting only certain groups of the restaurant sector) or about government lacking leadership and communication.	<ul style="list-style-type: none"> Leading healthy eating initiatives by example in public buildings or government facilities Listening to the position of the restaurant sector about healthy eating Mistrusting government's intention to collaborate with restaurants
Small, medium and large restaurants for increasing the reach of healthy eating	It refers to including small and medium independent owned restaurants to increase the scope of healthy eating initiatives	<ul style="list-style-type: none"> Engaging the restaurant sector in developing healthy eating initiatives Including small or individually owned restaurants for promoting healthy eating

Sub-category	Description	Open Codes
Support for small, privately owned restaurants	It refers to providing support to small restaurants to develop healthy eating interventions	<ul style="list-style-type: none"> • Educating restaurants about healthier food preparation • Providing support to small restaurants on healthier menu options
Support from a well-known individual or political figure to facilitate PPP development	It refers to the need of having a political figure or well-known influential person to facilitate the development of a partnership with the restaurant sector.	<ul style="list-style-type: none"> • Having a well-known individual or a political figure to facilitate the development of PPPs

Appendix 4_k – Themes, categories, sub-categories and the corresponding open codes for PPP development

Themes	Categories	Sub-categories	Open Codes
	Circumstances influencing decision-making about PPP development	<ul style="list-style-type: none"> Complex problems that cannot be solved by government alone influencing decision-making Political forces influencing decision-making Research evidence supporting decision-making 	<ul style="list-style-type: none"> Being pushed to engage in collaboration due to complex problems or pressures that cannot be solved alone Being willing to engage in collaboration due to political reasons Considering public opinion to guide government's decisions Considering research evidence to guide government's decisions
	Contextual Factors		<ul style="list-style-type: none"> Devoting time for planning before entering into a PPP Being guided by public health goals and outcomes Distinguishing when using regulations or partnerships Deciding on the approach for using public money on interventions involving restaurants Considering the nature of the intervention before deciding on PPP development Defining the type of collaborative arrangement Avoiding partnerships with potential conflictive food company Partnering with associations representing the food-related sector rather than an individual food companies Having the government controlling decision-making with regards to PPPs Having government guidelines to enter into a PPP
	Government requirements in considering the development of PPPs	<ul style="list-style-type: none"> Groundwork for planning PPPs 	

Themes	Categories	Sub-categories	Open Codes
Motivating Factors	Incentives for restaurants to develop healthy eating initiatives	<ul style="list-style-type: none"> Financial incentives for restaurants to promote healthy eating 	<ul style="list-style-type: none"> Showing evidence of business opportunity for healthy eating interventions Providing financial attractiveness for restaurants to promote healthy eating
		<ul style="list-style-type: none"> Non-financial incentives for restaurants to promote healthy eating Profit motives of the restaurant sector 	<ul style="list-style-type: none"> Being endorsed by the government Acknowledging the profit motive of restaurants Avoiding interventions that affect profits of restaurants
Enabling Factors	Support from a champion to facilitate PPP development	<ul style="list-style-type: none"> Support from a well-known individual or political figure to facilitate PPP development 	<ul style="list-style-type: none"> Having a well-known individual or a political figure to facilitate the development of PPPs
		<ul style="list-style-type: none"> Openness to find common interests 	<ul style="list-style-type: none"> Creating opportunities for dialogue between the government and the business sector Finding commonalities between the government and the business sector Willing to accept trade-offs when engaging in PPPs Being ready to engage in collaboration with the government
Governance	Governance structure and practice towards successful PPPs	<ul style="list-style-type: none"> Formal commitment, transparency and shared responsibilities 	<ul style="list-style-type: none"> Having core values, focus and clear goals Having a trustworthy governance structure and processes in place for PPPs Formalizing agreements between the public and the private sectors Having shared decision-making among partner organizations Sharing credits of the partnership
		<ul style="list-style-type: none"> Health-related, independent organization leading PPPs 	<ul style="list-style-type: none"> Considering government with less flexibility to run a PPP Understanding government decision-making Having a health-related government organization running the PPP Considering an independent organization representing the public interest to partner with restaurants

Themes	Categories	Sub-categories	Open Codes
Benefitting Factors	Corporate social responsibility influencing the development of healthy eating initiatives in restaurants	<ul style="list-style-type: none"> Corporate voluntary approach for the development of healthy eating initiatives 	<ul style="list-style-type: none"> Acknowledging the industry's voluntary approach for healthy eating Recognizing good corporate intention of some restaurants offering healthier food options
		<ul style="list-style-type: none"> Skepticism from the government on misleading marketing practices of restaurants 	<ul style="list-style-type: none"> Being aware of misleading messages about healthier food choices Being influenced by restaurants' marketing strategies Being transparent with consumers about healthy food sold in restaurants Mistrusting restaurants' intention to promote healthy eating
Hindering Factors	Distrust between government/NGO and restaurants on each other	<ul style="list-style-type: none"> Skepticism from the restaurant sector on government policies and processes 	<ul style="list-style-type: none"> Leading healthy eating initiatives by example in public buildings or public facilities Listening to the position of the restaurant sector about healthy eating Mistrusting government's intention to collaborate with restaurants

Appendix 4_k – Themes, categories, sub-categories and the corresponding open codes for PPPs for healthy eating initiatives in restaurants

Themes	Categories	Sub-categories	Open Codes
Contextual Factors	Government requirements for the development of PPPs for healthy eating in restaurants	<ul style="list-style-type: none"> Long-term economic benefit of healthy eating 	<ul style="list-style-type: none"> Acknowledging the impact of unhealthy diet on the health care system Considering long-term goals for improving healthy eating
		<ul style="list-style-type: none"> Incremental approach for healthy eating policy and programs 	<ul style="list-style-type: none"> Considering incremental government approach for healthy eating initiatives Experimenting with interventions in other settings
		<ul style="list-style-type: none"> Government leadership in healthy eating guidelines and standards 	<ul style="list-style-type: none"> Aligning demands of consumers with that of the government Avoiding the distinction between healthy and unhealthy food Defining success in healthy eating interventions in restaurants Having consistent food definitions, guidelines and messages Having the government developing guidelines for healthy eating
		<ul style="list-style-type: none"> Leverage restaurant sector's expertise and resources for healthy eating initiatives 	<ul style="list-style-type: none"> Having restaurants leading the implementation of healthy eating initiatives Possessing resources and capacity to promote healthy eating Recognizing the expertise of the restaurant sector for healthy eating interventions
Hindering Factors	Discordant observations about government regulations on healthy eating	<ul style="list-style-type: none"> Criticism of government regulations on restaurant business 	<ul style="list-style-type: none"> Being overregulated by the government Disapproving government regulations or interference in restaurant business Finding reasons against menu labelling policy Lacking understanding or consistent interpretation of government policies
		<ul style="list-style-type: none"> Preference for government regulation on healthy eating 	<ul style="list-style-type: none"> Banning food marketing to children Engaging the municipalities for restricting access to unhealthy food Having legislation to promote healthy food Restricting display of unhealthy food in front shelves

Themes	Categories	Sub-categories	Open Codes
Consumer Driven-Factors	Consumers' demand for healthy eating in restaurants	<ul style="list-style-type: none"> Consumers' dining-out decision-making 	<ul style="list-style-type: none"> Choosing restaurants not based on healthy menu options Deciding on what to eat is a consumer's choice Seeking a dining experience when eating out
		<ul style="list-style-type: none"> Emphasis on consumers for the creation of healthier menu options 	<ul style="list-style-type: none"> Considering consumers' demand for creating menu options Considering different types of consumers when promoting healthy eating Considering taste as a determinant of food choice Engaging consumers to figure out healthy eating interventions
	Consumer's incentives for healthy eating in restaurants	<ul style="list-style-type: none"> Incentives for consumers to engage in healthy eating 	<ul style="list-style-type: none"> Considering food pricing effects on healthier food choices Creating tools to facilitate healthier eating initiatives
Intervention Factors	Multi-stakeholder engagement for strengthening healthy eating interventions in restaurants	<ul style="list-style-type: none"> Small, medium and large restaurants for increasing the reach of healthy eating initiatives 	<ul style="list-style-type: none"> Engaging the restaurant sector in developing healthy eating initiatives Including small, privately-owned restaurants for promoting healthy eating
		<ul style="list-style-type: none"> Food chain distribution for supporting healthier menu options 	<ul style="list-style-type: none"> Engaging food distributors or suppliers for the provision of healthier food products
		<ul style="list-style-type: none"> Beyond restaurant settings for reinforcing healthy eating 	<ul style="list-style-type: none"> Involving other sectors to collectively address healthy eating and obesity Blaming poor eating at home rather than in restaurants
		<ul style="list-style-type: none"> Support for small, privately-owned restaurants 	<ul style="list-style-type: none"> Educating restaurants about healthier food preparation Providing support to small restaurants on healthier menu options
Intervention Factors	Multifaceted approach for promoting healthy eating in restaurants	<ul style="list-style-type: none"> Consumers' education for healthy eating 	<ul style="list-style-type: none"> Requiring the government to provide consumer education about healthy eating Educating children about healthy eating Educating consumers about healthy eating Educating parents about healthy eating
		<ul style="list-style-type: none"> Food reformulation for healthier food choices in restaurants 	<ul style="list-style-type: none"> Creating menu options with healthier food alternatives Reformulating food products for healthier menu options
		<ul style="list-style-type: none"> Complementary interventions for healthy eating in restaurants 	<ul style="list-style-type: none"> Agreeing with menu label as a good initiative Promoting local food choices Targeting smaller portion sizes of food and drinks

Appendix 4₁ – Letter of Ethics Approval

UNIVERSITY OF
TORONTO

OFFICE OF THE VICE PRESIDENT, RESEARCH

PROTOCOL REFERENCE # 29042

July 2, 2013

Dr. Alejandro Jadad
DEPT OF ANAESTHESIA
FACULTY OF MEDICINE

Mrs. Katia de Pinho Campos
DEPT OF ANAESTHESIA
FACULTY OF MEDICINE

Dear Dr. Jadad and Mrs. Katia de Pinho Campos,

Re: Your research protocol entitled, "Public-private partnerships for increasing availability and consumption of healthy food in restaurant chains"

ETHICS APPROVAL

Original Approval Date: July 2, 2013
Expiry Date: July 1, 2014
Continuing Review Level: 1

We are writing to advise you that the Health Sciences Research Ethics Board (REB) has granted approval to the above-named research protocol under the REB's delegated review process. Your protocol has been approved for a period of **one year** and ongoing research under this protocol must be renewed prior to the expiry date.

Any changes to the approved protocol or consent materials must be reviewed and approved through the amendment process prior to its implementation. Any adverse or unanticipated events in the research should be reported to the Office of Research Ethics as soon as possible.

Please ensure that you submit an Annual Renewal Form or a Study Completion Report 15 to 30 days prior to the expiry date of your current ethics approval. Note that annual renewals for studies cannot be accepted more than 30 days prior to the date of expiry.

If your research is funded by a third party, please contact the assigned Research Funding Officer in Research Services to ensure that your funds are released.

Best wishes for the successful completion of your research.

Yours sincerely,

Judith Friedland, Ph.D.
REB Chair

Daniel Gyewu
REB Manager

Appendix 4_m – Informed Consent

UNIVERSITY OF TORONTO
DALLA LANA SCHOOL OF PUBLIC HEALTH

CONSENT FORM

Thank you for your interest in participating in this PhD study, which is seeking to identify and understand the factors that facilitate the development of public-private partnerships (PPPs) for increasing availability and consumption of healthier food and beverage options in restaurant chains (e.g., McDonald's or Swiss Chalet) in Ontario.

This is the first ever study of its kind being conducted in Ontario and your participation is truly appreciated. You are being invited to take part in this study because your organization is considered a key stakeholder in matters related to obesity or diet-related chronic disease prevention. Your organization might have an interest in learning more about PPPs, or might be affected by a potential PPP, or might have an influence on the decision-making and implementation process related to that issue.

Conditions for Participating:

Your participation is voluntary. You have the right to withdraw from the study, or refrain from answering any question, at any time without negative repercussion.

Confidentiality:

We take privacy and confidentiality very seriously. Any identifying information will be removed from the questionnaires and replaced with unique study identification codes. The responses to the questionnaire will be ANONYMOUS and will be kept completely CONFIDENTIAL, and necessary measures will be taken to ensure security and privacy of your information. The study results will be reported as aggregated data so that no identifying information can be inferred. Your name will NOT be identified in any reports, publications, or presentations that may come from this study.

Benefits:

This study will offer important contributions to organizations that aim to engage in multisectoral collaboration to address obesity or diet-related chronic disease prevention. It will present the opinions from key stakeholders from the non-governmental sector, academia, government and the restaurant sector on factors that influence the development of PPPs for healthier food and beverage options.

Risks:

There are no foreseeable risks, harms or inconveniences resulting from participating in this study. No collection of sensitive data will take place. No coercion will be used.

Access:

Access to research materials will be restricted to the student investigator and the members of the PhD committee. When not in use, all electronic data will be stored in a secure computer, and all non-electronic data (e.g., questionnaires) will be stored in a locked cabinet at the Centre for Global eHealth Innovation, a research division of the University Health Network located at the Toronto General Hospital, where they will be kept for a maximum of one year following the first publication resulting from the study, and then destroyed.

This study has been approved by the University of Toronto Research Ethics Board. If you have any questions about your rights as a research participant in this study, please contact Daniel Gyewu at d.gyewu@utoronto.ca, 416 946 5606, Ethics Review Office, University of Toronto.

Do you agree to participate in this study?

() Yes, I voluntarily agree to participate in this study

Appendix 5_a – Wave Analysis – Examples for selected questions

Q1a - Distribution of responses **by week for motivating factors** to enter into a PPP – **to gain access to additional funding**, total and across weeks.

Week:		Important / somewhat important	Not at all important	I don't know / not applicable	Total
First week	Count	30	6	11	47
	% within	63.8%	12.8%	23.4%	100.0%
Second week	Count	27	2	6	35
	% within	77.1%	5.7%	17.1%	100.0%
Third or more weeks	Count	21	6	3	30
	% within	70.0%	20.0%	10.0%	100.0%
Total	Count	78	14	19	112
	% within	69.6%	12.5%	17.1%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	5.010 ^a	4	.286	.296 ^b
Likelihood Ratio	5.252	4	.262	.286 ^b
Fisher's Exact Test	4.852			.295^b
Linear-by-Linear Association	1.336 ^c	1	.248	.267 ^b
Number of valid cases	112			

a. 2 cells (22.2%) have expected count less than 5. The minimum expected count is 3.75.

b. Based on 10000 sampled tables with starting seed 1402669979.

c. The standardized statistic is -1.156.

Q2b - Distribution of responses **by week for enabling factors** to enter into a PPP – **support from an individual champion**, total and across weeks

Week:		Important / somewhat important	Not at all important	I don't know / not applicable	Total
First week	Count	39	5	3	47
	% within	83.0%	10.6%	6.4%	100.0%
Second week	Count	26	3	6	35
	% within	74.3%	8.6%	17.1%	100.0%
Third or more weeks	Count	25	4	1	30
	% within	83.3%	13.3%	3.3%	100.0%
Total	Count	89	12	10	112
	% within	80.4%	10.7%	8.9%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	4.614 ^a	4	.329	.343 ^b
Likelihood Ratio	4.420	4	.352	.391 ^b
Fisher's Exact Test	4.078			.399^b
Liner-by-Liner Association	.001 ^c	1	.979	1.000 ^b
Number of valid cases	112			

a. 6 cells (66.7%) have expected count less than 5. The minimum expected count is 2.68.

b. Based on 10000 sampled tables with starting seed 1402669979.

c. The standardized statistic is -.027.

