Being Manly Men: Conveying Masculinity
Through Eating Behaviour

by

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Abstract

Males were given false feedback that they scored low, high, or no feedback (control group) on masculinity and given a “masculine” food (meat pizza), a “feminine” food (vegetarian pizza), or the choice between the two to eat. An interaction between masculinity condition and food condition was found when the “feminine” food condition and the Control group were removed, such that low-masculine participants given meat pizza ate a small amount, as did high-masculine participants given a choice. High-masculine participants given meat pizza ate a large amount of food as did low-masculine participants given a choice. In certain situations males want to appear masculine and therefore eat a larger amount of food, or want to appear attractive on other dimensions and therefore eat a smaller amount of food.
Acknowledgements

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Introduction

Obesity rates, which are rising in North America, are higher among Canadian males than among Canadian females (Human Resources and Skills Development Canada, 2005; Starkey, 2005). Why are males in particular prone to obesity? Owing to the paucity of studies highlighting male eating behaviour, further investigation of the contribution of specific eating patterns to male obesity rates should be welcome. Certain healthy foods, such as fruits and particularly, vegetables, are stereotyped distinctively as feminine foods, whereas certain unhealthy foods, such as red meat, are stereotyped as masculine foods (Herman & Polivy, in press). These stereotypes are not inconsequential: for example, males eat fewer vegetables than do females (Statistics Canada, 2006). Although the stereotype may reflect the behaviour pattern (i.e., vegetables are “feminine” because females are more likely to eat them), it is equally possible that the behaviour reflects the stereotype (i.e., males do not eat vegetables precisely because they are “feminine”). The present study will test the latter possibility by enhancing or threatening the masculinity of male participants and observing how a manipulation of masculinity affects the quantity and type of food that they eat. It is hypothesized that males will express (or repair) their masculinity through their eating behaviour by choosing “masculine” foods; in particular males concerned about their masculinity will be more likely to choose foods perceived as “masculine.” Ultimately, a clearer explanation of why males eat less healthful diets may be provided.

Food-consumption stereotypes are based on the selection and quantity of food consumed (Vartanian, Herman, & Polivy, 2007). For example, those who eat healthy foods are perceived more positively and seen as more physically attractive, intelligent, calm,
likeable, self-controlled, and moral than are those who eat unhealthy foods. As well, those who eat low-fat foods are rated as healthier, smaller in body size, and more active than are those who eat high-fat foods. As for quantity, women (or men) who eat smaller meals are perceived as thinner and more feminine (or less masculine) than are those who eat larger meals. In addition, those who eat excessively are viewed as unattractive, heavy, and less feminine (Vartanian et al., 2007). These consumption stereotypes may be internalized and when one is eating with others and wants to make a specific impression, one will consider these consumption stereotypes and eat accordingly. Numerous studies have found that being in a social situation can influence food intake regardless of one’s hunger and satiety (Herman & Polivy, 2005, 2008). For instance, people alter their eating behaviour in accordance to specific food-consumption stereotypes when in the presence of others to convey a desired impression (see Herman, Roth, & Polivy, 2003, for a review). In North American society, this desired persona is of a non-overindulgent, thin, and physically attractive person, especially amongst females. Females eat less when in the presence of socially desirable males, so as to create a positive impression and make themselves appear socially desirable, more feminine and less masculine. Likewise, males eat less in the presence of someone of the opposite sex to convey a positive image (Chaiken & Pliner, 1989), but research has not exactly explored the reasons why. Presumably the image that males want to convey by eating sparingly includes attractiveness, intelligence, and discipline, but not femininity. Therefore, it is not entirely clear what sort of positive image males are trying to portray by eating less when someone of the opposite sex is present.
The literature is unclear as to whether males alter their eating behaviour (e.g., consume fewer vegetables) so as to try to appear specifically more masculine. There have been a few studies that have included male participants in order to examine their motivation for altering their eating patterns in the presence of others. Mori, Chaiken and Pliner (1987), in their first study, found when male participants ate peanuts and M&Ms with either a desirable or undesirable female or male, they (unlike the female participants) ate equal amounts with a desirable and undesirable partner, suggesting that amount of food eaten is not an indicator of masculinity for men. The female participants in this study ate significantly less when their male partner was desirable. Further, Chaiken and Pliner (1987) asked university students to rate either a fictitious male or female who ate either two small meals or two large meals. Unlike the fictitious females, the fictitious males’ meal size had no impact on the students’ perceptions of their femininity or masculinity. However, Bock and Kanarek (1995) found that as meal size increased (i.e., targets were depicted as eating two small, two medium, or two large meals), both female and male eaters were rated as less feminine and more masculine. Pliner and Chaiken’s (1990) second study did find that it is important for males to appear masculine when eating with someone of the same or opposite sex, and eating more is an indicator of being masculine. As is apparent, the numerous findings do show some indication that males may alter their food consumption quantity to portray masculinity, but the literature does not provide a clear consensus. Furthermore, Mori et al. ‘s (1987) participants were given the same neutral (i.e., neither masculine nor feminine stereotyped) food in the various gender and desirability conditions. A closer look at different types of food, a variable that has been largely neglected in
previous studies, could provide insight into how masculinity is expressed when males eat. The present study placed males in specific experimental situations to examine whether or not they would alter their eating behaviour (quantity/food type) to appear more masculine.

One experiment in Mori et al. (1987) provides an appropriate model for the proposed study. In this experiment, the researchers threatened or enhanced the femininity of female participants and then gave them the opportunity to eat peanuts and M&Ms in the presence of a socially desirable male who was either aware or not aware of the participants’ femininity status. The idea behind this procedure is that one must cope with a threat to one’s identity, and the means of doing so may involve the use of verbal explanations or behavioural tactics to minimize or ameliorate one’s new negative image (Schlenker, 1985 as cited in Mori et al., 1987). In this particular scenario, the females whose femininity had been threatened had the opportunity to use a behavioural tactic, impression management, to minimize or eliminate their negative image by eating less of the available food. By eating only a small amount of the available food, the female participants would appear more feminine. The study’s results indicated that females who ate with a male who was aware that the females were “low” in femininity ate fewer peanuts and M&Ms than did females whose partners were aware that they were “high” in femininity. When their partners were unaware of the participants’ femininity status, participants who knew themselves to be were “high” in femininity ate less than did the participants who were “low” in femininity. The participants whose femininity was “high” (but whose partners were unaware) wanted to express this high femininity status to their partner and therefore ate less. Mori et al. (1987) found that females whose femininity had been threatened ate less when in the
presence of a desirable male in order to “restore” their femininity. Male participants were not included in the experiment because it was assumed, on the basis of the literature that has already been reviewed, that males did not express their masculinity through eating.

