

Available online at www.sciencedirect.com



Carbohydrate Polymers

Carbohydrate Polymers 54 (2003) 531

www.elsevier.com/locate/carbpol

Book Review

Chemical and functional properties of food proteins Z.E. Sikorski (Ed.); Technomic Publishing Co., Inc., Basel, 2001, x + 490 pp, ISBN 1 56676 960 4

Among several aspects of food quality, the nutritional value, safety, functional properties, and sensory attributes are related to the content and characteristics of proteins and other nitrogen compounds. Knowing their effect on the attributes of quality, the food processor can set up requirements regarding the composition and features of raw materials and ingredients. One can also apply processing parameters that preserve the original, destroy the harmful components, and do not induce undesirable changes.

Furthermore, proteins are among the important components that determine the nutritional and sensory value of foods. A large amount of research and development has been devoted to the efficient utilisation of the world's protein resources for human food. This book contains a concise presentation of the current state of knowledge of the content, structure, chemical reactivity, and functional properties of food proteins.

This new food science resource presents an in-depth survey of current information on food proteins. The 16 chapters were prepared for this volume by food scientists, working with universities and food research organisations, from around the world. The first 10 chapters discuss structure-function relationships, methods of chemical analysis, chemical and enzymatic modifications, nutritive

roles, and mutagenicity and carcinogenecity of food proteins. The last 6 chapters describe the proteins in meat and fish, milk, eggs, cereals, legumes, oilseeds, and single-cell organisms. These chapters provide detailed information on the effects of conditions applied in storage and processing on the reactions in proteins and their impact on quality attributes of food products. Most chapters have the character of short monographs, presented a well-rounded discussion of the topic. The authors prepared their contributions based on personal research and experience, as well as on critical evaluation of the present state of the knowledge as reflected in literature.

The volume of *Chemical and Functional Properties of Food Components Series* is addressed to food scientists in industry and academia, to food science graduate students, and also to nutritionists and all those interested in the roles and attributes of food proteins.

Maria R. Kosseva School of Engineering (ChemEng), Centre for Bioprocess Engineering, The University of Birmingham, Edgbaston B15 2TT, UK

John F. Kennedy*

Chembiotech Laboratories,

The University of Birmingham Research Park,

Vincent Drive, Birmingham B15 2SQ, UK

^{*} Corresponding author.