Appendix 5_a – Wave Analysis – Examples for selected questions - cont'd

Q3c - Distribution of responses **by week for governance factors** to enter into a PPP – **formal accountability system (e.g. goals, roles & responsibilities, and performance measures)**, total and across weeks

Week:		Important / somewhat important	Not at all important	I don't know / not applicable	Total
First week	Count	44	2	1	47
	% within	93.6%	4.3%	2.1%	100.0%
Second week	Count	34	0	1	35
	% within	97.1%	0.0%	2.9%	100.0%
Third or more weeks	Count	30	0	0	30
	% within	100.0%	0.0%	0.0%	100.0%
Total	Count	108	2	2	112
	% within	96.4%	1.8%	1.8%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	3.638 ^a	4	.448	.566 ^b
Likelihood Ratio	4.844	4	.297	.566 ^b
Fisher's Exact Test	2.818			.675^b
Number of valid cases	1.471 ^c	1	.218	.273 ^b
Linear-by-Linear Association	112			

a. 6 cells (66.7%) have expected count less than 5. The minimum expected count is .54.

b. Based on 10000 sampled tables with starting seed 1402669979.

c. The standardized statistic is -1.213.

Q4d - Distribution of responses **by week for institutional benefits** to enter into a PPP – **creation of differential advantage for your organizations**, total and across weeks.

Week:		Yes / maybe	No	I don't know / not applicable	Total
First week	Count	25	9	13	47
	% within	54.3%	19.1%	27.7%	100.0%
Second week	Count	18	3	14	35
	% within	51.4%	8.6%	40.0%	100.0%
Third or more weeks	Count	15	9	6	30
	% within	50.0%	30.0%	20.0%	100.0%
Total	Count	58	21	33	112
	% within	51.8%	18.8%	29.5%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	6.283 ^a	4	.179	.183 ^b
Likelihood Ratio	6.447	4	.168	.184 ^b
Fisher's Exact Test	6.138			.188^b
Linear-by-Linear Association	.011 ^c	1	.916	.952 ^b
Number of valid cases	112			

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.63

b. Based on 10000 sampled tables with starting seed 1402669979.

c. The standardized statistic is .105.

Appendix 5_a – Wave Analysis – Examples for selected questions - cont'd

Q5a - Distribution of responses **by week for barriers** to enter into a PPP – **potential conflict of interest (e.g., inadvertently promote unhealthy food)**, total and across weeks

Week:		Yes, it is a barrier / somewhat a barrier	Not at all a barrier	I don't know / not applicable	Total
First week	Count	33	7	7	47
	% within	70.2%	14.9%	14.9%	100.0%
Second week	Count	27	3	5	35
	% within	77.1%	8.6%	14.3%	100.0%
Third or more weeks	Count	24	5	1	30
	% within	80.0%	16.7%	3.3%	100.0%
Total	Count	84	15	13	112
	% within	75.0%	13.4%	11.6%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	3.615 ^a	4	.461	.469 ^b
Likelihood Ratio	4.333	4	.363	.389 ^b
Fisher's Exact Test	3.760			.445^b
Linear-by-Linear Association	1.735 ^c	1	.188	.211 ^b
Number of valid cases	112			

a. 4 cells (44.4%) have expected count less than 5. The minimum expected count is 3.48

b. Based on 10000 sampled tables with starting seed 1402669979.

c. The standardized statistic is -1.317.

Q6b - Distribution of responses **by week for organizations from the public sector – Ontario Ministry of Health and Long-Term Care**, total and across weeks.

Week:		Yes / maybe	No	I don't know	Total
First week	Count	37	9	1	47
	% within	78.7%	19.1%	2.1%	100.0%
Second week	Count	26	6	2	34
	% within	76.5%	17.6%	5.9%	100.0%
Third or more weeks	Count	21	7	1	29
	% within	72.4%	24.1%	3.4%	100.0%
Total	Count	84	22	4	110
	% within	76.4%	20.0%	3.6%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	1.222 ^a	4	.848	.872 ^b
Likelihood Ratio	1.188	4	.856	.871 ^b
Fisher's Exact Test	1.510			.856^b
Linear-by-Linear Association	.423 ^c	1	.426	.428 ^b
Number of valid cases	110			

a. 3 cells (33.3%) have expected count less than 5. The minimum expected count is 1.05

b. Based on 10000 sampled tables with starting seed 14022669979.

c. The standardized statistic is .651.

Appendix 5_a – Wave Analysis – Examples for selected questions - cont'd

Q7b_{Gov} - Distribution of responses by week for the role of the government in a PPP- participate in the design of the partnership, total and across weeks.

Week:		Yes / maybe	No	I don't know	Total
First week	Count	43	3	1	47
	% within	91.5%	6.4%	2.1%	100.0%
Second week	Count	32	1	1	34
	% within	94.1%	2.9%	2.9%	100.0%
Third or more weeks	Count	27	2	0	29
	% within	93.1%	6.9%	0.0%	100.0%
Total	Count	102	6	2	110
	% within	92.7%	5.5%	1.8%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	1.382 ^a	4	.847	.910 ^b
Likelihood Ratio	1.938	4	.747	.910 ^b
Fisher's Exact Test	1.673			.938^b
Linear-by-Linear Association	.212 ^c	1	.645	.741 ^b
Number of valid cases	110			

a. 6 cells (66.7%) have expected count less than 5. The minimum expected count is .53

b. Based on 10000 sampled tables with starting seed 1402669979.

c. The standardized statistic is -.460.

Q7b_{Rest} – Distribution of responses by week for the role of the restaurant chains in a PPP- participate in the design of the partnership, total and across weeks

Week:		Yes / maybe	No	I don't know	Total
First week	Count	43	3	1	47
	% within	91.5%	6.4%	2.2%	100.0%
Second week	Count	31	2	1	34
	% within	91.2%	5.9%	2.9%	100.0%
Third or more weeks	Count	28	1	0	29
	% within	96.6%	3.4%	0.0%	100.0%
Total	Count	102	6	2	110
	% within	92.7%	5.5%	1.8%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	1.150 ^a	4	.886	.968 ^b
Likelihood Ratio	1.666	4	.797	.968 ^b
Fisher's Exact Test	1.406			1.000^b
Linear-by-Linear Association	.637 ^c	1	.425	.510 ^b
Number of valid cases	110			

a. 6 cells (66.7%) have expected count less than 5. The minimum expected count is .53

b. Based on 10000 sampled tables with starting seed 1402669979.

c. The standardized statistic is -.798.

Appendix 5_a – Wave Analysis – Examples for selected questions - cont'd

Q8b - Distribution of the responses by week **for strategies to implement in restaurant chains – marketing**, total and across weeks.

Week:		Agree	Disagree	Undecided / I don't know	Total
First week	Count	44	0	3	47
	% within	93.6%	0.0%	6.4%	100.0%
Second week	Count	32	1	1	34
	% within	94.1%	2.9%	2.9%	100.0%
Third or more weeks	Count	25	1	3	29
	% within	86.2%	3.4%	10.3%	100.0%
Total	Count	101	2	7	110
	% within	91.8%	1.8%	6.4%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	2.998 ^a	4	.558	.610 ^b
Likelihood Ratio	3.769	4	.438	.579 ^b
Fisher's Exact Test	3.400			.443^b
Number of valid cases	.706 ^c	1	.401	.414 ^b

a. 6 cells (66.7%) have expected count less than 5. The minimum expected count is .53

b. Based on 10000 sampled tables with starting seed 1402669979.

c. The standardized statistic is .840.

Appendix 5_b – Analysis of respondents vs. non-respondents characteristics

Distribution of responses by **gender**, respondents and non-respondents, total and across participants

Participants		Male	Female	Total
Respondent	Count	45	60	105
	% within	42.9%	57.1%	100.0%
Non-respondent	Count	48	61	109
	% within	44.0%	56.0%	100.0%
Total				
	Count	93	121	214
	% within	43.5%	56.5%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)
Pearson Chi-Square	.030 ^a	1	.862
Continuity Correction ^b	.001	1	.971
Likelihood Ratio	.030	1	
Liner-by-Linear Association	.030	1	.862
Number of valid cases	214		.862

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 45.63.

b. Computed only for a 2x2 table.

Distribution of responses by **position level**, respondents and non-respondents, total and across participants

Participants		Executive	Senior management	Total
Respondent	Count	35	70	105
	% within	33.3%	66.7%	100.0%
Non-respondent	Count	39	70	109
	% within	35.8%	64.2%	100.0%
Total				
	Count	74	140	214
	% within	34.6%	65.4%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)
Pearson Chi-Square	.141 ^a	1	.707
Continuity Correction ^b	.054	1	.816
Likelihood Ratio	.142	1	
Liner-by-Linear Association	.141	1	.707
Number of valid cases	214		.707

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 36.31.

b. Computed only for a 2x2 table.

Appendix 5c — List of the organizations that responded to the online survey

Organization	Group	Sector
Alliance of Ontario Food Processors	Restaurant-related	Private
Anishnawbe Mushkiki	Local health promotion	Public
Association of Local Public Health Agencies	Health Professional	NGO
Association of Municipalities of Ontario	Not-for-Profit	NGO
Association of Ontario Health Centres	Health Professional	NGO
Barrie Community Health Centre	Local health promotion	Public
Black Creek Community Health Centre	Local health promotion	Public
Bramalea Community Health Centre	Local health promotion	Public
Brant County Health Unit	Local health promotion	Public
Canadian Cancer Society	Not-for-Profit	NGO
Canadian Health Research Institute (CHIR), Institute of Nutrition, Metabolism, and Diabetes (INMD)	Research	Academia
Canadian Obesity Network	Health Professional	NGO
Canadian Partnership Against Cancer	Not-for-Profit	NGO
Canadian Produce Marketing Association	Restaurant-related	Private
Canadian Restaurant and Foodservices Association	Restaurant-related	Private
Central Community Health Centre	Local health promotion	Public
Centre de santé communautaire Chigamik	Local health promotion	Public
Centre de santé communautaire de Kapuskasing et région	Local health promotion	Public
Centre de santé communautaire de l'Estrie	Local health promotion	Public
Centre de santé communautaire de Sudbury-Est	Local health promotion	Public
Centretown Community Health Centre	Local health promotion	Public
Chatham Kent Community Health Centres	Local health promotion	Public
Chatham-Kent Health Unit	Local health promotion	Public
Chiefs of Ontario	Not-for-Profit	NGO
City Centre Health Care Community Health Centre	Local health promotion	Public
City of Hamilton – Public Health Services	Local health promotion	Public
Council of Ontario Medical Officers of Health	Health Professional	NGO
Crestview Opinion Changes	Restaurant-related	Private
Dairy Farmers of Ontario	Restaurant-related	Private
Davenport-Perth Neighbourhood and Community Health Centre	Local health promotion	Public
De dwa da dehs nye>s	Local health promotion	Public
Dietitians of Canada	Health Professional	NGO
Durham Region Health Department	Local health promotion	Public
East End Community Health Centre	Local health promotion	Public
Eastern Ontario Health Unit	Local health promotion	Public
Egg Farmers of Ontario	Restaurant-related	Private
Food Policy Research Initiative, Ontario Tobacco Research Unit, University of Toronto	Research	Academia
Ganaan De We O Dis^Yethi Yenahwahse (SOAHAC)	Local health promotion	Public
Gizhewaadiziwin Access Centre	Local health promotion	Public
Greenbelt Fund	Not-for-Profit	NGO
Grey Bruce Health Unit	Local health promotion	Public
Guelph Community Health Centre	Local health promotion	Public
Halton Region Health Department	Local health promotion	Public
Health Canada – Food and Nutrition	Provincial - Federal	Public
Heart and Stroke Foundation	Not-for-Profit	NGO
Holland Marsh Growers' Association	Restaurant-related	Private
Kingston Community Health Centres	Local health promotion	Public
Kingston, Frontenac and Lennox & Addington Health Unit	Local health promotion	Public
Lambton Health Unit	Local health promotion	Public
Leeds, Grenville & Lanark District Health Unit	Local health promotion	Public
London InterCommunity Health Centre	Local health promotion	Public
Metis Nation of Ontario	Not-for-Profit	NGO
Misiway Milopemahtesewin Community Health Centre	Local health promotion	Public
Niagara Region Public Health Department	Local health promotion	Public
N'Minoeyaa: Community Health Access Centre	Local health promotion	Public
Noojmowin Teg Health Centre	Local health promotion	Public
North Hamilton Community Health Centre	Local health promotion	Public
NorWest Community Health Centres	Local health promotion	Public
Ontario Agri-Food Education Inc.	Not-for-Profit	NGO
Ontario Chronic Disease Prevention Alliance	Not-for-Profit	NGO
Ontario Convenience Store Association	Restaurant-related	Private
Ontario Culinary Tourism Alliance	Restaurant-related	Private
Ontario Fruit and Vegetable Growers' Association	Restaurant-related	Private
Ontario Greenhouse Vegetable Growers	Restaurant-related	Private
Ontario Independent Meat Processors	Restaurant-related	Private
Ontario Ministry of Economic Development, Trade and Employment	Provincial - Federal	Public
Ontario Ministry of Health and Long-Term Care	Provincial - Federal	Public

Organization	Group	Sector
Ontario Produce Marketing Association	Restaurant-related	Private
Ontario Public Health Association	Health Professional	NGO
Ontario Public School Board Association	Health Professional	NGO
Ontario Restaurant, Hotel and Motel Association	Restaurant-related	Private
Ontario's Healthy Kids Panel	Research	Academia
Ottawa Public Health	Local health promotion	Public
Oxford County – Public Health & Emergency Services Department	Local health promotion	Public
Peel Public Health	Local health promotion	Public
Peterborough County-City Health Unit	Local health promotion	Public
Planned Parenthood of Toronto	Local health promotion	Public
Public Health Agency of Canada	Provincial - Federal	Public
Public Health Policy Division, Dalla Lana School of Public Health, University of Toronto	Research	Academia
Sandy Hill Community Health Centre	Local health promotion	Public
Savour Stratford	Restaurant-related	Private
Scarborough Centre for Healthy Communities	Local health promotion	Public
School of Health Services Management, Ryerson University	Research	Academia
Seaway Valley Community Health Centre	Local health promotion	Public
Simcoe Muskoka District Health Unit	Local health promotion	Public
South East Grey Community Health Centre	Local health promotion	Public
South Georgian Bay Community Health Centre	Local health promotion	Public
South Riverdale Community Health Centre	Local health promotion	Public
South-East Ottawa Community Health Centre	Local health promotion	Public
Stonegate Community Health Centre	Local health promotion	Public
Sustain Ontario	Not-for-Profit	NGO
TAIBU Community Health Centre	Local health promotion	Public
The District of Algoma Health Unit	Local health promotion	Public
The Four Villages Community Health Centre	Local health promotion	Public
The Ontario Society of Nutrition Professionals in Public Health	Health Professional	NGO
Thunder Bay District Health Unit	Local health promotion	Public
Timiskaming Health Unit	Local health promotion	Public
Toronto Public Health	Local health promotion	Public
Unison Health and Community Services- Lawrence Heights Site	Local health promotion	Public
Vaughan Community Health Centre	Local health promotion	Public
Vineland Research and Innovation Centre	Research	Academia
Wassay-Gezhig Na-Nahn-DahWe-Igamig	Local health promotion	Public
Wellington-Dufferin-Guelph Health Unit	Local health promotion	Public
West Elgin Community Health Centre	Local health promotion	Public
West Nipissing Community Health Centre	Local health promotion	Public
Windsor-Essex County Health Unit	Local health promotion	Public
Women's Health in Women's Hands CHC	Local health promotion	Public
Woolwich Community Health Centre	Local health promotion	Public
YMCA Ontario	Not-for-Profit	NGO
York Region, Public Health Branch, Community and Health Services Department	Local health promotion	Public

Appendix 5_d — List of the organizations that did not respond to the online survey