The current study was a variation on study two of Mori et al. (1987). Changes included having only male participants; having no confederates involved in the study; including a control condition in which participants were not given any information about their masculinity; serving food that was either “masculine” or “feminine”; and a condition in which participants had a choice between different types of food. The reasons for not using a confederate in the present study were two-fold: 1) if the confederate were to not eat at all, then the confederate would be a non-eating observer, thereby inhibiting the eating of the participant (Herman, et al., 2003) and 2) if the confederate were to eat, then the confederate would in effect become a model, indicating to the participant how much one should eat in this particular situation. When an experimental participant’s eating companion eats a large amount of food, then the participant tends to do so as well, and if the companion eats a small amount of food, the participant tends to do likewise (Herman, et al., 2003). To avoid having a confederate influence the participants’ eating, the study was designed without a confederate. Rather, a female experimenter provided (false) feedback to the participants regarding their masculinity. Because the participants were aware that the experimenter knew their masculinity status, we assumed that the participants would alter their eating behaviour to convey a certain impression to the experimenter. The female experimenter tried to make a positive impression on the male participants by dressing as an undergraduate student and acting in a friendly manner. Because the participants were
undergraduate students, we hoped that they would attempt to impress the experimenter. The food given to the participants was presented in such a way in that it was obvious to both the participant and the experimenter how much the participant ate.

In study two of the Mori et al. (1987) study, females were told they that were either low or high in femininity (based on a bogus questionnaire that they completed). The present study included an additional control condition in which participants were not informed about their masculinity level. This control condition was included in the present study in order to determine whether the participants would alter their eating when they were informed that they are low in masculinity or when they were informed that they are high in masculinity or both. The Mori et al. (1987) study could not determine which group of participants, the ones whose femininity was threatened or the ones whose femininity was enhanced (or both), altered their eating behaviour to convey a specific impression, because there was no control condition for comparison purposes. It should be further noted that Mori et al. (1987) did not take the type of food into consideration; they used only peanuts and M&Ms in the experiment. However, we assumed that the type of food plays an important role in conveying an impression of masculinity. Accordingly, different types of food were used in the present study so that “feminine” and “masculine” foods were both represented. Some of participants will had a choice between a “masculine” or “feminine” food.

A preliminary study was conducted to confirm that certain foods, such as vegetables, are stereotyped as more “feminine” and that other foods, such as red meat, are more “masculine”. The second study was an experiment in which male participants were assigned
to experimental conditions that threatened (or enhanced) their masculinity (analogous to a similar manipulation imposed on females by Mori et al., 1987, as previously discussed). Threatened (Low-Masculinity: Lo-Masc) males were told that on an “interest scale” they scored low in masculinity, whereas in the High-Masculinity (Hi-Masc) condition males were told that they scored high in masculinity. In addition, a third (Control) group of males was given no information about how they scored on the bogus interest scale. The male participants were also assigned to one of three food conditions in which they (a) ate a “masculine” food, (b) ate a “feminine” food or (c) could choose between the two. The different food types offered to the participants were intended to represent “masculine” and “feminine” choices and be equally palatable, as determined by the previously mentioned pilot study. The reason for utilizing the first two food-type (no-choice) conditions was to motivate the participants to express their masculinity through quantity of food consumed. The third (choice) condition allowed them to express their masculinity through selecting either a “masculine” or “feminine” food.

It was hypothesized that threatened (Lo-Masc) males who had the choice of eating “masculine” food or “feminine” food would assert their masculinity by choosing “masculine” food. Lo-Masc males who were presented with only the “masculine” food could not use their choice of “masculine” food to assert their masculinity; therefore, they would have to eat more of the “masculine” food than those Lo-Masc males who could assert their masculinity by choosing a “masculine” food. We expected Lo-Masc males in the masculine-food condition to eat more than the participants in all the other conditions. Participants in the feminine-food condition should have trouble asserting their masculinity. It is not clear
whether eating a lot of “feminine” food makes one appear to be more feminine (because the food is “feminine) or more masculine (because eating a large amount is “masculine”). We tentatively expected that the Lo-Masc males in the feminine-food condition would avoid the “feminine” food and eat sparingly. Hi-Masc and Control males were expected to (a) not be as decisive in choosing the “masculine” food as Lo-Masc males would be in the choice condition and (b) eat less “masculine” food than Lo-Masc males would eat in the masculine condition. There was no particular prediction for High-Masc and Control males and versus Lo-Masc males in the feminine-food condition, which is the condition that is the most ambiguous.

This study was designed to provide an entry into understanding the role of masculinity in driving the intake of “masculine” food and avoiding “feminine” food. This investigation, it was hoped, would allow researchers to approach an answer to the question of whether males portray their masculinity through eating. If in fact males do portray themselves as masculine through their eating behaviour, then perhaps we could provide a partial explanation of why males eat less fruits and vegetables than females do. Researchers will consequently be in a position to explore manipulations or interventions that will deter males from eating unhealthy foods and amounts, and encourage males to make healthier food choices.

Study One

A first study was conducted to confirm which foods are stereotyped as feminine and which are stereotyped as masculine. As well, the same foods were rated on taste. Specifically, the study was conducted to confirm if vegetables and foods with vegetables are
stereotyped as more “feminine” and if certain foods, such as red meat, are rated as
“masculine”. “Masculine” and “feminine” foods that were rated as equally good tasting were
used in the second study.

Method

Participants

Twenty-five males between the ages of 19 years and 30 years, (M = 24) volunteered
to fill in the survey. Seventy-six percent of the participants indicated that they were of
Caucasian descent, 20% indicated that they were of Asian descent, and 4% indicated that
they were of mixed descent.

Materials

An online survey consisting of five questions was designed by the researcher with
input from the eating-research lab at the University of Toronto. The first three questions
inquired about the respondent’s age, gender, and ethnicity. The survey then randomly listed
78 different foods (e.g., apple, meat pizza, tomatoes, vegetable sandwich, vegetarian pizza,
meatball sub) in random order for each participant. Participants were asked to rate on a
Likert scale from 1 to 7 how they would rate each item on femininity/masculinity (1 =
“extremely feminine”, 4 = “neutral”, and 7 = “extremely masculine”). The raters were then
given the same list of food in a different order and were asked to rate how much they liked
each food item on a Likert scale from 1 to 7 (1 = “extremely dislike”, 4 = “neutral”, and 7 =
“extremely like”).
Procedure

Participants were given an online link to access the survey. Participants were able to fill in the survey confidentially on any computer with internet access at any point in time. The participants’ answers were collected by the researcher through an online survey program and then entered into SPSS for data analysis.

Results

Means were tabulated for the masculinity/femininity ratings of the food and how much the participants liked each food item. The participants rated vegetable sandwiches (2.64 on the 7-point scale) and vegetarian pizza (2.97 on the 7-point scale) as feminine, whereas meat sandwiches (5.58 on the 7-point scale) and meat-lovers pizza (6.12 on the 7-point scale) were rated as “masculine.” The liking ratings showed that participants did not like vegetable sandwiches (3.68 on the 7-point scale) but did like meat sandwiches (5.48 on the 7-point scale), vegetarian pizza (mean of 4.32 on the 7-point scale), and meat-lovers pizza (5.00 on the 7-point scale).

