Book Review

**Soy protein and formulated meat products by Henk W. Hoogenkamp**

Oiye Shadrack and Hon. Prof. Ruth Oniang’o

**Code Number: nd05032**

In this issue we have included reviews of a few books that we thought are important in the field of food, agriculture, nutrition and development. Please read and tell us what you think

**Title:** Soy protein and formulated meat products  
**Author:** Henk W. Hoogenkamp  
**Publisher:** CABI Publishing  
**Reviewer:** Oiye Shadrack and Hon. Prof. Ruth Oniang’o

This book is an important and comprehensive account of the historical, nutritional, social and technological aspects of soy protein processing, focusing on variably possible formulations composed of soy concentrates and isolates as functional ingredients. The book - designed to interest advanced students and professionals in human nutrition as well and food and meat science and technology – argues that unlocking the potential of nature to improve quality of life is the single greatest challenge for soy protein nutrition. Basic knowledge in food science, food technology, nutrition and related issues is key to the understanding of important complexes between interrelated aspects of soy protein.

For this reason, Henk W. Hoogenband spends quite a significant number of initial chapters in this book to highlight some basic aspects, including the history of soy, meat processing, microbiology, lifestyle foods paradigms, nutrition-related illnesses and practices, and genetically modified organisms. One conspicuous observation is the simplicity and care that attends to the presentation of basic facts and contentious issues.

Quite a wide range of emulsified meat, meat pate, sausage and poultry formulations are given in tabular forms. Prior to these presentations, there is a whole chapter on the functional non-meat protein properties. Functional non-meat protein ingredients can be of animal or vegetable origin, and both can be used in processed meat products. It is, however, noted that during the last decade of the 20th century, the cost factor, processing capabilities and flavor improvements of soy protein have led to considerable erosion of milk protein market domination. Improved soy protein functionality, including gel strength, emulsification and removal of beany soy flavor, have slowly encroached on usage of milk protein which was previously the most ideal fat-water emulsifier in finely comminuted meat products. In the formulations presented in this book, soy protein in form of isolates and concentrates are included particularly to replace the meat and poultry levels, and for functional reasons. Three main fractions in functional soy protein have been discussed namely; fat-soluble protein, soluble aggregate and insoluble aggregate.
After a detailed account in relevant chapters of technological issues on particular types of meat products, formulations and explicit processing procedures for various meat products are annexed. No warranties, however, expressed or implied, are made on suggested formulations. Based on this information, it is suggested that the formulae should be evaluated on a small-scale prior to a full-scale production, and that the information contained in the book should not be construed as permission for violation of trademarks or patent rights. The last chapter on protein-enhanced fresh meat is particularly interesting. Modern time-trapped consumers demand a centre-of-the-plate meat portion that can be prepared in minutes – not hours. Ease of preparation at home thus needs to be part of the solution. Protein-stabilized, moisture-enhanced fresh meat - which is discussed in this chapter - is one key to that solution, being less intimidating and more forgiving during cooking and preparation.

It is evident that the author’s objective of making soy a strategic ingredient in menu meat and food items for global powerhouse of franchised food restaurants is met. The only question is, however, ‘How many readers will believe him?’ It is also clear from the book, that there is a wide window of opportunity to solve the challenge of soy industry and to find new, attractive, and technologically sound ways to develop great-tasting, affordable foods while at the same time educating the public about soy protein’s nutritional and health benefits.