Organization	Group	Sector
Access Alliance Multicultural Health and Community Services	Local health promotion	Public
Advertising Standards of Canada	Restaurant-related	Private
Agri-food @ Ivey, University of Western Ontario	Research	Academia
Anishnawbe Health Toronto	Local health promotion	Public
Anne Johnston Health Station	Local health promotion	Public
Belleville and Quinte West Community Health Centre	Local health promotion	Public
Bridges Community Health Centre	Local health promotion	Public
Brock Community Health Centre	Local health promotion	Public
Canadian Association of Broadcasters	Restaurant-related	Private
Canadian Association of Foodservice Professionals	Restaurant-related	Private
Canadian Beverage Association	Restaurant-related	Private
Canadian Culinary Federation	Restaurant-related	Private
Canadian Diabetes Association	Not-for-Profit	NGO
Canadian Federation of Independent Business (CFIB)	Restaurant-related	Private
Canadian Federation of Independent Grocers	Restaurant-related	Private
Canadian Food Inspection Agency	Provincial - Federal	Public
Canadian Marketing Association	Restaurant-related	Private
Canadian Paediatric Society	Health Professional	NGO
Cancer Care Ontario	Provincial - Federal	Public
Carlington Community Health Centre	Local health promotion	Public
Central Toronto Community Health Centres	Local health promotion	Public
Centre de santé communautaire du Grand Sudbury	Local health promotion	Public
Centre de santé communautaire du Témiskaming	Local health promotion	Public
Centre de santé communautaire Hamilton-Niagara	Local health promotion	Public
Centre Francophone de Toronto	Local health promotion	Public
Community Care City of Kawartha Lakes	Local health promotion	Public
Community Food Centres Canada	Not-for-Profit	NGO
Conference Board of Canada – Centre for Food in Canada	Research	Academia
Consumers' Association of Canada	Not-for-Profit	NGO
Country Roads Community Health Centre	Local health promotion	Public
Department of Nutritional Sciences, University of Toronto	Research	Academia
Distribution Canada Inc.	Restaurant-related	Private
Elgin-St. Thomas Health Unit	Local health promotion	Public
Farm and Food Care Ontario	Not-for-Profit	NGO
Farmes' Market Ontario	Restaurant-related	Private
Flemingdon Health Centre	Local health promotion	Public
Food & Consumer Products of Canada	Restaurant-related	Private
Foodlink Waterloo	Not-for-Profit	NGO
FoodShare	Not-for-Profit	NGO
Gateway Community Health Centre	Local health promotion	Public
Grand Bend Area Community Health Centre	Local health promotion	Public
Grand River Community Health Centre	Local health promotion	Public
Guelph Food Technology Centre	Restaurant-related	Private
Haldimand-Norfolk Health Unit	Local health promotion	Public
Haliburton, Kawartha, Pine Ridge District Health Unit	Local health promotion	Public
Hamilton Urban Core Community Health Centre	Local health promotion	Public
Hastings & Prince Edward Counties Health Unit	Local health promotion	Public
Huron County Health Unit	Local health promotion	Public
Kitchener Downtown Community Health Centre	Local health promotion	Public
Lakeshore Area Multi-Service Project (LAMP)	Local health promotion	Public
Lanark Health and Community Services	Local health promotion	Public
Langs Farm Village Association	Local health promotion	Public
Mary Berglund Community Health Centre	Local health promotion	Public
Middlesex-London Health Unit	Local health promotion	Public
Mohawk Council of Akwesasne	Local health promotion	Public
Niagara Falls Community Health Centre	Local health promotion	Public
North Bay Parry Sound District Health Unit	Local health promotion	Public
North Lambton Community Health Centre	Local health promotion	Public
Northwestern Health Unit	Local health promotion	Public
Ontario Agency for Health Protection and Promotion	Provincial - Federal	Public
Ontario Agricultural College, University of Guelph	Research	Academia
Ontario Association of Community Care Access Centres	Not-for-Profit	NGO
Ontario Catholic School Trustees' Association	Health Professional	NGO
Ontario Collaborative Group on Healthy Eating and Physical Activity	Not-for-Profit	NGO
Ontario Farm Fresh Marketing Association	Restaurant-related	Private
Ontario Federation of Indian Friendship Centres	Not-for-Profit	NGO
Ontario Healthy Communities Coalition	Not-for-Profit	NGO
Ontario Healthy School Coalition	Not-for-Profit	NGO

Organization	Group	Sector
Ontario Medical Association	Health Professional	NGO
Ontario Ministry of Agricultural and Food	Provincial - Federal	Public
Ontario Ministry of Children and Youth Services	Provincial - Federal	Public
Ontario Ministry of Education	Provincial - Federal	Public
Ontario Ministry of Finance	Provincial - Federal	Public
Ontario Native Women's Association	Not-for-Profit	NGO
Ontario Nurses Association	Health Professional	NGO
Ontario Pork	Restaurant-related	Private
Ontario Society of Nutrition Management	Health Professional	NGO
Oshawa Community Health Centre	Local health promotion	Public
Parkdale Community Health Centre	Local health promotion	Public
Perth District Health Unit	Local health promotion	Public
Pinecrest-Queensway Community Health Centre	Local health promotion	Public
Porcupine Health Unit	Local health promotion	Public
Port Hope Community Health Centre	Local health promotion	Public
Propel Centre for Population Health Impact, University of Waterloo	Research	Academia
Quest Community Health Centre	Local health promotion	Public
Rainbow Valley CHC	Local health promotion	Public
Regent Park Community Health Centre	Local health promotion	Public
Region of Waterloo, Public Health	Local health promotion	Public
Registered Nurses' Association of Ontario	Health Professional	NGO
Registered Practical Nurses Association of Ontario	Health Professional	NGO
Renfrew County & District Health Unit	Local health promotion	Public
Retail Council of Canada	Restaurant-related	Private
Rexdale Community Health Centre	Local health promotion	Public
Rideau Community Health Services	Local health promotion	Public
Shkagamik-Kwe Health Centre	Local health promotion	Public
Somerset West Community Health Centre	Local health promotion	Public
Sudbury & District Health Unit	Local health promotion	Public
The Centre for Science in the Public Interest	Research	Academia
The Youth Centre	Local health promotion	Public
United Way Ontario	Not-for-Profit	NGO
University of Ottawa Heart Institute, Division of Prevention and Rehabilitation	Research	Academia
Wabano Centre for Aboriginal Health	Local health promotion	Public
Windsor Essex Community Health Centre	Local health promotion	Public
Woodstock and Area Community Health Centre	Local health promotion	Public

Appendix 5_c – Kappa analysis for pre-determined assignation of types of organizations

Distribution for **types of organization based on pre-determined assignation and participants' self-identification**, total and across type of organizations.

Pre-determined assignation		Participants' self-identification						Total
		Health Professional	Not-for Profit	Research	Local Health Promotion	Prov/Fed Gov	Restaurant -related	
Health Professional	Count	5	2	0	0	0	0	7
	% within	71.4%	28.6%	0.0%	0.0%	0.0%	0.0%	100.0%
Not-for Profit	Count	0	8	0	0	0	0	8
	% within	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Research	Count	0	1	2	0	1	0	4
	% within	0.0%	25.0%	50.0%	0.0%	25.0%	0.0%	100.0%
Local Health Promotion	Count	3	4	0	53	2	0	62
	% within	4.8%	6.5%	0.0%	85.5%	3.2%	0.0%	100.0%
Prov/Fed Government	Count	0	0	0	0	4	0	4
	% within	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Restaurant-related	Count	0	5	0	0	2	2	9
	% within	0.0%	55.6%	0.0%	0.0%	22.2%	22.2%	100.0%
Total	Count	8	20	2	53	9	2	94
	% within	8.5%	21.3%	2.1%	56.4%	9.6%	2.1%	100.0%

Symmetric Measures

Test:	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Measurement of Agreement, Kappa	.643	.062	11.552	.000
Number of valid cases	94			

a. Not assuming the null hypothesis

b. Using the asymptotic standard error assuming the null hypothesis.

Appendix 5f - Results of Survey Responses

All Sectors -

Table Q1a - Distribution of responses for **motivating factors** to enter into a PPP - **to gain access to additional funding**, total and across sectors.

Sector:		Important / somewhat important	Not at all important	I don't know / not applicable	Total
NGO-Academia	Count	21	1	3	25
	% within	84.0%	4.0%	12.0%	100.0%
Private	Count	10	0	5	15
	% within	66.7%	0.0%	33.3%	100.0%
Public	Count	47	13	12	72
	% within	65.3%	18.1%	16.7%	100.0%
Total	Count	78	14	20	112
	% within	69.6%	12.5%	17.9%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	8.603 ^a	4	.072	.066 ^b
Likelihood Ratio	10.397	4	.034	.047 ^b
Fisher's Exact Test	7.660			.085^b
Number of valid cases	112			

a. 4 cells (44.4%) have expected count less than 5. The minimum expected count is 1.88.

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations -

Table Q1a - Distribution of responses for **motivating factors** to enter into a PPP - **to gain access to additional funding**, total and between **government and restaurant-related associations**

Groups		Important / somewhat important	Not at all important	I don't know / not applicable	Total
Government ^a	Count	13	7	6	27
	% within	48.1%	25.9%	25.9%	100.0%
Restaurant	Count	10	0	5	15
	% within	66.7%	0.0%	33.3%	100.0%
Total	Count	23	7	12	42
	% within	54.8%	16.7%	28.6%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	4.678 ^a	2	.096	.124 ^b
Likelihood Ratio	6.955	2	.031	.062 ^b
Fisher's Exact Test	4.819			.088^b
Linear-by-Linear Association	.152 ^c	1	.697	.712 ^b
Number of valid cases	42			

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 2.50

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is -.390.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q1b - Distribution of responses for **motivating factors** to enter into a PPP - **to gain access to client or customer's perspectives**, total and across sectors.

Sector:		Important / somewhat important	Not at all important	I don't know / not applicable	Total
NGO-Academia	Count	21	1	3	25
	% within	84.0%	4.0%	12.0%	100.0%
Private	Count	13	0	2	15
	% within	86.7%	0.0%	13.3%	100.0%
Public	Count	66	2	4	72
	% within	91.7%	2.8%	5.6%	100.0%
Total	Count	100	3	9	112
	% within	89.3%	2.7%	8.0%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	2.267 ^a	4	.687	.762 ^b
Likelihood Ratio	2.563	4	.633	.791 ^b
Fisher's Exact Test	2.902			.529^b
Number of valid cases	112			

a. 5 cells (55.6%) have expected count less than 5. The minimum expected count is .40.

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations -

Table Q1b - Distribution of responses for **motivating factors** to enter into a PPP - **to gain access to client or customer's perspectives**, total and between **government and restaurant-related associations**

Groups		Important / somewhat important	Not at all important	I don't know / not applicable	Total
Government ^a	Count	22	2	3	27
	% within	81.5%	7.4%	11.1%	100.0%
Restaurant	Count	13	0	2	15
	% within	86.7%	0.0%	13.3%	100.0%
Total	Count	35	2	5	42
	% within	83.3%	4.8%	11.9%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	1.182 ^a	2	.554	.676 ^b
Likelihood Ratio	1.838	2	.399	.593 ^b
Fisher's Exact Test	.946			.829^b
Linear-by-Linear Association	.019 ^c	1	.891	1.000 ^b
Number of valid cases	42			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .71.

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is -.137.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q1c - Distribution of responses for **motivating factors** to enter into a PPP - **to gain to access to expertise or specialized skills**, total and across sectors.

Sector:		Important / somewhat important	Not at all important	I don't know / not applicable	Total
NGO-Academia	Count	16	3	6	25
	% within	64.0%	12.0%	24.0%	100.0%
Private	Count	13	0	2	15
	% within	86.7%	0.0%	13.3%	100.0%
Public	Count	52	11	9	72
	% within	72.2%	15.3%	12.5%	100.0%
Total	Count	81	14	17	112
	% within	72.3%	12.5%	15.2%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	4.646 ^a	4	.326	.337 ^b
Likelihood Ratio	6.305	4	.178	.246 ^b
Fisher's Exact Test	4.374			.356^b
Number of valid cases	112			

a. 4 cells (44.4%) have expected count less than 5. The minimum expected count is 1.88.

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations -

Table Q1c - Distribution of responses for **motivating factors** to enter into a PPP - **to gain to access to expertise or specialized skills**, total and between **government and restaurant-related associations**

Groups		Important / somewhat important	Not at all important	I don't know / not applicable	Total
Government ^a	Count	14	9	4	27
	% within	51.9%	33.3%	14.8%	100.0%
Restaurant	Count	13	0	2	15
	% within	86.7%	0.0%	13.3%	100.0%
Total	Count	27	9	6	42
	% within	64.3%	21.4%	14.3%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	6.833 ^a	2	.033	.035 ^b
Likelihood Ratio	9.716	2	.008	.013 ^b
Fisher's Exact Test	7.306			.021^b
Linear-by-Linear Association	2.315 ^c	1	.128	.187 ^b
Number of valid cases	42			

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 2.14

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is -1.521.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q1d - Distribution of responses for **motivating factors** to enter into a PPP - **to reach out to clients or customers who would not be reached by either the public or private sector alone**, total and across sectors.

Sector:		Important / somewhat important	Not at all important	I don't know / not applicable	Total
NGO-Academia	Count	17	5	3	25
	% within	68.0%	20.0%	12.0%	100.0%
Private	Count	13	0	2	15
	% within	86.7%	0.0%	13.3%	100.0%
Public	Count	61	2	9	72
	% within	84.7%	2.8%	12.5%	100.0%
Total	Count	91	7	14	112
	% within	81.3%	6.3%	12.5%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	10.603 ^a	4	.031	.033 ^b
Likelihood Ratio	9.132	4	.058	.077 ^b
Fisher's Exact Test	7.904			.060^b
Number of valid cases	112			

a. 5 cells (55.6%) have expected count less than 5. The minimum expected count is .94.

b. Based on 10000 sampled tables with starting seed 2000000

Government and Restaurant-Related Associations -

Table Q1d - Distribution of responses for **motivating factors** to enter into a PPP - **to reach out to clients or customers who would not be reached by either the public or private sector alone**, total and between **government and restaurant-related associations**

Groups		Important / somewhat important	Not at all important	I don't know / not applicable	Total
Government ^a	Count	22	1	4	27
	% within	81.5%	3.7%	14.8%	100.0%
Restaurant	Count	13	0	2	15
	% within	86.7%	0.0%	13.3%	100.0%
Total	Count	35	1	6	42
	% within	83.3%	2.4%	14.3%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	.601 ^a	2	.740	1.000 ^b
Likelihood Ratio	.930	2	.628	1.000 ^b
Fisher's Exact Test	.646			1.000^b
Linear-by-Linear Association	.084 ^c	1	.772	.871 ^b
Number of valid cases	42			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .36

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is -.289.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q2a - Distribution of responses for **enabling factors** to enter into a PPP - **experience with public-private partnerships**, total and across sectors.

Sector:		Important / somewhat important	Not at all important	I don't know / not applicable	Total
NGO-Academia	Count	19	2	4	25
	% within	76.0%	8.0%	16.0%	100.0%
Private	Count	13	0	2	15
	% within	86.7%	0.0%	13.3%	100.0%
Public	Count	60	5	7	72
	% within	83.3%	6.9%	9.7%	100.0%
Total	Count	92	7	13	112
	% within	82.1%	6.3%	11.6%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	1.955 ^a	4	.744	.803 ^b
Likelihood Ratio	2.849	4	.583	.695 ^b
Fisher's Exact Test	1.932			.788^b
Number of valid cases	112			

a. 5 cells (55.6%) have expected count less than 5. The minimum expected count is .94.

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-related Associations

Table Q2a - Distribution of responses for **enabling factors** to enter into a PPP - **experience with public-private partnerships**, total and between **government and restaurant-related associations**

Groups		Important / somewhat important	Not at all important	I don't know / not applicable	Total
Government ^a	Count	21	2	4	27
	% within	77.8%	7.4%	14.8%	100.0%
Restaurant	Count	13	0	2	15
	% within	86.7%	0.0%	13.3%	100.0%
Total	Count	34	2	6	42
	% within	81.0%	4.8%	14.3%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	1.220 ^a	2	.523	.715 ^b
Likelihood Ratio	1.875	2	.392	.606 ^b
Fisher's Exact Test	.911			.831^b
Linear-by-Linear Association	.199 ^c	1	.655	.831 ^b
Number of valid cases	42			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .71.

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is -.496.

Appendix 5f - Results of Survey Responses -Cont'd

All Sectors -

Table Q2b - Distribution of responses for **enabling factors** to enter into a PPP – **support from an individual champion**, total and across sectors.

Sector:		Important / somewhat important	Not at all important	I don't know / not applicable	Total
NGO-Academia	Count	16	4	5	25
	% within	64.0%	16.0%	20.0%	100.0%
Private	Count	12	1	2	15
	% within	80.0%	6.7%	13.3%	100.0%
Public	Count	62	7	3	72
	% within	86.1%	9.7%	4.2%	100.0%
Total	Count	90	12	10	112
	% within	80.4%	10.7%	8.9%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	7.663 ^a	4	.105	.095 ^b
Likelihood Ratio	7.180	4	.127	.180 ^b
Fisher's Exact Test	7.667			.075^b
Number of valid cases	112			

a. 4 cells (44.4%) have expected count less than 5. The minimum expected count is 1.34.