A paired t-test confirmed that there was no difference between how the participants rated liking vegetarian pizza and meat-lovers pizza (t (24) = -1.32, p < .2).

Discussion

Because the vegetarian pizza and meat pizza were equally liked but dramatically different with respect to gender stereotype (vegetarian pizza being “feminine” and meat pizza being “masculine”), it was decided to use these two equally preferred foods as the “feminine” and “masculine” foods in second study in order for personal preference not be a confounding factor.
Study Two

Study two examined whether males express their masculinity through their eating behaviour by either eating large amounts of food or choosing “masculine” food.

Method

Participants

One hundred and twenty-four male students were recruited from the undergraduate psychology subject pool at the University of Toronto. The participants were run between the hours of 11:00 am and 7:00 pm. The participants averaged 20 years old (range 17 - 44). Most of the participants (61.3%) lived with their family and 62.3% were in their first year of university. Forty-six percent of the participants indicated that they were of Caucasian descent, 38.7% indicated that they were of East Asian descent, 8% indicated that were an ethnicity that was not listed, 2.4% indicated that they were South Asian, 1.6% indicated that they were Black, 1.6% indicated that they were Hispanic, and 1.6% indicated that they were Middle Eastern. Participants participated in the study in exchange for research-participation credit towards their Introduction to Psychology course or for $10.00. Participants were able to take part in the study only if they were male and if they did not have any dietary restrictions due to allergies or religion. Participants were also required to have been born in North America, or have moved to North America before the age of ten, due to the cultural context of the study.

Materials

Participants were run in a testing room with a table and chair, and were first asked to sign a consent form describing the details of the procedure of the study. A bogus interest
scale (see Appendix A) was created for participants to fill out to determine their preferences (allegedly masculine and feminine) for activities. Participants were told that this scale was part of a research project in a different lab, so that they would assume that the results of the scale would have nothing to do with the study in which they were actually participating. Asking participants to fill out this scale gave the experimenter the opportunity to tell participants (at a later point in the proceedings) that they scored high or low in masculinity. On a 7-point Likert scale, participants were asked to rate how much they like doing 20 particular activities (1 = “strongly dislike”; 7 = “strongly like”). Examples of activities were: listening to CDs, traveling, reading, and watching television, which are neither stereotypically masculine or feminine. The activities were neutral, thereby allowing the experimenter to control which participants “scored” low or high in masculinity.

Participants were asked to fill out a demographic information sheet, which provided the researchers with information on the participants’ gender, ethnicity, religion, religiosity, year in university, and housing situation. Participants filled out a mood scale (see Appendix B) in which 34 emotion words were listed in Likert format (1 = “very slightly or not at all”; 5 = “extremely”). Participants assigned a number to each emotion indicating how they felt at the particular moment. Examples of emotions were: relaxed, jittery, hungry, embarrassed, full, and proud. Participants were given meat or vegetarian pizza (or a choice) to eat, in such a way that it was obvious to the participant that the experimenter would know how much the participant had eaten. All the pizza served was ordered from the same company and cut up into rectangles. Each participant was served 12 rectangles of pizza, that were 2 inches wide and 5 inches long, in a rectangular formation on a tray.
Participants were then asked to fill out a final set of questionnaires that include the three manipulation checks (see Appendix C), the Self-Monitoring Scale (Snyder, 1974), the Need to Belong Scale (Leary, Kelly, Cottrell, & Schreindorfer, 2007), the Restraint Scale (Herman & Polivy, 1980), the Rosenberg Self-Esteem Scale (Rosenberg, 1989), the Brief Fear of Negative Evaluation Scale (Leary, 1983), and a social motives questionnaire regarding eating (based on Pliner & Chaiken, 1990, see Appendix D). The Self-Monitoring Scale, the Need to Belong Scale, the Brief Fear of Negative Evaluation Scale, and the Rosenberg Self-Esteem Scale were included because current research in a similar lab is looking at these variables, and it may prove to be important to be able to compare results between the present study and studies conducted in the other lab. As well, some personality variables may affect the amount eaten.

*Manipulation Checks.* The first manipulation check (see Appendix C) assessed whether the participants thought that the meat pizza was masculine and that the vegetarian pizza was feminine, and how much they liked the pizza. The second manipulation check determined if the participants found the experimenter attractive and if they were trying to impress her. Finally, the third manipulation check assessed how masculine and feminine the participants perceived themselves to be.

*Dietary restraint.* The Restraint Scale (Herman & Polivy, 1980) was used to assess dietary restraint and includes ten items assessing one’s eating behaviour and weight fluctuations. It is also asks participants to report their current weight and height. Those who are identified as restrained and unrestrained were compared in order to determine if the eating behaviour differs between those are restrained eaters and those who are not.
Self-monitoring. To assess self-monitoring the Self-Monitoring Scale (Snyder, 1974) was used. Participants must indicate on this scale how they react to different situations by indicating either “mostly true” or “not usually true”. Items on this scale include: “I may deceive people by being friendly when I really dislike them”, “I have considered being an entertainer”, and “I am not particularly good at making other people like me”.

Self-esteem. The Rosenberg Self-Esteem Scale (Rosenberg, 1989) measured participants’ level of self-esteem with a 10-item questionnaire. Participants must respond from 1 (strongly agree) to 4 (strongly disagree) on the items. Items included: “I feel that I have a number of good qualities” and “I certainly feel useless at times.”

Fear of negative evaluation. The Brief Fear of Negative Evaluation Scale (Leary, 1983) assessed how characteristic it was of the participants in different scenarios to worry about how others view them. Participants must indicate from 1 (”not at all characteristic of me”) to 5 (”extremely characteristic of me”) on 12 items. Examples of items include: “I am afraid others will not approve of me” and “I am usually worried about what kind of impression I make.”

Need to belong. The Need to Belong Scale (Leary et al., 2007) was used to assess one’s need to belong. The scale includes ten items in which the participants must indicate the extent of their agreement, from 1 (strongly disagree) to 5 (strongly agree) with each item. Items on this scale include: “I have a strong need to belong” and “I seldom worry about whether other people care about me.”

Social motives in regards to eating. A social motives questionnaire (based on Pliner & Chaiken, 1990, see Appendix D) assessed how important it was for participants to convey a
certain impression when having lunch with someone whom they have not met before and who is of the same or opposite sex. Items included in this questionnaire are attempts to appear attractive, polite, healthy, fit, feminine, and masculine, and so on. Participants must indicate on a 7-point Likert scale from 1 (not at all important) through 7 (extremely important) how important it is for them to convey a certain impression. The second part of the social motives questionnaire asks participants how much they would eat if they were trying to convey a certain impression when having lunch with a likable person whom they just met who is of the same or opposite sex. On a 7-point Likert scale, participants must indicate from 1 (extremely small amount) through 7 (extremely large amount) how much they would eat. Examples of items include how much participants would eat if they were trying to appear attractive, healthy, masculine, and feminine. The results of this scale may reveal males’ motives for altering their eating behaviour in social situations.