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations

Table Q2b - Distribution of responses for **enabling factors** to enter into a PPP - **support from an individual champion**, total and between **government and restaurant-related associations**

Groups		Important / somewhat important	Not at all important	I don't know / not applicable	Total
Government ^a	Count	21	5	1	27
	% within	77.8%	18.5%	3.7%	100.0%
Restaurant	Count	12	1	2	15
	% within	80.0%	6.7%	13.3%	100.0%
Total	Count	33	6	3	42
	% within	78.6%	14.3%	7.1%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	2.206 ^a	2	.332	.437 ^b
Likelihood Ratio	2.260	2	.323	.470 ^b
Fisher's Exact Test	2.093			.367^b
Linear-by-Linear Association	.149 ^c	1	.700	.787 ^b
Number of valid cases	42			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is 1.07

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is .386.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q2c - Distribution of responses for **enabling factors** to enter into a PPP – **compatibility of organizational values with PPP goals**, total and across sectors.

Sector:		Important / somewhat important	Not at all important	I don't know / not applicable	Total
NGO-Academia	Count	22	0	3	25
	% within	88.0%	0.0%	12.0%	100.0%
Private	Count	13	0	2	15
	% within	86.7%	0.0%	13.3%	100.0%
Public	Count	70	0	2	72
	% within	97.2%	0.0%	2.8%	100.0%
Total					
	Count	104	0	7	112
	% within	93.7%	0.0%	6.3%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	4.177 ^a	2	.124	.108 ^b
Likelihood Ratio	3.965	2	.138	.194 ^b
Fisher's Exact Test	4.658			.070^b
Number of valid cases	112			

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .94

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations -

Table Q2c - Distribution of responses for **enabling factors** to enter into a PPP - **compatibility of organizational values with PPP goals**, total and between **government and restaurant-related associations**

Groups		Important / somewhat important	Not at all important	I don't know / not applicable	Total
Government ^a	Count	26	0	1	27
	% within	96.3%	0.0%	3.7%	100.0%
Restaurant	Count	13	0	2	15
	% within	86.7%	0.0%	13.3%	100.0%
Total					
	Count	39	0	3	42
	% within	92.9%	0.0%	7.1%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	1.348 ^a	1	.246	.543
Continuity Correction ^b	.287	1	.592	
Likelihood Ratio	1.280	1	.258	.543
Fisher's Exact Test				.543
Linear-by-Linear Association	1.316 ^d	1	.251	.543
Number of valid cases	42			

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 1.07

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results

d. The standardized statistic is 1.147

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q2d - Distribution of responses for **enabling factors** to enter into a PPP – **endorsement from credible institutions**, total and across sectors.

Sector:		Important / somewhat important	Not at all important	I don't know / not applicable	Total
NGO-Academia	Count	17	5	3	25
	% within	68.0%	20.0%	12.0%	100.0%
Private	Count	12	1	2	15
	% within	80.0%	6.7%	13.3%	100.0%
Public	Count	63	5	4	72
	% within	87.5%	6.9%	5.6%	100.0%
Total	Count	92	11	9	112
	% within	82.1%	9.8%	8.0%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	5.829 ^a	4	.212	.197 ^b
Likelihood Ratio	5.251	4	.262	.356 ^b
Fisher's Exact Test	5.995			.155^b
Number of valid cases	112			

a. 4 cells (44.4%) have expected count less than 5. The minimum expected count is 1.21

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations -

Table Q2d - Distribution of responses for **enabling factors** to enter into a PPP - **endorsement from credible institutions**, total and between **government and restaurant-related associations**

Groups		Important / somewhat important	Not at all important	I don't know / not applicable	Total
Government ^a	Count	23	3	1	27
	% within	85.2%	11.1%	3.7%	100.0%
Restaurant	Count	12	1	2	15
	% within	80.0%	6.7%	13.3%	100.0%
Total	Count	35	4	3	42
	% within	83.3%	9.5%	7.1%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	1.483 ^a	2	.476	.664 ^b
Likelihood Ratio	1.426	2	.490	.664 ^b
Fisher's Exact Test	1.540			.664^b
Linear-by-Linear Association	.637 ^c	1	.425	.584 ^b
Number of valid cases	42			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is 1.07

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is .798.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q2e - Distribution of responses for **enabling factors** to enter into a PPP – **existence of guidelines on PPP development**, total and across sectors.

Sector:		Important / somewhat important	Not at all important	I don't know / not applicable	Total
NGO-Academia	Count	19	3	3	25
	% within	76.0%	12.0%	12.0%	100.0%
Private	Count	12	1	2	15
	% within	80.0%	6.7%	13.3%	100.0%
Public	Count	66	3	3	72
	% within	91.7%	4.2%	4.2%	100.0%
Total	Count	97	7	8	112
	% within	86.6%	6.3%	7.1%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	4.963 ^a	4	.291	.272 ^b
Likelihood Ratio	4.611	4	.330	.470 ^b
Fisher's Exact Test	5.800			.147^b
Number of valid cases	112			

a. 5 cells (55.6%) have expected count less than 5. The minimum expected count is .94.

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations -

Table Q2e - Distribution of responses for **enabling factors** to enter into a PPP - **existence of guidelines on PPP development**, total and between **government and restaurant-related associations**

Groups		Important / somewhat important	Not at all important	I don't know / not applicable	Total
Government ^a	Count	23	3	1	27
	% within	85.2%	11.1%	3.7%	100.0%
Restaurant	Count	12	1	2	15
	% within	80.0%	6.7%	13.3%	100.0%
Total	Count	35	4	3	42
	% within	83.3%	9.5%	7.1%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	1.483 ^a	2	.476	.664 ^b
Likelihood Ratio	1.426	2	.490	.664 ^b
Fisher's Exact Test	1.540			.664^b
Linear-by-Linear Association	.637 ^c	1	.425	.584 ^b
Number of valid cases	42			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is 1.07

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is .798.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q3a - Distribution of responses for **governance factors** to enter into a PPP – **equal representation from partner organizations on board committees**, total and across sectors.

Sector:		Important / somewhat important	Not at all important	I don't know / not applicable	Total
NGO-Academia	Count	19	5	1	25
	% within	76.0%	20.0%	4.0%	100.0%
Private	Count	12	2	1	15
	% within	80.0%	13.3%	6.7%	100.0%
Public	Count	65	4	3	72
	% within	90.3%	5.6%	4.2%	100.0%
Total	Count	96	11	5	112
	% within	85.7%	9.8%	4.5%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	4.856 ^a	4	.302	.305 ^b
Likelihood Ratio	4.461	4	.347	.479 ^b
Fisher's Exact Test	5.487			.185^b
Number of valid cases	112			

a. 5 cells (55.6%) have expected count less than 5. The minimum expected count is .67.

b. Based on 10000 sampled tables with starting seed 2000000

Government and Restaurant-Related Associations -

Table Q3a - Distribution of responses for **governance factors** to enter into a PPP – **equal representation from partner organizations on board committees**, total and between **government and restaurant-related associations**

Groups		Important / somewhat important	Not at all important	I don't know / not applicable	Total
Government ^a	Count	22	3	2	27
	% within	81.5%	11.1%	7.4%	100.0%
Restaurant	Count	12	2	1	15
	% within	80.0%	13.3%	6.7%	100.0%
Total	Count	34	5	3	42
	% within	81.0%	11.9%	7.1%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	.050 ^a	2	.975	1.000 ^b
Likelihood Ratio	.049	2	.976	1.000 ^b
Fisher's Exact Test	.353			1.000^b
Linear-by-Linear Association	.002 ^c	1	.969	1.000 ^b
Number of valid cases	42			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is 1.07

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is -.039.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q3b - Distribution of responses for **governance factors** to enter into a PPP – **clarity and openness in decision-making**, total and across sectors.

Sector:		Important / somewhat important	Not at all important	I don't know / not applicable	Total
NGO-Academia	Count	24	0	1	25
	% within	96.0%	0.0%	4.0%	100.0%
Private	Count	14	0	1	15
	% within	93.3%	0.0%	6.7%	100.0%
Public	Count	71	1	0	72
	% within	98.6%	1.4%	0.0%	100.0%
Total	Count	109	1	2	112
	% within	97.3%	.9%	1.8%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	4.570 ^a	4	.334	.439 ^b
Likelihood Ratio	5.173	4	.270	.285 ^b
Fisher's Exact Test	5.684			.229^b
Number of valid cases	112			

a. 6 cells (66.7%) have expected count less than 5. The minimum expected count is .13.

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations -

Table Q3b - Distribution of responses for **governance factors** to enter into a PPP – **clarity and openness in decision-making**, total and between **government and restaurant-related associations**

Groups		Important / somewhat important	Not at all important	I don't know / not applicable	Total
Government ^a	Count	26	1	0	27
	% within	96.3%	3.7%	0.0%	100.0%
Restaurant	Count	14	0	1	15
	% within	93.3%	0.0%	6.7%	100.0%
Total	Count	40	1	1	42
	% within	95.2%	2.4%	2.4%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	2.364 ^a	2	.307	.601 ^b
Likelihood Ratio	2.952	2	.229	.601 ^b
Fisher's Exact Test	2.211			.601^b
Linear-by-Linear Association	.766 ^c	1	.381	.759 ^b
Number of valid cases	42			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .36

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is .875.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q3c - Distribution of responses for governance factors to enter into a PPP – formal accountability system (e.g. goals, roles & responsibilities, and performance measures), total and across sectors.

Sector:		Important / somewhat important	Not at all important	I don't know / not applicable	Total
NGO-Academia	Count	24	0	1	25
	% within	96.0%	0.0%	4.0%	100.0%
Private	Count	14	0	1	15
	% within	93.3%	0.0%	6.7%	100.0%
Public	Count	70	2	0	72
	% within	97.2%	2.8%	0.0%	100.0%
Total	Count	108	2	2	112
	% within	96.4%	1.8%	1.8%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	5.105 ^a	4	.277	.231 ^b
Likelihood Ratio	6.035	4	.197	.201 ^b
Fisher's Exact Test	5.173			.239^b
Number of valid cases	112			

a. 6 cells (66.7%) have expected count less than 5. The minimum expected count is .27.

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations -

Table Q3c - Distribution of responses for governance factors to enter into a PPP – formal accountability system (e.g. goals, roles & responsibilities, and performance measures), total and between government and restaurant-related associations

Groups		Important / somewhat important	Not at all important	I don't know / not applicable	Total
Government ^a	Count	25	2	0	27
	% within	92.6%	7.4%	0.0%	100.0%
Restaurant	Count	14	0	1	15
	% within	93.3%	0.0%	6.7%	100.0%
Total	Count	39	2	1	42
	% within	92.9%	4.8%	2.4%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	2.912 ^a	2	.233	.280 ^b
Likelihood Ratio	3.837	2	.148	.280 ^b
Fisher's Exact Test	2.404			.280^b
Linear-by-Linear Association	.247 ^c	1	.619	.694 ^b
Number of valid cases	42			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .36

b. Based on 10000 sampled tables with starting seed 424620234,

c. The standardized statistic is .497.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q3d - Distribution of responses for **governance factors** to enter into a PPP – **equal decision-making authority among partner organizations**, total and across sectors.

Sector:		Important / somewhat important	Not at all important	I don't know / not applicable	Total
NGO-Academia	Count	20	4	1	25
	% within	80.0%	16.0%	4.0%	100.0%
Private	Count	14	0	1	15
	% within	93.3%	0.0%	6.7%	100.0%
Public	Count	62	7	3	72
	% within	86.1%	9.7%	4.2%	100.0%
Total	Count	96	11	5	112
	% within	85.7%	9.8%	4.5%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	2.833 ^a	4	.586	.620 ^b
Likelihood Ratio	4.128	4	.389	.523 ^b
Fisher's Exact Test	3.023			.517^b
Number of valid cases	112			

a. 5 cells (55.6%) have expected count less than 5. The minimum expected count is .67.

b. Based on 10000 sampled tables with starting seed 20000000.

Government and Restaurant-Related Associations -

Table Q3d - Distribution of responses for **governance factors** to enter into a PPP – **equal decision-making authority among partner organizations**, total and between **government and restaurant-related associations**

Groups		Important / somewhat important	Not at all important	I don't know / not applicable	Total
Government ^a	Count	20	6	1	27
	% within	74.1%	22.2%	3.7%	100.0%
Restaurant	Count	14	0	1	15
	% within	93.3%	0.0%	6.7%	100.0%
Total	Count	34	6	2	42
	% within	81.0%	14.3%	4.8%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	3.953 ^a	2	.139	.143 ^b
Likelihood Ratio	5.905	2	.052	.081 ^b
Fisher's Exact Test	4.129			.108^b
Linear-by-Linear Association	.904 ^c	1	.342	.391 ^b
Number of valid cases	42			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .71

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is -.951.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q3e - Distribution of responses for **governance factors** to enter into a PPP – **transparent process for monitoring and evaluation**, total and across sectors.

Sector:		Important / somewhat important	Not at all important	I don't know / not applicable	Total
NGO-Academia	Count	24	0	1	25
	% within	96.0%	0.0%	4.0%	100.0%
Private	Count	14	0	1	15
	% within	93.3%	0.0%	6.7%	100.0%
Public	Count	71	1	0	72
	% within	98.6%	1.4%	0.0%	100.0%
Total	Count	109	1	2	112
	% within	97.3%	.9%	1.8%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	4.570 ^a	4	.334	.439 ^b
Likelihood Ratio	5.173	4	.270	.285 ^b
Fisher's Exact Test	5.684			.229^b
Number of valid cases	112			

a. 6 cells (66.7%) have expected count less than 5. The minimum expected count is .13.

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations -

Table Q3e - Distribution of responses for **governance factors** to enter into a PPP – **transparent process for monitoring and evaluation**, total and between **government and restaurant-related associations**

Groups		Important / somewhat important	Not at all important	I don't know / not applicable	Total
Government ^a	Count	26	1	0	27
	% within	96.3%	3.7%	0.0%	100.0%
Restaurant	Count	14	0	1	15
	% within	93.3%	0.0%	6.7%	100.0%
Total	Count	40	1	1	42
	% within	95.2%	2.4%	2.4%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	2.364 ^a	2	.307	.601 ^b
Likelihood Ratio	2.952	2	.229	.601 ^b
Fisher's Exact Test	2.211			.601^b
Linear-by-Linear Association	.766 ^c	1	.381	.759 ^b
Number of valid cases	42			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .36

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is .875.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q4a - Distribution of responses for **institutional benefits** to enter into a PPP – improved image of your organization, total and across sectors.

Sector:		Yes / maybe	No	I don't know / not applicable	Total
NGO-Academia	Count	15	6	4	25
	% within	60.0%	24.0%	16.0%	100.0%
Private	Count	13	0	2	15
	% within	86.7%	0.0%	13.3%	100.0%
Public	Count	44	15	13	72
	% within	61.1%	20.8%	18.1%	100.0%
Total	Count	72	21	19	112
	% within	64.3%	18.8%	17.0%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	4.881 ^a	4	.300	.312 ^b
Likelihood Ratio	7.553	4	.109	.147 ^b
Fisher's Exact Test	5.141			.270^b
Number of valid cases	112			

a. 4 cells (44.4%) have expected count less than 5. The minimum expected count is 2.57

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations -

Table Q4a - Distribution of responses for **institutional benefits** to enter into a PPP – improved image of your organization, total and between government and restaurant-related associations.

Group:		Yes / maybe	No	I don't know / not applicable	Total
Government ^a	Count	12	8	7	27
	% within	44.4%	29.6%	25.9%	100.0%
Restaurant	Count	13	0	2	15
	% within	86.7%	0.0%	13.3%	100.0%
Total	Count	25	8	9	42
	% within	59.5%	19.0%	22.4%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	8.046 ^a	2	.018	.016 ^b
Likelihood Ratio	10.595	2	.005	.009 ^b
Fisher's Exact Test	8.044			.016^b
Linear-by-Linear Association	4.257 ^c	1	.039	.048 ^b
Number of valid cases	42			

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 2.86

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is -2.063.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q4b - Distribution of responses for **institutional benefits** to enter into a PPP – **improved performance of your organization**, total and across sectors.

Sector:		Yes / maybe	No	I don't know / not applicable	Total
NGO-Academia	Count	17	5	3	25
	% within	68.0%	20.0%	12.0%	100.0%
Private	Count	10	3	2	15
	% within	66.7%	20.0%	13.3%	100.0%
Public	Count	49	14	9	72
	% within	68.1%	19.7%	12.5%	100.0%
Total	Count	76	22	14	112
	% within	67.9%	19.6%	12.5%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	.021 ^a	4	1.000	1.000 ^b
Likelihood Ratio	.021	4	1.000	1.000 ^b
Fisher's Exact Test	.305			1.000^b
Number of valid cases	112			

a. 4 cells (44.4%) have expected count less than 5. The minimum expected count is 1.88

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations -

Table Q4b - Distribution of responses for **institutional benefits** to enter into a PPP – **improved performance of your organization**, total and between **government and restaurant-related associations**.

Group:		Yes / maybe	No	I don't know / not applicable	Total
Government ^a	Count	16	6	5	27
	% within	59.3%	22.2%	18.5%	100.0%
Restaurant	Count	10	3	2	15
	% within	66.7%	20.0%	13.3%	100.0%
Total	Count	26	9	7	42
	% within	61.9%	21.4%	16.7%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	.263 ^a	2	.877	.905 ^b
Likelihood Ratio	.268	2	.875	.905 ^b
Fisher's Exact Test	.312			1.000^b
Linear-by-Linear Association	.257 ^c	1	.612	.672 ^b
Number of valid cases	42			

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 2.50

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is -.507.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q4c - Distribution of responses for **institutional benefits** to enter into a PPP – **able to influence food industry to promote healthy eating**, total and across sectors.

Sector:		Yes / maybe	No	I don't know / not applicable	Total
NGO-Academia	Count	22	0	3	25
	% within	88.0%	0.0%	12.0%	100.0%
Private	Count	13	0	2	15
	% within	86.7%	0.0%	13.3%	100.0%
Public	Count	68	1	3	72
	% within	94.4%	1.4%	4.2%	100.0%
Total	Count	103	1	8	112
	% within	92.0%	.9%	7.1%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	3.216 ^a	4	.522	.539 ^b
Likelihood Ratio	3.397	4	.494	.602 ^b
Fisher's Exact Test	4.375			.409^b
Number of valid cases	112			

a. 5 cells (55.6%) have expected count less than 5. The minimum expected count is .13.

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations -

Table Q4c - Distribution of responses for **institutional benefits** to enter into a PPP – **able to influence food industry to promote healthy eating**, total and between **government and restaurant-related associations**.

Group:		Yes / maybe	No	I don't know / not applicable	Total
Government ^a	Count	24	1	2	27
	% within	88.9%	3.7%	7.4%	100.0%
Restaurant	Count	13	0	2	15
	% within	86.7%	0.0%	13.3%	100.0%
Total	Count	37	1	4	42
	% within	88.1%	2.4%	9.5%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	.917 ^a	2	.632	.756 ^b
Likelihood Ratio	1.230	2	.541	.756 ^b
Fisher's Exact Test	1.067			.756^b
Linear-by-Linear Association	.174 ^c	1	.676	.853 ^b
Number of valid cases	42			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .36

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is .417.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q4d - Distribution of responses for **institutional benefits** to enter into a PPP – **creation of differential advantage for your organization**, total and across sectors.

Sector:		Yes / maybe	No	I don't know / not applicable	Total
NGO-Academia	Count	16	2	7	25
	% within	64.0%	8.0%	28.0%	100.0%
Private	Count	9	2	4	15
	% within	60.0%	13.3%	26.7%	100.0%
Public	Count	33	17	22	72
	% within	45.8%	23.6%	30.6%	100.0%
Total	Count	58	21	33	112
	% within	51.8%	18.8%	29.5%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	4.178 ^a	4	.382	.388 ^b
Likelihood Ratio	4.523	4	.340	.364 ^b
Fisher's Exact Test	3.931			.411^b
Number of valid cases	112			

a. 3 cells (33.3%) have expected count less than 5. The minimum expected count is 2.81

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations -

Table Q4d - Distribution of responses for **institutional benefits** to enter into a PPP – **creation of differential advantage for your organization**, total and between **government and restaurant-related associations**.

Group:		Yes / maybe	No	I don't know / not applicable	Total
Government ^a	Count	10	8	9	27
	% within	37.0%	29.6%	33.3%	100.0%
Restaurant	Count	9	2	4	15
	% within	60.0%	13.3%	26.7%	100.0%
Total	Count	19	10	13	42
	% within	45.2%	23.8%	31.0%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	2.338 ^a	2	.311	.319 ^b
Likelihood Ratio	2.404	2	.301	.319 ^b
Fisher's Exact Test	2.198			.319^b
Linear-by-Linear Association	1.115 ^c	1	.291	.352 ^b
Number of valid cases	42			

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 3.57.

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is -1.056.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q5a - Distribution of responses for **barriers** to enter into a PPP – **potential for conflict of interest (e.g. inadvertently promote unhealthy food)**, total and across sectors.

Sector:		Yes, it is a barrier / somewhat a barrier	Not at all a barrier	I don't know / not applicable	Total
NGO-Academia	Count	20	3	2	25
	% within	80.0%	12.0%	8.0%	100.0%
Private	Count	7	5	3	15
	% within	46.7%	33.3%	20.0%	100.0%
Public	Count	57	7	8	72
	% within	79.2%	9.7%	11.3%	100.0%
Total	Count	84	15	13	112
	% within	75.0%	13.4%	11.6%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	8.275 ^a	4	.082	.079 ^b
Likelihood Ratio	7.155	4	.128	.183 ^b
Fisher's Exact Test	7.671			.085^b
Number of valid cases	112			

a. 4 cells (44.4%) have expected count less than 5. The minimum expected count is 1.74

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations -

Table Q5a - Distribution of responses for **barriers** to enter into a PPP – **potential for conflict of interest (e.g. inadvertently promote unhealthy food)**, total and between **government and restaurant-related associations**.

Group:		Yes, it is a barrier / somewhat a barrier	Not at all a barrier	I don't know / not applicable	Total
Government ^a	Count	23	1	3	27
	% within	85.2%	3.7%	11.1%	100.0%
Restaurant	Count	7	5	3	15
	% within	46.7%	33.3%	20.0%	100.0%
Total	Count	30	6	6	42
	% within	71.4%	14.3%	14.3%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	8.462 ^a	2	.015	.012 ^b
Likelihood Ratio	8.427	2	.015	.012 ^b
Fisher's Exact Test	8.022			.012^b
Linear-by-Linear Association	3.987 ^c	1	.046	.048 ^b
Number of valid cases	42			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is 2.14

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is 1.997.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q5b - Distribution of responses for **barriers** to enter into a PPP – **potential for inappropriate use of marketing strategies by one of the partner organizations**, total and across sectors.

Sector:		Yes, it is a barrier / somewhat a barrier	Not at all a barrier	I don't know / not applicable	Total
NGO-Academia	Count	19	3	3	25
	% within	76.0%	12.0%	12.0%	100.0%
Private	Count	8	2	5	15
	% within	53.3%	13.3%	33.3%	100.0%
Public	Count	60	4	8	72
	% within	83.3%	5.6%	11.1%	100.0%
Total	Count	87	9	16	112
	% within	77.7%	8.0%	14.3%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	7.423 ^a	4	.115	.105 ^b
Likelihood Ratio	6.470	4	.167	.226 ^b
Fisher's Exact Test	7.375			.085^b
Number of valid cases	112			

a. 4 cells (44.4%) have expected count less than 5. The minimum expected count is 1.21

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations -

Table Q5b - Distribution of responses for **barriers** to enter into a PPP – **potential for inappropriate use of marketing strategies by one of the partner organizations**, total and between **government and restaurant-related associations**.

Group:		Yes, it is a barrier / somewhat a barrier	Not at all a barrier	I don't know / not applicable	Total
Government ^a	Count	23	1	3	27
	% within	85.2%	3.7%	11.1%	100.0%
Restaurant	Count	8	2	5	15
	% within	53.3%	13.3%	33.3%	100.0%
Total	Count	31	3	8	42
	% within	73.8%	7.1%	19.0%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	5.077 ^a	2	.079	.085 ^b
Likelihood Ratio	4.940	2	.085	.132 ^b
Fisher's Exact Test	5.013			.085^b
Linear-by-Linear Association	4.378 ^c	1	.036	.039 ^b
Number of valid cases	42			

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 1.07

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is 2.092.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q5c - Distribution of responses for **barriers** to enter into a PPP – **opposition or resistance from stakeholders not directly involved in the PPP**, total and across sectors.

Sector:		Yes, it is a barrier / somewhat a barrier	Not at all a barrier	I don't know / not applicable	Total
NGO-Academia	Count	21	1	3	25
	% within	84.0%	4.0%	12.0%	100.0%
Private	Count	8	4	3	15
	% within	53.3%	26.7%	20.0%	100.0%
Public	Count	54	9	9	72
	% within	75.0%	12.5%	12.5%	100.0%
Total	Count	83	14	15	112
	% within	74.1%	12.5%	13.4%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	5.633 ^a	4	.228	.223 ^b
Likelihood Ratio	5.581	4	.233	.307 ^b
Fisher's Exact Test	5.569			.211^b
Number of valid cases	112			

a. 4 cells (44.4%) have expected count less than 5. The minimum expected count is 1.22

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations -

Table Q5c: Distribution of responses for **barriers** to enter into a PPP – **opposition or resistance from stakeholders not directly involved in the PPP**, total and between **government and restaurant-related associations**.

Group:		Yes, it is a barrier / somewhat a barrier	Not at all a barrier	I don't know / not applicable	Total
Government ^a	Count	22	1	4	27
	% within	81.5%	3.7%	14.8%	100.0%
Restaurant	Count	8	4	3	15
	% within	53.3%	26.7%	20.0%	100.0%
Total	Count	30	5	7	42
	% within	71.4%	11.9%	16.7%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	5.496 ^a	2	.064	.071 ^b
Likelihood Ratio	5.388	2	.068	.111 ^b
Fisher's Exact Test	5.184			.068^b
Linear-by-Linear Association	1.800 ^c	1	.180	.207 ^b
Number of valid cases	42			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is 1.79

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is 1.342.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q5d - Distribution of responses for barriers to enter into a PPP – lack of trust in the other partner organization, total and across sectors.

Sector:		Yes, it is a barrier / somewhat a barrier	Not at all a barrier	I don't know / not applicable	Total
NGO-Academia	Count	20	2	3	25
	% within	80.0%	8.0%	12.0%	100.0%
Private	Count	8	3	4	15
	% within	53.3%	20.0%	26.7%	100.0%
Public	Count	52	8	12	72
	% within	72.2%	11.1%	16.7%	100.0%
Total	Count	80	13	19	112
	% within	71.4%	11.6%	17.0%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	3.356 ^a	4	.500	.519 ^b
Likelihood Ratio	3.202	4	.525	.580 ^b
Fisher's Exact Test	3.510			.473^b
Number of valid cases	112			

a. 4 cells (44.4%) have expected count less than 5. The minimum expected count is 1.74

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations -

Table Q5d - Distribution of responses for barriers to enter into a PPP – lack of trust in the other partner organization, total and between government and restaurant-related associations.

Group:		Yes, it is a barrier / somewhat a barrier	Not at all a barrier	I don't know / not applicable	Total
Government ^a	Count	21	2	4	27
	% within	77.8%	7.4%	14.8%	100.0%
Restaurant	Count	8	3	4	15
	% within	53.3%	20.0%	26.7%	100.0%
Total	Count	29	5	8	42
	% within	69.0%	11.9%	19.0%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	2.830 ^a	2	.243	.315 ^b
Likelihood Ratio	2.765	2	.251	.315 ^b
Fisher's Exact Test	2.932			.315^b
Linear-by-Linear Association	1.965 ^c	1	.161	.219 ^b
Number of valid cases	42			

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 1.79

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is 1.402.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q5e - Distribution of responses for **barriers** to enter into a PPP – **potential for loss of credibility in the eyes of the general public or shareholders**, total and across sectors.

Sector:		Yes, it is a barrier / somewhat a barrier	Not at all a barrier	I don't know / not applicable	Total
NGO-Academia	Count	17	6	2	25
	% within	68.0%	24.0%	8.0%	100.0%
Private	Count	7	5	3	15
	% within	46.7%	33.3%	20.0%	100.0%
Public	Count	48	12	12	72
	% within	66.7%	16.7%	16.7%	100.0%
Total	Count	72	23	17	112
	% within	64.3%	20.5%	15.2%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	3.892 ^a	4	.421	.438 ^b
Likelihood Ratio	3.959	4	.412	.454 ^b
Fisher's Exact Test	4.118			.394^b
Number of valid cases	112			

a. 3 cells (33.3%) have expected count less than 5. The minimum expected count is 2.28

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations -

Table Q5e - Distribution of responses for **barriers** to enter into a PPP – **potential for loss of credibility in the eyes of the general public or shareholders**, total and between **government** and **restaurant-related** associations.

Group:		Yes, it is a barrier / somewhat a barrier	Not at all a barrier	I don't know / not applicable	Total
Government ^a	Count	21	3	3	27
	% within	77.8%	11.1%	11.1%	100.0%
Restaurant	Count	7	5	3	15
	% within	46.7%	33.3%	20.0%	100.0%
Total	Count	28	8	6	42
	% within	66.7%	19.0%	14.3%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	4.433 ^a	2	.109	.099 ^b
Likelihood Ratio	4.354	2	.113	.166 ^b
Fisher's Exact Test	4.421			.099^b
Linear-by-Linear Association	2.814 ^c	1	.093	.121 ^b
Number of valid cases	42			

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 2.14

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is 1.678.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q6a - Distribution of responses for **organizations from the public sector to partner with the restaurant sector - Ontario Public Health Units**, total and across sectors.

Sector:		Yes / maybe	No	I don't know	Total
NGO-Academia	Count	19	5	1	25
	% within	76.0%	20.0%	4.0%	100.0%
Private	Count	9	4	2	15
	% within	60.0%	26.7%	13.3%	100.0%
Public	Count	60	7	2	69
	% within	87.0%	10.1%	2.9%	100.0%
Total	Count	88	16	5	109
	% within	80.7%	14.7%	4.6%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	7.065 ^a	4	.132	.113 ^b
Likelihood Ratio	6.126	4	.190	.244 ^b
Fisher's Exact Test	7.243			.087^b
Number of valid cases	109			

a. 5 cells (55.6%) have expected count less than 5. The minimum expected count is .69

b. Based on 10000 sampled tables with starting seed 20000000.

Government and Restaurant-Related Associations -

Table Q6a - Distribution of responses for **organizations from the public sector to partner with the restaurant sector - Ontario Public Health Units**, total and between **government and restaurant-related associations**.

Group:		Yes / maybe	No	I don't know	Total
Government ^a	Count	17	6	2	25
	% within	68.0%	24.0%	8.0%	100.0%
Restaurant	Count	9	4	2	15
	% within	60.0%	26.7%	13.3%	100.0%
Total	Count	26	10	4	40
	% within	65.0%	25.0%	10.0%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	.386 ^a	2	.825	.888 ^b
Likelihood Ratio	.378	2	.828	.888 ^b
Fisher's Exact Test	.616			.888^b
Linear-by-Linear Association	.363 ^c	1	.547	.623 ^b
Number of valid cases	40			

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 1.50

b. Based on 10000 sampled tables with starting seed 424620234

c. The standardized statistic is .603

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q6b - Distribution of responses for **organizations from the public sector to partner with the restaurant sector - Ontario Ministry of Health and Long-Term Care**, total and across sectors.