Procedure

Participants were instructed not to eat for three hours before arriving at the lab. Once participants arrived at the lab, they were welcomed by the experimenter and shown to the testing room. The study took approximately one hour for each participant and run participants were run individually. Participants were asked to read and sign the consent form if they agreed to participate, which all participants agreed to. Participants then filled in the bogus interest scale (see Appendix A), which they were informed was an assessment of the interests of university students, allegedly because the results would be used in another lab. Participants subsequently filled out the demographic information sheet. Participants were randomly assigned to one of three masculinity conditions: 1) low
masculinity (Lo-Masc), 2) high masculinity (Hi-Masc), or 3) no feedback (Control). After participants completed the demographic information sheet, those in the Lo-Masc condition were told that they scored low in masculinity on the interest scale (see Appendix A), participants in the Hi-Masc condition were told they scored high in masculinity, and the participants in the Control condition were given no information about how they scored.

Participants then filled out the first mood scale. Because participants assumed that the effect of eating on mood was being evaluated, participants were asked to fill out a mood scale (see Appendix B) before and after they ate. The only items on the mood scale of actual importance to the experimenter were the hunger and fullness ratings. Participants were also assigned to a food-type condition: 1) masculine food (meat pizza), 2) feminine food (vegetarian pizza), or 3) choice of food condition (option to select meat or vegetarian pizza). The pizza was served in such a way that it was obvious to the participant and researcher how much the participant ate, and the participants were informed by the experimenter to “eat as much as you like.” The experimenter then left the room, closing the door, and the participant opened the door when he was finished eating. The eating materials were then cleared by the experimenter and participants were asked to fill out the second mood scale. Participants were then given the rest of the testing materials to fill out by themselves in the testing room with the door shut. Participants were asked to open the door when they were done filling in the scales. The scales included the three manipulation checks, the Restraint Scale (Herman and Polivy, 1980), the Self-Monitoring Scale (Snyder, 1974), the Rosenberg Self-Esteem Scale (Rosenberg, 1989), the Brief Fear of Negative
Evaluation Scale (Leary, 1983), the Need to Belong Scale (Leary et al., 2007), and the eating with social motives questionnaires (based on Pliner & Chaiken, 1990, see Appendix D).

Lastly, participants were thanked for participating and debriefed about the true nature of the study, and were asked to sign a re-consent form indicating they knew the true nature of the study and that they consented to their data being used. All the participants signed the re-consent form. Participants were shown out of the lab.

**Results**

Means, standard deviations, and ranges were calculated for the participants’ demographic information and perceived masculinity and femininity as shown in Table 1.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Range</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>20</td>
<td>3.795</td>
<td>17 - 44</td>
<td>124</td>
</tr>
<tr>
<td>Religion</td>
<td>2.93</td>
<td>2.396</td>
<td>1 – 8</td>
<td>124</td>
</tr>
<tr>
<td>Religious Level</td>
<td>2.76</td>
<td>1.847</td>
<td>1 - 7</td>
<td>123</td>
</tr>
<tr>
<td>Year in University</td>
<td>1.76</td>
<td>1.220</td>
<td>1 - 7</td>
<td>122</td>
</tr>
<tr>
<td>Residence</td>
<td>1.90</td>
<td>1.255</td>
<td>1 - 4</td>
<td>124</td>
</tr>
<tr>
<td>Perceived Masculinity</td>
<td>5.35</td>
<td>.838</td>
<td>3 – 7</td>
<td>124</td>
</tr>
<tr>
<td>Perceived Femininity</td>
<td>2.81</td>
<td>1.286</td>
<td>1 - 6</td>
<td>124</td>
</tr>
</tbody>
</table>
Participants’ eating’s of the pizza are shown in Table 2.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Range</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount Eaten (grams)</td>
<td>428.41</td>
<td>160.6839</td>
<td>103.1 – 1033.1</td>
<td>124</td>
</tr>
<tr>
<td>Number of pieces eaten</td>
<td>5.10</td>
<td>2.058</td>
<td>1 - 12</td>
<td>124</td>
</tr>
<tr>
<td>Liked the pizza</td>
<td>4.79</td>
<td>1.302</td>
<td>2 - 7</td>
<td>124</td>
</tr>
<tr>
<td>Liking of meat pizza</td>
<td>5.14</td>
<td>1.422</td>
<td>2 - 7</td>
<td>123</td>
</tr>
<tr>
<td>Liking of vegetarian pizza</td>
<td>3.82</td>
<td>1.647</td>
<td>1 - 7</td>
<td>119</td>
</tr>
</tbody>
</table>
| Rating of meat pizza on
masculinity/femininity          | 5.46   | 1.058              | 2 - 7           | 123|
| Rating of vegetarian pizza on
masculinity/femininity          | 3.45   | 1.072              | 1 – 7           | 119|

The overall mean of food intake was 428.41 grams of pizza, the mean number of pieces eaten was 5.10, and the overall mean of participants’ liking of the pizza was a 4.79 (on the 7-point scale).

**Manipulation checks.** Participants rated the meat-lovers pizza as “masculine” (mean of 5.43 on the 7-point scale) and the vegetarian pizza as “feminine” (mean of 3.46 on the 7-point scale). A paired t-test confirmed that these ratings are significantly different ($t (117) = 12.53, p < .001$). Participants did significantly rate liking meat pizza (mean of 5.10 on the 7-point scale) more than vegetarian pizza (mean of 3.80) ($t (117) = 6.78, p<.001$). The participants who ate meat pizza and the participants who ate vegetarian pizza, equally liked the pizza ($t (82) = 1.31, p<.195$). On average the participants said they wanted to impress
the experimenter as a 4 out of 7 and that she was a 5.31 (on the 7-point scale) on attractiveness.

The mean rating of the participants’ perceived masculinity level was 5.35 (on the 7-point scale) and the mean rating of their perceived femininity level was 2.81 (on the 7-point scale). Independent t-tests confirmed a significant difference between those in the Lo-Masc condition who rated themselves as less masculine (5.2 on the 7-point scale) than did those in the Hi-Masc condition (5.61 on the 7-point scale) (t (80) = 2.32, p < .02). There was no significant difference between those in the Lo-Masc condition (5.2 on the 7-point scale) and those in the Control group condition (5.26 on the 7-point scale) on perceived masculinity (t (81) = .331, p > .74). There was a significant difference between those in the Hi-Masc condition (5.61 on the 7-point scale) and those in the Control condition (5.26 on the 7-point scale) on perceived masculinity (t (81) = 2.15, p < .034).