Sector:		Yes / maybe	No	I don't know	Total
NGO-Academia	Count	18	5	2	25
	% within	72.0%	20.0%	8.0%	100.0%
Private	Count	12	2	1	15
	% within	80.0%	13.3%	6.7%	100.0%
Public	Count	54	15	1	70
	% within	77.1%	21.4%	1.4%	100.0%
Total	Count	84	22	4	110
	% within	76.4%	20.0%	3.6%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	3.125 ^a	4	.537	.534 ^b
Likelihood Ratio	3.040	4	.551	.657 ^b
Fisher's Exact Test	3.652			.413^b
Number of valid cases	110			

a. 5 cells (55.6%) have expected count less than 5. The minimum expected count is .55

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations -

Table Q6b - Distribution of responses for **organizations from the public sector to partner with the restaurant sector - Ontario Ministry of Health and Long-Term Care**, total and between **government and restaurant-related associations**.

Group:		Yes / maybe	No	I don't know	Total
Government ^a	Count	17	8	1	25
	% within	65.4%	30.8%	3.8%	100.0%
Restaurant	Count	12	2	1	15
	% within	80.0%	13.3%	6.7%	100.0%
Total	Count	29	10	2	41
	% within	70.7%	24.4%	4.9%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	1.628 ^a	2	.443	.543 ^b
Likelihood Ratio	1.734	2	.420	.660 ^b
Fisher's Exact Test	1.814			.361^b
Linear-by-Linear Association	.400 ^c	1	.527	.583 ^b
Number of valid cases	41			

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .73.

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is -.633.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q6c - Distribution of responses for organizations from the public sector to partner with the restaurant sector - Ontario Ministry of Agriculture and Food, total and across sectors.

Sector:		Yes / maybe	No	I don't know	Total
NGO-Academia	Count	23	1	1	25
	% within	92.0%	4.0%	4.0%	100.0%
Private	Count	14	0	1	15
	% within	93.3%	0.0%	6.7%	100.0%
Public	Count	58	9	2	69
	% within	84.1%	13.0%	2.9%	100.0%
Total	Count	95	10	4	109
	% within	87.2%	9.2%	3.7%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	3.927 ^a	4	.416	.422 ^b
Likelihood Ratio	5.304	4	.258	.358 ^b
Fisher's Exact Test	3.733			.388^b
Number of valid cases	109			

a. 5 cells (55.6%) have expected count less than 5. The minimum expected count is .55.

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations -

Table Q6c - Distribution of responses for organizations from the public sector to partner with the restaurant sector - Ontario Ministry of Agriculture and Food, total and between government and restaurant-related associations.

Group:		Yes / maybe	No	I don't know	Total
Government ^a	Count	17	8	1	26
	% within	65.4%	30.8%	3.8%	100.0%
Restaurant	Count	14	0	1	15
	% within	93.3%	0.0%	6.7%	100.0%
Total	Count	31	8	2	41
	% within	75.6%	19.5%	4.9%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	5.753 ^a	2	.056	.040 ^b
Likelihood Ratio	8.393	2	.015	.017 ^b
Fisher's Exact Test	6.322			.032^b
Linear-by-Linear Association	1.924 ^c	1	.165	.243 ^b
Number of valid cases	41			

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .73

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is -1.387

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q6d - Distribution of responses for organizations from the public sector to partner with the restaurant sector - Ontario Ministry of Economic Development, Trade and Employment, total and across sectors.

Sector:		Yes / maybe	No	I don't know	Total
NGO-Academia	Count	16	8	1	25
	% within	64.0%	32.0%	4.0%	100.0%
Private	Count	11	3	1	15
	% within	73.3%	20.0%	6.7%	100.0%
Public	Count	45	19	6	70
	% within	64.3%	27.1%	8.6%	100.0%
Total	Count	72	30	8	110
	% within	65.5%	27.3%	7.3%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	1.199 ^a	4	.878	.902 ^b
Likelihood Ratio	1.277	4	.865	.890 ^b
Fisher's Exact Test	1.093			.927^b
Number of valid cases	110			

a. 3 cells (33.3%) have expected count less than 5. The minimum expected count is 1.09.

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations -

Table Q6d - Distribution of responses for organizations from the public sector to partner with the restaurant sector - Ontario Ministry of Economic Development, Trade and Employment, total and between government and restaurant-related associations.

Group:		Yes / maybe	No	I don't know	Total
Government ^a	Count	13	11	2	26
	% within	50.0%	42.3%	7.7%	100.0%
Restaurant	Count	11	3	1	15
	% within	73.3%	20.0%	6.7%	100.0%
Total	Count	24	14	3	41
	% within	58.5%	34.1%	7.3%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	2.285 ^a	2	.319	.316 ^b
Likelihood Ratio	2.379	2	.304	.441 ^b
Fisher's Exact Test	2.339			.316^b
Linear-by-Linear Association	1.390 ^c	1	.238	.307 ^b
Number of valid cases	41			

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 1.10.

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is -1.179.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q6e - Distribution of responses for **organizations from the public sector to partner with the restaurant sector - Ontario Ministry of Education**, total and across sectors.

Sector:		Yes / maybe	No	I don't know	Total
NGO-Academia	Count	17	7	1	25
	% within	68.0%	28.0%	4.0%	100.0%
Private	Count	7	5	1	13
	% within	53.8%	38.5%	7.7%	100.0%
Public	Count	53	16	1	70
	% within	75.7%	23.2%	1.4%	100.0%
Total	Count	77	28	3	108
	% within	71.3%	25.9%	2.8%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	3.592 ^a	4	.464	.462 ^b
Likelihood Ratio	3.260	4	.515	.584 ^b
Fisher's Exact Test	4.563			.268^b
Number of valid cases	108			

a. 4 cells (44.4%) have expected count less than 5. The minimum expected count is .36.

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations -

Table Q6e - Distribution of responses for **organizations from the public sector to partner with the restaurant sector - Ontario Ministry of Education**, total and between **government and restaurant-related associations**.

Group:		Yes / maybe	No	I don't know	Total
Government ^a	Count	15	10	1	26
	% within	57.7%	38.5%	3.8%	100.0%
Restaurant	Count	7	5	1	13
	% within	53.8%	38.5%	7.7%	100.0%
Total	Count	22	15	2	39
	% within	56.4%	38.5%	5.1%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	.273 ^a	2	.873	1.000 ^b
Likelihood Ratio	.258	2	.879	1.000 ^b
Fisher's Exact Test	.645			1.000^b
Linear-by-Linear Association	.142 ^c	1	.707	.776 ^b
Number of valid cases	39			

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is .67

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is .377.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q6f - Distribution of responses for **organizations from the public sector to partner with the restaurant sector - Ontario Ministry of Children and Youth Services**, total and across sectors.

Sector:		Yes / maybe	No	I don't know	Total
NGO-Academia	Count	16	7	2	25
	% within	64.0%	28.0%	8.0%	100.0%
Private	Count	10	4	1	15
	% within	66.7%	26.7%	6.7%	100.0%
Public	Count	50	19	1	70
	% within	71.4%	27.1%	1.4%	100.0%
Total	Count	76	30	4	110
	% within	69.1%	27.3%	3.6%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	2.795 ^a	4	.593	.589 ^b
Likelihood Ratio	2.669	4	.615	.739 ^b
Fisher's Exact Test	3.492			.434^b
Number of valid cases	110			

a. 4 cells (44.4%) have expected count less than 5. The minimum expected count is .55

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations -

Table Q6f - Distribution of responses for **organizations from the public sector to partner with the restaurant sector - Ontario Ministry of Children and Youth Services**, total and between **government and restaurant-related associations**.

Group:		Yes / maybe	No	I don't know	Total
Government ^a	Count	13	12	1	26
	% within	50.0%	46.2%	3.8%	100.0%
Restaurant	Count	10	4	1	15
	% within	66.7%	26.7%	6.7%	100.0%
Total	Count	23	16	2	41
	% within	56.1%	39.0%	4.9%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	1.552 ^a	2	.460	.479 ^b
Likelihood Ratio	1.591	2	.451	.674 ^b
Fisher's Exact Test	1.805			.401^b
Linear-by-Linear Association	.512 ^c	1	.474	.588 ^b
Number of valid cases	41			

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is .73.

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is -.716.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q6g - Distribution of responses for **organizations from the public sector to partner with the restaurant sector - Health Canada**, total and across sectors.

Sector:		Yes / maybe	No	I don't know	Total
NGO-Academia	Count	18	5	2	25
	% within	72.0%	20.0%	8.0%	100.0%
Private	Count	12	2	1	15
	% within	80.0%	13.3%	6.7%	100.0%
Public	Count	57	12	1	70
	% within	81.4%	17.1%	1.4%	100.0%
Total	Count	87	19	4	110
	% within	79.1%	17.3%	3.6%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	3.078 ^a	4	.545	.562 ^b
Likelihood Ratio	2.960	4	.564	.699 ^b
Fisher's Exact Test	3.739			.403^b
Number of valid cases	110			

a. 5 cells (55.6%) have expected count less than 5. The minimum expected count is .55

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations -

Table Q6g - Distribution of responses for **organizations from the public sector to partner with the restaurant sector - Health Canada**, total and between government and restaurant-related associations.

Group:		Yes / maybe	No	I don't know	Total
Government ^a	Count	16	9	1	26
	% within	61.5%	34.6%	3.8%	100.0%
Restaurant	Count	12	2	1	15
	% within	80.0%	13.3%	6.7%	100.0%
Total	Count	28	11	2	41
	% within	68.3%	26.8%	4.9%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	2.236 ^a	2	.327	.362 ^b
Likelihood Ratio	2.404	2	.301	.439 ^b
Fisher's Exact Test	2.421			.362^b
Linear-by-Linear Association	.689 ^c	1	.407	.572 ^b
Number of valid cases	41			

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .73

b. Based on 10000 sampled tables with starting seed 424620234

c. The standardized statistic is -.830.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q6h - Distribution of responses for **organizations from the public sector to partner with the restaurant sector - Public Health Agency of Canada**, total and across sectors.

Sector:		Yes / maybe	No	I don't know	Total
NGO-Academia	Count	18	5	2	25
	% within	72.0%	20.0%	8.0%	100.0%
Private	Count	12	1	1	14
	% within	85.7%	7.1%	7.1%	100.0%
Public	Count	59	8	1	69
	% within	85.5%	13.0%	1.4%	100.0%
Total	Count	89	15	4	108
	% within	82.4%	13.9%	3.7%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	4.234 ^a	4	.375	.356 ^b
Likelihood Ratio	4.145	4	.387	.488 ^b
Fisher's Exact Test	4.784			.248^b
Number of valid cases	108			

a. 5 cells (55.6%) have expected count less than 5. The minimum expected count is .52

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations -

Table Q6h - Distribution of responses for **organizations from the public sector to partner with the restaurant sector - Public Health Agency of Canada**, total and between **government and restaurant-related associations**.

Group:		Yes / maybe	No	I don't know	Total
Government ^a	Count	17	8	1	26
	% within	65.4%	30.8%	3.8%	100.0%
Restaurant	Count	12	1	1	14
	% within	85.7%	7.1%	7.1%	100.0%
Total	Count	29	9	2	40
	% within	72.5%	22.5%	5.0%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	2.974 ^a	2	.226	.226 ^b
Likelihood Ratio	3.408	2	.182	.283 ^b
Fisher's Exact Test	3.142			.226^b
Linear-by-Linear Association	.806 ^c	1	.369	.404 ^b
Number of valid cases	40			

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .70.

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is -.898.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q6i - Distribution of responses for **organizations from the public sector to partner with the restaurant sector – an independent organization established for the purpose of the partnership**, total and across sectors.

Sector:		Yes / maybe	No	I don't know	Total
NGO-Academia	Count	19	0	6	25
	% within	76.0%	0.0%	24.0%	100.0%
Private	Count	12	1	2	15
	% within	80.0%	6.7%	13.3%	100.0%
Public	Count	50	11	7	68
	% within	73.5%	16.2%	10.3%	100.0%
Total	Count	81	12	15	108
	% within	75.0%	11.1%	13.9%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	7.164 ^a	4	.127	.126 ^b
Likelihood Ratio	9.521	4	.049	.074 ^b
Fisher's Exact Test	7.082			.109^b
Number of valid cases	108			

a. 4 cells (44.4%) have expected count less than 5. The minimum expected count is 1.67

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations -

Table Q6i - Distribution of responses for **organizations from the public sector to partner with the restaurant sector - an independent organization established for the purpose of the partnership**, total and between government and restaurant-related associations.

Group:		Yes / maybe	No	I don't know	Total
Government ^a	Count	20	5	1	26
	% within	76.9%	19.2%	3.8%	100.0%
Restaurant	Count	12	1	2	15
	% within	80.0%	6.7%	13.3%	100.0%
Total	Count	32	6	3	41
	% within	78.0%	14.6%	7.3%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	2.208 ^a	2	.332	.384 ^b
Likelihood Ratio	2.285	2	.319	.466 ^b
Fisher's Exact Test	2.099			.371^b
Linear-by-Linear Association	.108 ^c	1	.743	.789 ^b
Number of valid cases	41			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is 1.10

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is .329.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q6j - Distribution of responses for **organizations from the public sector to partner with the restaurant sector – your own organization**, total and across sectors.

Sector:		Yes / maybe	No	I don't know	Total
NGO-Academia	Count	19	5	1	25
	% within	76.0%	20.0%	4.0%	100.0%
Private	Count	11	2	2	15
	% within	73.3%	13.3%	13.3%	100.0%
Public	Count	45	16	7	68
	% within	66.2%	23.5%	10.3%	100.0%
Total	Count	75	23	10	108
	% within	69.4%	21.3%	9.3%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	2.012 ^a	4	.734	.762 ^b
Likelihood Ratio	2.241	4	.691	.739 ^b
Fisher's Exact Test	1.916			.771^b
Number of valid cases	108			

a. 3 cells (33.3%) have expected count less than 5. The minimum expected count is 1.39

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations -

Table Q6j - Distribution of responses for **organizations from the public sector to partner with the restaurant sector - your own organization**, total and between **government and restaurant-related associations**.

Group:		Yes / maybe	No	I don't know	Total
Government ^a	Count	13	9	4	26
	% within	50.0%	34.6%	15.4%	100.0%
Restaurant	Count	11	2	2	15
	% within	73.3%	13.3%	13.3%	100.0%
Total	Count	24	11	6	41
	% within	58.5%	26.8%	14.6%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	2.518 ^a	2	.284	.315 ^b
Likelihood Ratio	2.677	2	.262	.315 ^b
Fisher's Exact Test	2.447			.315^b
Linear-by-Linear Association	1.110 ^c	1	.292	.380 ^b
Number of valid cases	41			

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 2.20.

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is -1.053.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q7a_{Gov} - Distribution of responses for the **role of the government in a PPP – develop PPP guidelines**, total and across sectors.

Sector:		Yes / maybe	No	I don't know	Total
NGO-Academia	Count	23	0	2	25
	% within	92.0%	0.0%	8.0%	100.0%
Private	Count	13	1	1	15
	% within	86.7%	6.7%	6.7%	100.0%
Public	Count	69	1	0	70
	% within	98.6%	1.4%	0.0%	100.0%
Total	Count	105	2	3	110
	% within	95.5%	1.8%	2.7%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	7.987 ^a	4	.092	.113 ^b
Likelihood Ratio	8.436	4	.077	.068 ^b
Fisher's Exact Test	8.262			.032^b
Number of valid cases	110			

a. 6 cells (66.7%) have expected count less than 5. The minimum expected count is .27

b. Based on 10000 sampled tables with starting seed 2000000.

Table Q7a_{Rest} - Distribution of responses for the **role of the restaurant chains in a PPP – develop PPP guidelines**, total and across sectors.

Sector:		Yes / maybe	No	I don't know	Total
NGO-Academia	Count	18	6	1	25
	% within	72.0%	24.0%	4.0%	100.0%
Private	Count	13	1	1	15
	% within	86.7%	6.7%	6.7%	100.0%
Public	Count	55	15	0	70
	% within	78.6%	21.4%	0.0%	100.0%
Total	Count	86	22	2	110
	% within	78.2%	20.0%	1.8%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	5.733 ^a	4	.220	.187 ^b
Likelihood Ratio	6.496	4	.165	.165 ^b
Fisher's Exact Test	6.123			.144^b
Number of valid cases	110			

a. 4 cells (44.4%) have expected count less than 5. The minimum expected count is .27

b. Based on 10000 sampled tables with starting seed 2000000.

Appendix 5f - Results of Survey Responses - Cont'd

Government and Restaurant-Related Associations -

Table Q7a_{Gov} - Distribution of responses for the **role of the government in a PPP – develop PPP guidelines**, total and between **government and restaurant-related associations**.

Group:		Yes / maybe	No	I don't know	Total
Government ^a	Count	25	1	0	26
	% within	96.2%	3.8%	0.0%	100.0%
Restaurant	Count	13	1	1	15
	% within	86.7%	6.7%	6.7%	100.0%
Total	Count	38	2	1	41
	% within	92.7%	4.9%	2.4%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	1.981 ^a	2	.371	.461 ^b
Likelihood Ratio	2.254	2	.324	.695 ^b
Fisher's Exact Test	2.164			.461^b
Linear-by-Linear Association	1.770 ^c	1	.183	.206 ^b
Number of valid cases	41			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .37

b. Based on 10000 sampled tables with starting seed 424620234

c. The standardized statistic is 1.330

Table Q7a_{Rest} - Distribution of responses for the **role of the restaurant chains in a PPP – develop PPP guidelines**, total and between **government and restaurant-related associations**.

Group:		Yes / maybe	No	I don't know	Total
Government ^a	Count	20	6	0	26
	% within	76.9%	23.1%	0.0%	100.0%
Restaurant	Count	13	1	1	15
	% within	86.7%	6.7%	6.7%	100.0%
Total	Count	33	7	1	41
	% within	80.5%	17.1%	2.4%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	3.346 ^a	2	.188	.189 ^b
Likelihood Ratio	3.857	2	.145	.140 ^b
Fisher's Exact Test	3.039			.189^b
Linear-by-Linear Association	.040 ^c	1	.842	1.000 ^b
Number of valid cases	41			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .37

b. Based on 10000 sampled tables with starting seed 424620234

c. The standardized statistic is -.200.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors –

Table Q7b_{Gov} - Distribution of responses for the **role of the government in a PPP – participate in the design of the partnership**, total and across sectors.

Sector:		Yes / maybe	No	I don't know	Total
NGO-Academia	Count	23	1	1	25
	% within	92.0%	4.0%	4.0%	100.0%
Private	Count	12	2	1	15
	% within	80.0%	13.3%	6.7%	100.0%
Public	Count	67	3	0	70
	% within	95.7%	4.3%	0.0%	100.0%
Total	Count	102	6	2	110
	% within	92.7%	5.5%	1.8%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	6.177 ^a	4	.186	.144 ^b
Likelihood Ratio	6.026	4	.197	.244 ^b
Fisher's Exact Test	6.771			.094^b
Number of valid cases	110			

a. 6 cells (66.7%) have expected count less than 5. The minimum expected count is .27

b. Based on 10000 sampled tables with starting seed 2000000

Table Q7b_{Rest} - Distribution of responses for the **role of the restaurant chains in a PPP – participate in the design of the partnership**, total and across sectors.

Sector:		Yes / maybe	No	I don't know	Total
NGO-Academia	Count	21	3	1	25
	% within	84.0%	12.0%	4.0%	100.0%
Private	Count	14	0	1	15
	% within	93.3%	0.0%	6.7%	100.0%
Public	Count	67	3	0	70
	% within	95.7%	4.3%	0.0%	100.0%
Total	Count	101	6	2	110
	% within	92.7%	5.5%	1.8%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	7.097 ^a	4	.131	.130 ^b
Likelihood Ratio	7.739	4	.102	.100 ^b
Fisher's Exact Test	6.923			.079^b
Number of valid cases	110			

a. 6 cells (66.7%) have expected count less than 5. The minimum expected count is .27

b. Based on 10000 sampled tables with starting seed 2000000.

Appendix 5f - Results of Survey Responses - Cont'd

Government and Restaurant-Related Associations -

Table Q7b_{Gov} - Distribution of responses for the **role of the government in a PPP – participate in the design of the partnership**, total and between **government and restaurant-related associations**.

Group:		Yes / maybe	No	I don't know	Total
Government ^a	Count	25	1	0	26
	% within	96.2%	3.8%	0.0%	100.0%
Restaurant	Count	12	2	1	15
	% within	80.0%	13.3%	6.7%	100.0%
Total	Count	37	3	1	41
	% within	90.2%	7.3%	2.4%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	3.178 ^a	2	.204	.223 ^b
Likelihood Ratio	3.405	2	.182	.365 ^b
Fisher's Exact Test	3.120			.125^b
Linear-by-Linear Association	3.101 ^c	1	.078	.098 ^b
Number of valid cases	41			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .37

b. Based on 10000 sampled tables with starting seed 424620234

c. The standardized statistic is 1.761.

Table Q7b_{Rest} - Distribution of responses for the **role of the restaurant chains in a PPP – participate in the design of the partnership**, total and between **government and restaurant-related associations**.

Group:		Yes / maybe	No	I don't know	Total
Government ^a	Count	24	2	0	26
	% within	92.3%	7.7%	0.0%	100.0%
Restaurant	Count	14	0	1	15
	% within	93.3%	0.0%	6.7%	100.0%
Total	Count	38	2	1	41
	% within	92.7%	4.9%	2.4%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	2.888 ^a	2	.236	.286 ^b
Likelihood Ratio	3.843	2	.147	.286 ^b
Fisher's Exact Test	2.391			.286^b
Linear-by-Linear Association	.216 ^c	1	.642	.695 ^b
Number of valid cases	41			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .37

b. Based on 10000 sampled tables with starting seed 424620234

c. The standardized statistic is .465

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors –

Table Q7cGov - Distribution of responses for the **role of the government in a PPP – coordinate the implementation of the partnership**, total and across sectors.

Sector:		Yes / maybe	No	I don't know	Total
NGO-Academia	Count	22	1	2	25
	% within	88.0%	4.0%	8.0%	100.0%
Private	Count	14	0	1	15
	% within	93.3%	0.0%	6.7%	100.0%
Public	Count	65	5	0	70
	% within	92.9%	7.1%	0.0%	100.0%
Total	Count	101	6	3	110
	% within	91.8%	5.5%	2.7%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	6.644 ^a	4	.156	.144 ^b
Likelihood Ratio	8.221	4	.084	.089 ^b
Fisher's Exact Test	6.372			.095^b
Number of valid cases	110			

a. 6 cells (66.7%) have expected count less than 5. The minimum expected count is .41.

b. Based on 10000 sampled tables with starting seed 2000000.

Table Q7cRest - Distribution of responses for the **role of the restaurant chains in a PPP – coordinate the implementation of the partnership**, total and across sectors.

Sector:		Yes / maybe	No	I don't know	Total
NGO-Academia	Count	20	4	1	25
	% within	80.0%	16.0%	4.0%	100.0%
Private	Count	13	1	1	15
	% within	86.7%	6.7%	6.7%	100.0%
Public	Count	64	5	1	70
	% within	91.4%	7.1%	1.4%	100.0%
Total	Count	97	10	3	110
	% within	88.2%	9.1%	2.7%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	3.414 ^a	4	.491	.489 ^b
Likelihood Ratio	3.033	4	.552	.711 ^b
Fisher's Exact Test	4.254			.284^b
Number of valid cases	110			

a. 6 cells (66.7%) have expected count less than 5. The minimum expected count is .41.

b. Based on 10000 sampled tables with starting seed 2000000.

Appendix 5f - Results of Survey Responses - Cont'd

Government and Restaurant-Related Associations –

Table Q7C_{Gov} - Distribution of responses for the **role of the government in a PPP – coordinate the implementation of the partnership**, total and between **government and restaurant-related associations**.

Group:		Yes / maybe	No	I don't know	Total
Government ^a	Count	25	1	0	26
	% within	96.2%	3.8%	0.0%	100.0%
Restaurant	Count	14	0	1	15
	% within	93.3%	0.0%	6.7%	100.0%
Total	Count	39	1	1	41
	% within	95.1%	2.4%	2.4%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	2.318 ^a	2	.314	.613 ^b
Likelihood Ratio	2.930	2	.231	.613 ^b
Fisher's Exact Test	2.169			.613^b
Linear-by-Linear Association	.716 ^c	1	.397	.756 ^b
Number of valid cases	41			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .37

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is .846.

Table Q7C_{Rest} - Distribution of responses for the **role of the restaurant chains in a PPP – coordinate the implementation of the partnership**, total and between **government and restaurant-related associations**.

Group:		Yes / maybe	No	I don't know	Total
Government ^a	Count	23	3	0	26
	% within	88.5%	11.5%	0.0%	100.0%
Restaurant	Count	13	1	1	15
	% within	86.7%	6.7%	6.7%	100.0%
Total	Count	36	4	1	41
	% within	87.8%	9.8%	2.4%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	1.968 ^a	2	.374	.542 ^b
Likelihood Ratio	2.260	2	.323	.542 ^b
Fisher's Exact Test	1.842			.542^b
Linear-by-Linear Association	.383 ^c	1	.536	.716 ^b
Number of valid cases	41			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .37

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is .618.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors –

Table Q7d_{Gov} - Distribution of responses for the **role of the government in a PPP – monitor partnership operation**, total and across sectors.

Sector:		Yes / maybe	No	I don't know	Total
NGO-Academia	Count	23	1	1	25
	% within	92.0%	4.0%	4.0%	100.0%
Private	Count	12	2	1	15
	% within	80.0%	13.3%	6.7%	100.0%
Public	Count	65	3	2	70
	% within	92.9%	4.3%	2.9%	100.0%
Total	Count	100	6	4	110
	% within	90.9%	5.5%	3.6%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	2.713 ^a	4	.607	.620 ^b
Likelihood Ratio	2.183	4	.702	.893 ^b
Fisher's Exact Test	3.532			.422^b
Number of valid cases	110			

a. 6 cells (66.7%) have expected count less than 5. The minimum expected count is .55

b. Based on 10000 sampled tables with starting seed 2000000

Table Q7d_{Rest} - Distribution of responses for the **role of the restaurant chains in a PPP – monitor partnership operation**, total and across sectors.

Sector:		Yes / maybe	No	I don't know	Total
NGO-Academia	Count	21	3	1	25
	% within	84.0%	12.0%	4.0%	100.0%
Private	Count	12	2	1	15
	% within	80.0%	13.3%	6.7%	100.0%
Public	Count	62	6	2	70
	% within	88.6%	8.6%	2.9%	100.0%
Total	Count	95	11	4	110
	% within	86.4%	10.0%	3.6%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	1.040 ^a	4	.904	.910 ^b
Likelihood Ratio	.961	4	.916	.956 ^b
Fisher's Exact Test	2.178			.696^b
Number of valid cases	110			

a. 5 cells (55.6%) have expected count less than 5. The minimum expected count is .55

b. Based on 10000 sampled tables with starting seed 2000000

Appendix 5f - Results of Survey Responses - Cont'd

Government and Restaurant-Related Associations –

Table Q7d_{Gov} - Distribution of responses for the **role of the government in a PPP – monitor partnership operation**, total and between **government and restaurant-related associations**.

Group:		Yes / maybe	No	I don't know	Total
Government ^a	Count	23	2	1	26
	% within	88.5%	7.7%	3.8%	100.0%
Restaurant	Count	12	2	1	15
	% within	80.0%	13.3%	6.7%	100.0%
Total	Count	35	4	2	41
	% within	85.4%	9.8%	4.9%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	.545 ^a	2	.761	.812 ^b
Likelihood Ratio	.529	2	.768	.812 ^b
Fisher's Exact Test	1.017			.812^b
Linear-by-Linear Association	.464 ^c	1	.496	.545 ^b
Number of valid cases	41			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .73

b. Based on 10000 sampled tables with starting seed 424620234

c. The standardized statistic is .681.

Table Q7d_{Rest} - Distribution of responses for the **role of the restaurant chains in a PPP – monitor partnership operation**, total and between **government and restaurant-related associations**.

Group:		Yes / maybe	No	I don't know	Total
Government ^a	Count	23	2	1	26
	% within	88.5%	7.7%	3.8%	100.0%
Restaurant	Count	12	2	1	15
	% within	80.0%	13.3%	6.7%	100.0%
Total	Count	35	4	2	41
	% within	85.4%	9.8%	4.9%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	.545 ^a	2	.761	.812 ^b
Likelihood Ratio	.529	2	.768	.812 ^b
Fisher's Exact Test	1.017			.812^b
Linear-by-Linear Association	.464 ^c	1	.496	.545 ^b
Number of valid cases	41			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .73

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is .681.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q7e_{gov} - Distribution of responses for the **role of the government in a PPP – be accountable for partnership performance**, total and across sectors.

Sector:		Yes / maybe	No	I don't know	Total
NGO-Academia	Count	22	2	1	25
	% within	88.0%	8.0%	4.0%	100.0%
Private	Count	14	0	1	15
	% within	93.3%	0.0%	6.7%	100.0%
Public	Count	63	7	0	70
	% within	90.0%	10.0%	0.0%	100.0%
Total	Count	99	9	2	110
	% within	90.0%	8.2%	1.8%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	5.407 ^a	4	.248	.207 ^b
Likelihood Ratio	6.924	4	.140	.162 ^b
Fisher's Exact Test	5.414			.205^b
Number of valid cases	110			

a. 5 cells (55.6%) have expected count less than 5. The minimum expected count is .27.

b. Based on 10000 sampled tables with starting seed 2000000.

Table Q7e_{rest} - Distribution of responses for the **role of the restaurant chains in a PPP – be accountable for partnership performance**, total and across sectors.

Sector:		Yes / maybe	No	I don't know	Total
NGO-Academia	Count	23	1	1	25
	% within	92.0%	4.0%	4.0%	100.0%
Private	Count	14	0	1	15
	% within	93.3%	0.0%	6.7%	100.0%
Public	Count	68	2	0	70
	% within	97.1%	2.9%	0.0%	100.0%
Total	Count	105	3	2	110
	% within	95.5%	2.7%	1.8%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	4.488 ^a	4	.344	.287 ^b
Likelihood Ratio	5.187	4	.269	.220 ^b
Fisher's Exact Test	5.072			.220^b
Number of valid cases	110			

a. 6 cells (66.7%) have expected count less than 5. The minimum expected count is .27.

b. Based on 10000 sampled tables with starting seed 2000000.

Appendix 5f - Results of Survey Responses - Cont'd

Government and Restaurant-Related Associations –

Table Q7_{e_{gov}} - Distribution of responses for the **role of the government in a PPP – be accountable for partnership performance**, total and between **government and restaurant-related associations**.

Group:		Yes / maybe	No	I don't know	Total
Government ^a	Count	22	4	0	26
	% within	84.6%	15.4%	0.0%	100.0%
Restaurant	Count	14	0	1	15
	% within	93.3%	0.0%	6.7%	100.0%
Total	Count	36	4	1	41
	% within	87.8%	9.8%	2.4%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	4.123 ^a	2	.127	.109 ^b
Likelihood Ratio	5.736	2	.057	.072 ^b
Fisher's Exact Test	3.622			.109^b
Linear-by-Linear Association	.022 ^c	1	.881	1.000 ^b
Number of valid cases	41			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .37

b. Based on 10000 sampled tables with starting seed 424620234

c. The standardized statistic is -.150.

Table Q7_{e_{rest}} - Distribution of responses for the **role of the restaurant chains in a PPP – be accountable for partnership performance**, total and between **government and restaurant-related associations**.

Group:		Yes / maybe	No	I don't know	Total
Government ^a	Count	25	1	0	26
	% within	96.2%	3.8%	0.0%	100.0%
Restaurant	Count	14	0	1	15
	% within	93.3%	0.0%	6.7%	100.0%
Total	Count	39	1	1	41
	% within	95.1%	2.4%	2.4%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	2.318 ^a	2	.314	.613 ^b
Likelihood Ratio	2.930	2	.231	.613 ^b
Fisher's Exact Test	2.169			.613^b
Linear-by-Linear Association	.716 ^c	1	.397	.756 ^b
Number of valid cases	41			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .37

b. Based on 10000 sampled tables with starting seed 424620234

c. The standardized statistic is .846.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors –

Table Q7f_{gov} - Distribution of responses for the **role of the government in a PPP – contribute funding to the partnership**, total and across sectors.