Overall analysis. The data were analyzed by two-way analysis of variance (ANOVA) using masculinity condition (Lo-Masc, Hi-Masc, or Control) and food type condition (feminine food, masculine food, or choice of food) as the independent variables. The dependent variable was the amount of pizza consumed and, in the choice condition, the pizza type chosen, which are displayed in Table 3.
<table>
<thead>
<tr>
<th></th>
<th>Meat Pizza</th>
<th>Vegetarian Pizza</th>
<th>Choice of Pizza</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Low Masculinity</strong></td>
<td>370.880</td>
<td>456.064</td>
<td>441.892</td>
<td>420.751</td>
</tr>
<tr>
<td></td>
<td>(155.4625)</td>
<td>(212.0468)</td>
<td>(112.5060)</td>
<td>(167.5002)</td>
</tr>
<tr>
<td></td>
<td>n = 15</td>
<td>n = 14</td>
<td>n = 12</td>
<td>n = 41</td>
</tr>
<tr>
<td><strong>High Masculinity</strong></td>
<td>451.487</td>
<td>505.857</td>
<td>354.458</td>
<td>441.654</td>
</tr>
<tr>
<td></td>
<td>(168.7267)</td>
<td>(170.8984)</td>
<td>(110.5492)</td>
<td>(163.0239)</td>
</tr>
<tr>
<td></td>
<td>n = 15</td>
<td>n = 14</td>
<td>n = 12</td>
<td>n = 41</td>
</tr>
<tr>
<td><strong>Control Group</strong></td>
<td>426.000</td>
<td>443.313</td>
<td>396.208</td>
<td>422.962</td>
</tr>
<tr>
<td></td>
<td>(178.9241)</td>
<td>(135.2904)</td>
<td>(155.8668)</td>
<td>(154.5733)</td>
</tr>
<tr>
<td></td>
<td>n = 14</td>
<td>n = 15</td>
<td>n = 13</td>
<td>n = 42</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>415.898</td>
<td>467.828</td>
<td>397.484</td>
<td>428.411</td>
</tr>
<tr>
<td></td>
<td>(167.3270)</td>
<td>(172.6308)</td>
<td>(130.2881)</td>
<td>(160.6839)</td>
</tr>
<tr>
<td></td>
<td>n = 44</td>
<td>n = 43</td>
<td>n = 37</td>
<td>n = 124</td>
</tr>
</tbody>
</table>

The majority of the participants in the choice condition chose the meat pizza; that is, 33 out of 37 participants chose the meat pizza when they had the choice. An ANOVA showed that there was no significant main effect for food condition (F (2,114) = 2.164, p>.11), there was no significant main effect for masculinity condition (F (2,114)= .119, p>.88), and there was no food condition x masculine condition interaction (F (4,114)= 1.143, p>.33) (see Figure 1). The homogeneity of variance is not significant (F (8,115)= .749, p>.64).
Additional ANOVAs were conducted eliminating some of the conditions. An ANOVA eliminating the “feminine” food condition and the Control condition, revealed no significant main effects but a significant cross-over interaction (F (1,50)= 4.66, p<.036) (see Figure 2).

The homogeneity of variance is not significant (F (3,50) = 1.336, p<.273). Table 4 shows the means, standard deviations, and group sizes of this data.
### Table: Choice of Pizza by Masculinity Level

<table>
<thead>
<tr>
<th></th>
<th>Measured Variable</th>
<th>Low Masculinity</th>
<th>High Masculinity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>n = 15</td>
<td>n = 12</td>
<td>n = 27</td>
</tr>
<tr>
<td>Meat Pizza</td>
<td></td>
<td>370.880 (155.4625)</td>
<td>451.487 (168.7267)</td>
<td>411.183 (164.5949)</td>
</tr>
<tr>
<td>Choice of Pizza</td>
<td></td>
<td>441.892 (112.5060)</td>
<td>354.458 (110.5492)</td>
<td>398.175 (117.8675)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>402.441 (140.2212)</td>
<td>408.363 (151.3729)</td>
<td>405.402 (144.5515)</td>
</tr>
</tbody>
</table>

The same analyses were run dropping those participants who were suspicious of their masculinity results and the results were effectively the same, so for the analyses all the participants’ results were included. There were no significant ethnicity differences between the different groups (F (4,115)= 1.17, p>.32), even when the Control group condition and the feminine food condition were removed (F (1,50)= 1.39, p>.24). There was no significant difference in the amount eaten depending on the participants’ ethnicity (F = (5.48) 1.172, p>.33).

**Questionnaires.** Scores on the mood scale indicated that participants were hungry before they ate the pizza (mean of 3.65 on a 5-point scale) and were not hungry when they finished eating (mean of 1.11 on a 5-point scale). A paired samples t-test confirmed that these means are significantly different (t (123) = 26.54, p < .001). Results from the mood scales also indicated that the participants were not full before they ate (mean of 1.2 on a 5-point scale) but were full after they ate the pizza (mean of 4.13 on a 5-point scale). A paired
samples t-test confirmed these means were significantly different ($t (123) = 36.46, p < .001$).

The mean scores on the trait scales were: for restraint, 10.48; for self-monitoring, 14.19; for self-esteem, 22.06; for need-to-belong, 31.74; and for fear of negative evaluation, 34.94. Table 5 displays the participants’ means, standard deviations, and ranges of the questionnaires.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Range</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dietary restraint</td>
<td>10.48</td>
<td>5.288</td>
<td>2 – 23</td>
<td>124</td>
</tr>
<tr>
<td>Self-monitoring</td>
<td>14.19</td>
<td>3.820</td>
<td>6 - 23</td>
<td>123</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>22.06</td>
<td>4.813</td>
<td>9 – 30</td>
<td>124</td>
</tr>
<tr>
<td>Need-to-belong</td>
<td>31.74</td>
<td>6.746</td>
<td>16 - 50</td>
<td>124</td>
</tr>
<tr>
<td>Fear of negative evaluation</td>
<td>34.94</td>
<td>10.174</td>
<td>14 - 58</td>
<td>124</td>
</tr>
</tbody>
</table>

Correlations were calculated and shown in Table 6. There are no significant correlations between scores on the traits questionnaires and the amount eaten.

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restraint</td>
<td>-.099</td>
<td>.274</td>
</tr>
<tr>
<td>Self-Monitoring</td>
<td>-.006</td>
<td>.949</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>.120</td>
<td>.184</td>
</tr>
<tr>
<td>Need-to-belong</td>
<td>-.076</td>
<td>.399</td>
</tr>
<tr>
<td>Fear of negative evaluation</td>
<td>-.134</td>
<td>.138</td>
</tr>
</tbody>
</table>
Mean scores on the social motives questionnaire regarding having lunch with someone of the same sex indicated that it would be 5.14 (on the 7-point scale) important to make a good impression, 5.35 to be polite, 3.10 to appear attractive, 1.48 to appear feminine, 4.40 to appear masculine, 4.57 to appear healthy, and 3.94 to appear superior and are shown in Table 7.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Range</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impression</td>
<td>5.14</td>
<td>1.290</td>
<td>1 - 7</td>
<td>124</td>
</tr>
<tr>
<td>Polite</td>
<td>5.35</td>
<td>1.409</td>
<td>1 - 7</td>
<td>124</td>
</tr>
<tr>
<td>Attractive</td>
<td>3.10</td>
<td>1.708</td>
<td>1 – 7</td>
<td>124</td>
</tr>
<tr>
<td>Interested</td>
<td>5.07</td>
<td>1.211</td>
<td>1 – 7</td>
<td>124</td>
</tr>
<tr>
<td>Involved</td>
<td>5.56</td>
<td>1.212</td>
<td>2 - 7</td>
<td>124</td>
</tr>
<tr>
<td>Feminine</td>
<td>1.48</td>
<td>.897</td>
<td>1 – 4</td>
<td>124</td>
</tr>
<tr>
<td>Masculine</td>
<td>4.40</td>
<td>1.869</td>
<td>1 – 7</td>
<td>124</td>
</tr>
<tr>
<td>Healthy/Fit</td>
<td>4.57</td>
<td>1.827</td>
<td>1 - 7</td>
<td>124</td>
</tr>
<tr>
<td>Superior</td>
<td>3.94</td>
<td>1.847</td>
<td>1 - 7</td>
<td>124</td>
</tr>
<tr>
<td>Similar</td>
<td>3.91</td>
<td>1.830</td>
<td>1 - 7</td>
<td>124</td>
</tr>
</tbody>
</table>

Mean scores on the social motives questionnaire regarding having lunch with someone of the opposite sex indicated that it would be 6.15 (on the 7-point scale) important to make a good impression, 6.20 to be polite, 5.92 to appear attractive, 2.07 to appear feminine, 4.91 to appear masculine, 5.58 to appear healthy, and 2.90 to appear superior and are shown in Table 8.
<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Range</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impression</td>
<td>6.15</td>
<td>1.099</td>
<td>1 - 7</td>
<td>123</td>
</tr>
<tr>
<td>Polite</td>
<td>6.20</td>
<td>0.958</td>
<td>3 - 7</td>
<td>123</td>
</tr>
<tr>
<td>Attractive</td>
<td>5.92</td>
<td>1.053</td>
<td>2 - 7</td>
<td>123</td>
</tr>
<tr>
<td>Interested</td>
<td>6.10</td>
<td>0.824</td>
<td>3 - 7</td>
<td>123</td>
</tr>
<tr>
<td>Involved</td>
<td>6.29</td>
<td>0.894</td>
<td>2 - 7</td>
<td>123</td>
</tr>
<tr>
<td>Feminine</td>
<td>2.07</td>
<td>1.256</td>
<td>1 - 5</td>
<td>123</td>
</tr>
<tr>
<td>Masculine</td>
<td>4.91</td>
<td>1.531</td>
<td>1 - 7</td>
<td>123</td>
</tr>
<tr>
<td>Healthy/Fit</td>
<td>5.58</td>
<td>1.293</td>
<td>1 - 7</td>
<td>123</td>
</tr>
<tr>
<td>Superior</td>
<td>2.90</td>
<td>1.734</td>
<td>1 - 7</td>
<td>123</td>
</tr>
<tr>
<td>Similar</td>
<td>3.80</td>
<td>1.646</td>
<td>1 - 7</td>
<td>122</td>
</tr>
</tbody>
</table>

Paired samples t-tests confirmed a significant difference between wanting to make a good impression ($t(122) = 9.03, p<.001$), appearing polite ($t(122) = 7.37, p<.001$), appearing attractive ($t(122) = 17.26, p<.001$), appearing interested ($t(122) = 9.43, p<.001$), appearing feminine ($t(122) = 6.76, p<.001$), appearing masculine ($t(122) = 2.98, p<.003$), and appearing healthy ($t(122) = -6.76, p<.001$) when eating with someone of the same sex versus eating with someone of the opposite sex.

Regarding how much the participants would eat when they were eating with someone of the same sex mean scores indicated that if they wanted to make a good impression they would eat 4.81 (on the 7-point scale), 4.23 to appear polite, 4.17 to appear
attractive, 2.27 to appear feminine, 5.89 to appear masculine, 4.53 to appear healthy, and 5.83 to appear superior and are shown in Table 9.

<table>
<thead>
<tr>
<th>Amount</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Range</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount 1</td>
<td>4.81</td>
<td>1.049</td>
<td>1 – 7</td>
<td>124</td>
</tr>
<tr>
<td>Amount 2</td>
<td>4.23</td>
<td>.961</td>
<td>1 - 6</td>
<td>124</td>
</tr>
<tr>
<td>Amount 3</td>
<td>4.17</td>
<td>1.114</td>
<td>1 - 7</td>
<td>123</td>
</tr>
<tr>
<td>Amount 4</td>
<td>3.94</td>
<td>1.026</td>
<td>1 - 6</td>
<td>124</td>
</tr>
<tr>
<td>Amount 5</td>
<td>3.73</td>
<td>1.143</td>
<td>1 – 6</td>
<td>124</td>
</tr>
<tr>
<td>Amount 6</td>
<td>2.27</td>
<td>1.202</td>
<td>1- 6</td>
<td>123</td>
</tr>
<tr>
<td>Amount 7</td>
<td>5.89</td>
<td>1.080</td>
<td>1 - 7</td>
<td>123</td>
</tr>
<tr>
<td>Amount 8</td>
<td>4.53</td>
<td>1.051</td>
<td>1 – 7</td>
<td>123</td>
</tr>
<tr>
<td>Amount 9</td>
<td>5.83</td>
<td>1.259</td>
<td>1 – 7</td>
<td>123</td>
</tr>
<tr>
<td>Amount 10</td>
<td>4.55</td>
<td>.863</td>
<td>1 - 7</td>
<td>122</td>
</tr>
</tbody>
</table>

Participants’ mean scores for how much they would eat when eating with someone of the opposite sex were 4.23 (on the 7-point scale) to make a good impression, 3.98 to be polite, 4.00 to appear attractive, 2.36 to appear feminine, 5.49 to appear masculine, 4.35 to appear healthy, and 5.07 to appear superior and are shown in Table 10.
<table>
<thead>
<tr>
<th>Amount</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Range</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
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<td>4.23</td>
<td>.953</td>
<td>2 – 7</td>
<td>124</td>
</tr>
<tr>
<td>Amount 2</td>
<td>3.98</td>
<td>.924</td>
<td>2 – 7</td>
<td>124</td>
</tr>
<tr>
<td>Amount 3</td>
<td>4.00</td>
<td>1.119</td>
<td>1 – 7</td>
<td>123</td>
</tr>
<tr>
<td>Amount 4</td>
<td>3.56</td>
<td>1.062</td>
<td>1 – 7</td>
<td>124</td>
</tr>
<tr>
<td>Amount 5</td>
<td>3.30</td>
<td>1.119</td>
<td>1 – 7</td>
<td>124</td>
</tr>
<tr>
<td>Amount 6</td>
<td>2.36</td>
<td>1.171</td>
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<td>Amount 7</td>
<td>5.49</td>
<td>.984</td>
<td>1 – 7</td>
<td>124</td>
</tr>
<tr>
<td>Amount 8</td>
<td>4.35</td>
<td>1.004</td>
<td>1 – 7</td>
<td>124</td>
</tr>
<tr>
<td>Amount 9</td>
<td>5.07</td>
<td>1.510</td>
<td>1 – 7</td>
<td>124</td>
</tr>
<tr>
<td>Amount 10</td>
<td>3.54</td>
<td>.943</td>
<td>1 – 7</td>
<td>123</td>
</tr>
</tbody>
</table>

**Discussion**

When men are given the choice between meat-lovers pizza and vegetarian pizza they tend to chose the meat-lovers pizza. Although the pilot study found that male university students equally preferred meat pizza and vegetarian pizza, the males in the second study almost unanimously chose the meat pizza. The males in this study rated liking meat pizza more than liking vegetarian pizza, expect when they actually ate the pizza. This unexpected bias meant that there was little opportunity for Lo-Masc males to choose the meat pizza more than Hi-Masc males chose it.