Sector:		Yes / maybe	No	I don't know	Total
NGO-Academia	Count	20	4	1	25
	% within	80.0%	16.0%	4.0%	100.0%
Private	Count	14	0	1	15
	% within	93.3%	0.0%	6.7%	100.0%
Public	Count	56	11	3	70
	% within	80.0%	15.7%	4.3%	100.0%
Total	Count	90	15	5	110
	% within	81.8%	13.6%	4.5%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	2.826 ^a	4	.587	.607 ^b
Likelihood Ratio	4.827	4	.305	.417 ^b
Fisher's Exact Test	3.253			.510^b
Number of valid cases	110			

a. 5 cells (55.6%) have expected count less than 5. The minimum expected count is .68.

b. Based on 10000 sampled tables with starting seed 2000000.

Table Q7f_{rest} - Distribution of responses for the **role of the restaurant chains in a PPP – contribute funding to the partnership**, total and across sectors.

Sector:		Yes / maybe	No	I don't know	Total
NGO-Academia	Count	22	0	3	25
	% within	88.0%	0.0%	12.0%	100.0%
Private	Count	13	1	1	15
	% within	86.7%	6.7%	6.7%	100.0%
Public	Count	66	1	3	70
	% within	94.3%	1.4%	4.3%	100.0%
Total	Count	101	2	7	110
	% within	92.8%	1.8%	6.4%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	4.307 ^a	4	.366	.299 ^b
Likelihood Ratio	3.774	4	.437	.584 ^b
Fisher's Exact Test	4.487			.279^b
Number of valid cases	110			

a. 6 cells (66.7%) have expected count less than 5. The minimum expected count is .27.

b. Based on 10000 sampled tables with starting seed 2000000.

Appendix 5f - Results of Survey Responses - Cont'd

Government and Restaurant-Related Associations –

Table Q7f_{Gov} - Distribution of responses for the **role of the government in a PPP – contribute funding to the partnership**, total and between **government and restaurant-related associations**.

Group:		Yes / maybe	No	I don't know	Total
Government ^a	Count	19	5	1	26
	% within	73.0%	19.2%	7.7%	100.0%
Restaurant	Count	14	0	1	15
	% within	93.3%	0.0%	6.7%	100.0%
Total	Count	33	5	2	41
	% within	80.5%	12.2%	7.3%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	3.383 ^a	2	.184	.277 ^b
Likelihood Ratio	5.044	2	.080	.155 ^b
Fisher's Exact Test	3.258			.177^b
Linear-by-Linear Association	1.227 ^c	1	.268	.292 ^b
Number of valid cases	41			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is 1.10

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is -1.108.

Table Q7f_{Rest} - Distribution of responses for the **role of the restaurant chains in a PPP – contribute funding to the partnership**, total and between **government and restaurant-related associations**.

Group:		Yes / maybe	No	I don't know	Total
Government ^a	Count	23	1	2	26
	% within	88.5%	3.8%	7.7%	100.0%
Restaurant	Count	13	1	1	15
	% within	86.7%	6.7%	6.7%	100.0%
Total	Count	36	2	2	41
	% within	87.8%	4.9%	7.3%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	.172 ^a	2	.917	1.000 ^b
Likelihood Ratio	.167	2	.920	1.000 ^b
Fisher's Exact Test	.626			1.000^b
Linear-by-Linear Association	.002 ^c	1	.966	1.000 ^b
Number of valid cases	41			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .73

b. Based on 10000 sampled tables with starting seed 424620234

c. The standardized statistic is .043.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q8a - Distribution of responses for **strategies to implement in restaurant chains – menu labelling**, total and across sectors.

Sector:		Agree	Disagree	Undecided / I don't know	Total
NGO-Academia	Count	21	1	3	25
	% within	84.0%	4.0%	12.0%	100.0%
Private	Count	9	1	5	15
	% within	60.0%	6.7%	33.3%	100.0%
Public	Count	65	2	3	70
	% within	92.9%	2.9%	4.3%	100.0%
Total	Count	95	4	11	110
	% within	86.4%	3.6%	10.0%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	12.622 ^a	4	.013	.019 ^b
Likelihood Ratio	10.191	4	.037	.039 ^b
Fisher's Exact Test	11.374			.009^b
Number of valid cases	110			

a. 5 cells (55.6%) have expected count less than 5. The minimum expected count is .55

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations –

Table Q8a - Distribution of responses for **strategies to implement in restaurant chains – menu labelling**, total and between **government and restaurant-related associations**.

Group:		Agree	Disagree	Undecided / I don't know	Total
Government ^a	Count	24	1	1	26
	% within	92.3%	3.8%	3.8%	100.0%
Restaurant	Count	9	1	5	15
	% within	60.0%	6.7%	33.3%	100.0%
Total	Count	32	2	6	41
	% within	80.0%	4.9%	14.6%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	7.040 ^a	2	.030	.040 ^b
Likelihood Ratio	6.998	2	.030	.055 ^b
Fisher's Exact Test	6.819			.012^b
Linear-by-Linear Association	6.847 ^c	1	.009	.012 ^b
Number of valid cases	41			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .73

b. Based on 10000 sampled tables with starting seed 424620234

c. The standardized statistic is 2.617.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q8b - Distribution of responses for **strategies to implement in restaurant chains – marketing**, total and across sectors.

Sector:		Agree	Disagree	Undecided / I don't know	Total
NGO-Academia	Count	23	1	1	25
	% within	92.0%	4.0%	4.0%	100.0%
Private	Count	13	0	2	15
	% within	86.7%	0.0%	13.3%	100.0%
Public	Count	65	1	4	70
	% within	92.9%	1.4%	5.7%	100.0%
Total	Count	101	2	7	110
	% within	91.8%	1.8%	6.4%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	2.448 ^a	4	.654	.734 ^b
Likelihood Ratio	2.316	4	.678	.812 ^b
Fisher's Exact Test	2.954			.537^b
Number of valid cases	110			

a. 6 cells (66.7%) have expected count less than 5. The minimum expected count is .27.

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations –

Table Q8b - Distribution of responses for **strategies to implement in restaurant chains – marketing**, total and between **government and restaurant-related associations**.

Group:		Agree	Disagree	Undecided / I don't know	Total
Government ^a	Count	24	0	2	26
	% within	92.3%	0.0%	7.7%	100.0%
Restaurant	Count	13	0	2	15
	% within	86.7%	0.0%	13.3%	100.0%
Total	Count	37	0	4	41
	% within	90.2%	0.0%	9.8%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	.344 ^a	1	.558	.615
Continuity Correction ^b	.002	1	.968	
Likelihood Ratio	.333	1	.564	.615
Fisher's Exact Test				.615
Linear-by-Linear Association	.335 ^d	1	.562	.615
Number of valid cases	41			

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 1.46

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results

d. The standardized statistic is .579.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q8c - Distribution of responses for **strategies to implement in restaurant chains – economic incentives**, total and across sectors.

Sector:		Agree	Disagree	Undecided / I don't know	Total
NGO-Academia	Count	23	0	2	25
	% within	92.0%	0.0%	8.0%	100.0%
Private	Count	9	3	3	15
	% within	60.0%	20.0%	20.0%	100.0%
Public	Count	65	1	4	70
	% within	92.9%	1.4%	5.7%	100.0%
Total	Count	97	4	9	110
	% within	88.2%	3.6%	8.2%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	17.541 ^a	4	.002	.003 ^b
Likelihood Ratio	12.496	4	.014	.014 ^b
Fisher's Exact Test	12.090			.006 ^b
Number of valid cases	110			

a. 5 cells (55.6%) have expected count less than 5. The minimum expected count is .55

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations –

Table Q8c - Distribution of responses for **strategies to implement in restaurant chains – economic incentives**, total and between **government and restaurant-related associations**.

Group:		Agree	Disagree	Undecided / I don't know	Total
Government ^a	Count	23	1	2	26
	% within	88.5%	3.8%	7.7%	100.0%
Restaurant	Count	9	3	3	15
	% within	60.0%	20.0%	20.0%	100.0%
Total	Count	32	4	5	41
	% within	78.0%	9.8%	12.5%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	4.713 ^a	2	.095	.085 ^b
Likelihood Ratio	4.597	2	.100	.244 ^b
Fisher's Exact Test	4.558			.085^b
Linear-by-Linear Association	3.291 ^c	1	.070	.097 ^b
Number of valid cases	41			

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is 1.46

b. Based on 10000 sampled tables with starting seed 424620234

c. The standardized statistic is 1.814.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q8d - Distribution of responses for **strategies to implement in restaurant chains – healthier menu**, total and across sectors.

Sector:		Agree	Disagree	Undecided / I don't know	Total
NGO-Academia	Count	23	2	0	25
	% within	92.0%	8.0%	0.0%	100.0%
Private	Count	12	0	3	15
	% within	80.0%	0.0%	20.0%	100.0%
Public	Count	68	1	1	70
	% within	97.1%	1.4%	1.4%	100.0%
Total					
	Count	103	3	4	110
	% within	93.6%	2.7%	3.6%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	16.680 ^a	4	.002	.003 ^b
Likelihood Ratio	11.783	4	.019	.014 ^b
Fisher's Exact Test	10.526			.015 ^b
Number of valid cases	110			

a. 6 cells (66.7%) have expected count less than 5. The minimum expected count is .41.

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations –

Table Q8d - Distribution of responses for **strategies to implement in restaurant chains – healthier menu**, total and between **government and restaurant-related associations**.

Group:		Agree	Disagree	Undecided / I don't know	Total
Government ^a	Count	25	0	1	26
	% within	96.2%	0.0%	3.8%	100.0%
Restaurant	Count	12	0	3	15
	% within	80.0%	0.0%	20.0%	100.0%
Total					
	Count	37	0	4	41
	% within	90.2%	0.0%	9.8%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	2.819 ^a	1	.093	.130
Continuity Correction ^b	1.283	1	.257	
Likelihood Ratio	2.725	1	.099	.278
Fisher's Exact Test				.130
Linear-by-Linear Association	2.751 ^d	1	.097	.130
Number of valid cases	41			

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 1.46

b. Computed only for a 2x2 table

c. For 2x2 crosstabulation, exact results are provided instead of Monte Carlo results

d. The standardized statistic is 1.658.

Appendix 5f - Results of Survey Responses - Cont'd

All Sectors -

Table Q8e - Distribution of responses for **strategies to implement in restaurant chains – portion size**, total and across sectors.

Sector:		Agree	Disagree	Undecided / I don't know	Total
NGO-Academia	Count	21	3	1	25
	% within	84.0%	12.0%	4.0%	100.0%
Private	Count	8	3	4	15
	% within	53.3%	20.0%	26.7%	100.0%
Public	Count	60	1	9	70
	% within	85.7%	1.4%	12.9%	100.0%
Total	Count	89	7	14	110
	% within	80.9%	6.4%	12.7%	100.0%

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	13.736 ^a	4	.008	.010 ^b
Likelihood Ratio	13.304	4	.010	.011 ^b
Fisher's Exact Test	13.330			.004 ^b
Number of valid cases	110			

a. 5 cells (55.6%) have expected count less than 5. The minimum expected count is .95.

b. Based on 10000 sampled tables with starting seed 2000000.

Government and Restaurant-Related Associations –

Table Q8e - Distribution of responses for **strategies to implement in restaurant chains – portion size**, total and between **government and restaurant-related associations**.

Group:		Agree	Disagree	Undecided / I don't know	Total
Government ^a	Count	21	0	5	26
	% within	80.8%	0.0%	19.2%	100.0%
Restaurant	Count	8	3	4	15
	% within	53.3%	20.0%	26.7%	100.0%
Total	Count	29	3	9	41
	% within	70.7%	7.3%	22.0%	100.0%

a. Government includes Ontario public health units, and provincial and federal government/agencies

Chi-Square Tests, Overall

Test:	Value	df	P-value (Asymptotic)	P-value (Monte Carlo)
Pearson Chi-Square	6.452 ^a	2	.040	.036 ^b
Likelihood Ratio	7.323	2	.026	.046 ^b
Fisher's Exact Test	5.826			.036^b
Linear-by-Linear Association	1.638 ^c	1	.201	.241 ^b
Number of valid cases	41			

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 1.10

b. Based on 10000 sampled tables with starting seed 424620234.

c. The standardized statistic is 1.280.

Appendix 5_g – Exploratory factor analysis: Items and the corresponding factors related to PPP formation, pre and post factor analysis

Factor	Allocation of items	
	Pre-Factor Analysis	Post-Factor Analysis
Motivating	<ul style="list-style-type: none"> • To gain access to additional funding • To gain access to client or customer's perspectives • To gain access to expertise or specialized skills • To reach out to clients or customers who would not be reached by either the public or private sector alone 	<ul style="list-style-type: none"> • To reach out to clients or customers who would not be reached by either the public or private sector alone • To gain access to client or customer's perspectives • To gain access to expertise or specialized skills • Endorsement from credible institutions • Existence of guidelines on PPP development
Enabling	<ul style="list-style-type: none"> • Experience with public-private partnerships • Support from an individual champion • Compatibility of organizational values with PPP goals • Endorsement from credible institutions • Existence of guidelines on PPP development 	<ul style="list-style-type: none"> • Support from an individual champion • Existence of guidelines on PPP development
Governance	<ul style="list-style-type: none"> • Equal representation from partner organizations on board committees • Clarity and openness in decision making • Formal accountability system (e.g., goals, roles & responsibilities and performance measures) • Equal decision-making authority among partner organizations • Transparent process for monitoring and evaluation 	<ul style="list-style-type: none"> • Transparent process for monitoring and evaluation • Clarity and openness in decision making • Formal accountability system (e.g., goals, roles & responsibilities and performance measures)
Benefit	<ul style="list-style-type: none"> • To improve image of your organization • To improve performance of your organization • To influence food industry to promote healthy eating • To create differential advantage for your organization 	<ul style="list-style-type: none"> • To create differential advantage for your organization • To improve performance of your organization • To gain access to additional funding
Barrier	<ul style="list-style-type: none"> • Potential conflict of interests (e.g., protect public's health vs. promote unhealthy food) • Potential for inappropriate use of marketing strategies by one of the partner organizations • Opposition or resistance from stakeholders not directly involved in the PPP • Lack of trust in the other partner organization • Potential for loss of legitimacy in the eyes of the general public or shareholders 	<ul style="list-style-type: none"> • Potential conflict of interests (e.g., protect public's health vs. promote unhealthy food) • Potential for inappropriate use of marketing strategies by one of the partner organizations • Potential for loss of legitimacy in the eyes of the general public or shareholders • Lack of trust in the other partner organization • Opposition or resistance from stakeholders not directly involved in the PPP
Shared Leadership <i>New</i>		<ul style="list-style-type: none"> • Equal representation from partner organizations on board committees • Equal decision-making authority among partner organizations • Compatibility of organizational values with PPP goals
Outcome <i>New</i>		<ul style="list-style-type: none"> • To influence food industry to promote healthy eating • To improve performance of your organization

Appendix 6_a – Summary of key QUAL findings according to the purpose of the mixed methods design

Purpose of MMR	Description	Findings	
		Themes	Categories
Expanding results	New themes that emerged from the open-ended questions	• Contextual factors ^{new}	<ul style="list-style-type: none"> • Circumstances influencing decision-making about PPPs ^{new} • Government requirements in developing PPPs ^{new} • Government requirements in developing PPPs for healthy eating in restaurants ^{new}
		• Motivation factors	<ul style="list-style-type: none"> • Incentives for restaurants to develop PPPs ^{new}
		• Consumer-driven factors ^{new}	<ul style="list-style-type: none"> • Consumers' demand ^{new} • Consumers' incentives ^{new}
		• Intervention factors	<ul style="list-style-type: none"> • Multi-stakeholder engagement for healthy eating in restaurants ^{new} • Multifaceted approach for healthy eating in restaurants ^{new}
Gaining complementary insights	Factors that require further illustration, clarification	<ul style="list-style-type: none"> • Governance • Enabling factors 	<ul style="list-style-type: none"> • Governance structure and practice • Support from a champion • Openness to find common interests
Exploring divergence of opinions	Factors that show variation across sectors and groups	<ul style="list-style-type: none"> • Benefitting factors • Hindering factors 	<ul style="list-style-type: none"> • Corporate social responsibility • Distrust between the two sectors • Discordant opinions about regulation