An interaction between masculinity condition and food condition was found when the feminine food condition and the Control group were removed, with Lo-Masc
participants given meat pizza eating a small amount, as did Hi-Masc given a choice. Hi-Masc given meat pizza ate a large amount of food, as did Lo-Masc given a choice (see Figure 2). As the results were not what was previously predicted, we propose that Lo-Masc in the meat condition cannot restore their threatened masculinity by freely choosing masculine food and so they try appear desirable on other traits, such as disciplined, intelligent, and polite. Hi-Masc in the meat condition are possibly content with their masculinity and therefore eat a lot, in conforming with their masculinity level. Lo-Masc given a choice choose a masculine food and want to emphasize their masculinity and therefore eat a large amount. Hi-Masc given a choice choose a masculine food, but also want to also appear desirable on other traits, such as politeness and intelligent, and therefore eat only a small amount. Depending on the specific circumstances (threatened masculinity, availability of choice) males eat a lot to convey masculinity or eat a small amount to appear attractive on other dimensions.

General Discussion

When people eat and want to convey a specific impression to others, they will alter their eating to portray themselves accordingly. For example, in the presence of a desirable male, females will eat less to convey femininity. What impression do males want to portray while eating in the presence of a female? The present study found that males chose meat pizza over vegetarian pizza, even though a previous similar sample of males rated the different pizzas as equally good tasting. Perhaps this act of choosing a “masculine” food portrays masculinity. When males have the option and want to do so, they express their masculinity through their eating behaviour by choosing meat over vegetables and eating a
lot of the meat. After the interaction was found, it is proposed that in certain situations males do not want to appear “pig-like” and would rather appear moral, intelligent, polite, and sophisticated and do so by eating a smaller amount of “masculine” food. When males are threatened and given a meat pizza to eat, they tend to eat less of the meat pizza in order to present themselves as having good qualities such as being intelligent, polite, and moral. When the threatened males are given the choice of meat or vegetarian pizza they chose the meat pizza to assert their masculinity and further assert their masculinity by eating a lot of the pizza. When males are told they are high in masculinity they are happy that the female serving them knows they are masculine and therefore eat a lot of meat pizza to confirm their masculinity and do not worry about presenting themselves as intelligent, moral, and polite. The males whose masculinity has been enhanced and have the choice of eating a “masculine” or “feminine” food, knowing the female serving them knows they are masculine, they assert their masculinity by choosing a masculine food, and then eat less of the pizza in order to appear intelligent, polite, and moral, as well as masculine.

The social motives questionnaires indicated that males consider that making a good impression is important when eating with someone of the same sex, as is appearing polite, interested, masculine, and healthy. Males also report that when eating with someone of the opposite sex making a good impression is important, as well as appearing polite, attractive, interested, masculine, and healthy. Further analysis showed that participants reported that it was more important to make a good impression, appear polite, attractive, interested, feminine, masculine, and healthy when eating with someone of the opposite sex than when eating with someone of the same sex. Overall, when one is eating with someone of the
opposite sex it is important to make a good impression, consisting of appearing polite, attractive, interested, masculine, and healthy.

Males indicated that when eating with someone of the same sex they would eat a medium amount of food to appear polite, attractive, interested, and healthy. They would eat a slightly larger amount of food to appear masculine and a much smaller amount of food if they wanted to appear feminine. The same males report that when they eat with someone of the opposite sex in order to appear polite, attractive, interested, and healthy they would eat a medium amount of food. These participants would eat a larger amount to appear masculine and a much smaller amount if they wanted to appear feminine.

Overall, males tend to choose meat over vegetables and eat a varied amount depending on what type of impression they would like to make. If males want to appear masculine they will eat more of a “masculine” food consisting of meat and if they want to appear polite, attractive, healthy, intelligent, and moral they will eat less of the “masculine” food. In conclusion, it is important for males to appear more attractive when eating with someone of the opposite sex as opposed to when eating with someone of the same sex.

*Alternative explanations*

*Vegetable cue.* In the choice condition participants were told that they had a choice of pizza and they could have either meat-lovers pizza or vegetarian pizza. In this condition the males chose the meat pizza but ate different amounts compared to the males in the meat pizza only condition. The males in the choice condition ate the meat pizza just like those participants in the meat pizza only condition but they also encountered a vegetable cue when the experimenter mentioned that they had the choice between meat or vegetarian
pizza. Vegetables are healthy and the schema of being healthy may have entered the participants’ minds, making them conscious of the fact that they have chosen the unhealthier choice. This cue alone may have altered how much the males decided to ingest. The Hi-Masc males in the meat pizza condition ate more than did the males in the choice condition. The males in the choice condition may have been conscious of having made an unhealthy choice and therefore ate less of the pizza. The mere mentioning of the vegetarian pizza may have served as a reminder to be healthy and that healthier food choices do exist. Studies have found that the presence of a cue can affect later judgments and behaviour (Ferguson, Bargh, & Nayak, 2005).

*Choice.* The mere fact that in the one condition the participants had a choice between two types of pizza could have altered how much the participants ate. Having the choice, one now has to use cognitive resources and thoughts may be altered (Arana & Leon, 2009), thus possibly affecting how much one consumes.

*Limitations*

A limitation of the study is that the males in the second study rated liking meat pizza over vegetarian pizza, unlike the males in the pilot study. When the males actually ate the pizza, they equally preferred the meat and vegetarian pizza. If males rated the meat pizza as better tasting then it is a possibility that in the choice condition males picked the meat pizza over the vegetarian pizza because they liked meat pizza more.

A second limitation is that the participants may have preconceived notions regarding their masculinity and may not have believed or cared about what the experimenter told them regarding their masculinity level. These participants may have
acted in accordance to their own notion of how masculine they are. It was found that the males in the High-Masc condition rated themselves higher on masculinity than the males in the Low-Masc condition and the Control condition. The males rated themselves as equally masculine in the Low-Masc condition and the Control condition; thus they may not have believed the experimenter when they were told they scored low on masculinity.

_Future Studies_

The participants in this study were male university students. It would be interesting to run the study with different subject pools, example females, older males, or teenage males. Moreover, it would be interesting if the study were run with a male experimenter in order to determine how the gender of the experimenter affected eating.

Further studies could test to see if having a “healthy” cue present when being offered food affects how much one eats. As well, one might well investigate if the mere choice between two or more foods alters how much one consumes.

One’s culture may play a role in how one views different types of food and how much one consumes. Future studies should examine how culture plays a role in how one views food and how much one consumes in certain situations. Eating a certain amount of food to convey a specific impression may be different for different culture
References


Herman, C. P., Roth, D. A., & Polivy, J. (2003). Effects of the presence of others on food intake:


Appendix A

Interest Scale for University Students

For Dr. Bailis’s lab (collection 2008 – 2009)

Please rate how you feel about each item using the following scale.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Dislike</th>
<th>Dislike</th>
<th>Slightly Dislike</th>
<th>Neither dislike nor like</th>
<th>Slightly Like</th>
<th>Like</th>
<th>Strongly Like</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

1. _____ Listening to CDs
2. _____ Watching movies
3. _____ Traveling
4. _____ Sending postcards
5. _____ Collecting coins
6. _____ Reading
7. _____ Collecting posters
8. _____ Drinking coffee
9. _____ Skiing
10. _____ Going for bike rides
11. _____ Writing reminders
12. _____ Going on facebook
13. _____ E-mailing friends
14. _____ Sending text messages
15. _____ Riding public transportation
16. _____ Reading magazines
17. _____ Smoking
18. _____ Swimming
19. _____ Watching TV
20. _____ Camping
Appendix B

Mood Scale

This scale consists of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you feel this way right now, that is, at the present moment. Use the following scale to record your answers.

<table>
<thead>
<tr>
<th></th>
<th>1 very slightly or not at all</th>
<th>2 a little</th>
<th>3 moderately</th>
<th>4 quite a bit</th>
<th>5 extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>___</td>
<td>relaxed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>___</td>
<td>distressed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>___</td>
<td>droopy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>___</td>
<td>excited</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>___</td>
<td>annoyed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>___</td>
<td>serene</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>___</td>
<td>upset</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>___</td>
<td>bored</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>___</td>
<td>calm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>___</td>
<td>satisfied</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>___</td>
<td>guilty</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>___</td>
<td>hungry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>___</td>
<td>at ease</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>___</td>
<td>enthusiastic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>___</td>
<td>proud</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>___</td>
<td>embarrassed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>___</td>
<td>interested</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

___ irritable

___ tired

___ strong

___ sluggish

___ ashamed

___ at rest

___ inspired

___ full

___ nervous

___ self-conscious

___ determined

___ pleased

___ jittery

___ irritated

___ drowsy

___ active

___ afraid
Appendix C

Manipulation Check 1

To what extent did you plan to try to make a good impression to the experimenter? (please circle)

1  2  3  4  5  6  7
not at all  a lot

If you were going to try to make a good impression on the experimenter, what kinds of things were you planning to do to make a good impression?
___________________________________________________________________________________________________________________
_______________________________________________________________________________________

What kinds of things were you going to avoid doing?
___________________________________________________________________________________________________________________
_______________________________________________________________________________________

How nervous were you about your interaction with the experimenter in the study? (please circle)

1  2  3  4  5  6  7
not nervous  extremely
at all  nervous

How attractive did you think the experimenter was?

1  2  3  4  5  6  7
not at all  a lot
Manipulation Check 2

How much did you like the pizza available in the experiment? (please circle)

1 2 3 4 5 6 7
Did not like at all 

How would you rate the pizza?

1 2 3 4 5 6 7
Extremely feminine Neither Extremely masculine

How much do you like _________ pizza? (the pizza type that was not eaten in the experiment for the particular subject)

1 2 3 4 5 6 7
Did not like at all 

How would you rate _________ pizza? (the type not eaten in the experiment for the particular subject)

1 2 3 4 5 6 7
Extremely feminine Neither Extremely masculine

How much pizza did you eat? ________________________________

Do you have any food allergies that would have prevented you from eating the pizza available in the experiment? (circle one)

YES NO

Do you have any religious dietary restrictions that would have prevented you from eating the pizza available in the experiment? (circle one)

YES NO

When was the last time that you ate? _________ a.m./p.m. (please circle)
Please list what you ate the last time you ate before coming to this experiment.

___________________________________________________________________________________________________________________

___________________________________________________________________________________________________________________

___________________________________________________________________________________________________________________

Manipulation Check 3

Perceive Yourself Traits

Please rate yourself on the 7-point scale. “How __________ are you?”

1 not at all
2 3 4 5 6 7 completely

1. _____ laid-back
2. _____ courageous
3. _____ feminine
4. _____ shy
5. _____ stubborn
6. _____ spontaneous
7. _____ masculine
8. _____ cautious
9. _____ outgoing
10. _____ considerate
Appendix D

Social Motives Scale

Assume that you are having lunch with a likeable person of the same sex/opposite sex whom you have just met.

Base your answers to the following questions on the situation described above. Using the scale below rate how important each motives are to you when meeting a new person. Write the number on the line next to each item.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all important</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Extremely important</td>
</tr>
</tbody>
</table>

1. ____ How important would it be for you to **make a good impression**?
2. ____ How important would it be for you to **be polite**?
3. ____ How important would it be for you to **appear attractive**?
4. ____ How important would it be for you to **appear interested in what your companion is saying**?
5. ____ How important would it be for you to **become involved in conversation with your companion**?
6. ____ How important would it be for you to **appear feminine**?
7. ____ How important would it be for you to **appear masculine**?
8. ____ How important would it be for you to **appear healthy/fit**?
9. ____ How important would it be for you to **feel superior to/compete with your companion**?
10. ____ How important would it be for you to **be similar to/behave like your companion**?
Again we would like you to assume that you are having lunch with a likable person of the same sex/opposite sex whom you have just met. On the previous scale you indicated how important various factors would be to you in this situation. Now, on the following items we want you to ASSUME that each of these factors is important to you, and then indicate HOW MUCH YOU WOULD EAT IF THIS WERE TRUE.

Using the scale below indicate how much you would eat. Write the number on the line next to each item.

1. **Extremely small amount**  
2. **Extremely large amount**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
</table>

1. __   **Assuming you want to make a good impression** how much would you eat?  
2. __   **Assuming you want to be polite** how much would you eat?  
3. __   **Assuming you want to appear attractive** how much would you eat?  
4. __   **Assuming you want to appear interested in what your companion has to say** how much would you eat?  
5. __   **Assuming you want to become involved in conversation with your companion** how much would you eat?  
6. __   **Assuming you want to appear feminine** how much would you eat?  
7. __   **Assuming you want to appear masculine** how much would you eat?  
8. __   **Assuming you want to appear healthy/fit** how much would you eat?  
9. __   **Assuming you want to feel superior to/compete with your companion** how much would you eat?  
10. __  **Assuming you want to be similar/behave like your companion** how much would you eat?