
Book reviews

Cereals processing technology

G. OWENS (Ed.)

CRC Press, Boca Raton, Woodhead Publishing Ltd., Cambridge, 2001, CRC Press ISBN 0-8493-1219-1,
Woodhead Publ. Ltd. ISBN 185573561 X, 238 pages

The cereal processing industry is a continuously developing one, which has very high importance in human nutrition and animal feeding, too. The development of the this branch of food industry has been well presented in this book by a distinguished international team of contributors. This book is the newest available review that gives a wide-ranging survey of raw materials as well as cereal products and the technologies used to produce them. This review has presented also the emerging technologies and equipment in addition to the traditional cereal processing technologies and equipment used in this industry.

The book consists of two parts. The first part, "Cereal and flour production", gives an overview in three chapters on the cereal production methods such as wheat, corn and coarse grains milling, and biotechnology, cereal and cereal products quality. The last chapter is of especially emphasized importance and it is one of the most valuable parts of the book. In the second part of the book, "Cereal products", the reader could get information about rice production, pasta production, Asian noodle processing, breakfast cereals, malting and breadmaking in six separate chapters.

The **Cereals processing technology** is a scientific guidebook for raw material producers, refiners, bakers and other industrial processors involved in milling, breakfast cereal manufacturing, maltings and brewing. This book is also recommended for those who work in educational and governmental establishments to get useful information about cereal processing technologies and equipment.

Zs. CSERHALMI

Chemie in Lebensmitteln
Rückstände, Verunreinigungen, Inhalts- und Zusatzstoffe

J. F. DIEHL

Wiley-VCH Verlag GmbH, Weinheim, 2000, ISBN 3-527-30233-6, 332 pages

It is well known that many types of toxic and poisonous materials can get into the human organism by foods. These materials can be up-taken and can contaminate during growing, breeding, cultivation of plants and animals as pesticides, hormones, heavy metals, microbial toxins etc., further during processing of raw materials as disinfectants, preservation materials, additives, etc. Furthermore, foods might contain natural substances toxic to humans. Chemical materials and their metabolism, the metabolites as well as the combined effects are also dealt with. The book gives a good summary of risk factors in foods causing allergic reactions and food intolerance. At the determination of the quality of foods it is necessary to identify and detect all these kinds of compounds, their absence or presence as well as their quantity.

The author deals with several aspects of the subjects investigated, gives a short history of the problem, shows the cases, discusses the national and international situation in the field of legal steps taken to ensure the safety of our food.

The book starts with a retrospect to the "good old times", giving thought to the history of food as a basic need and food-related problems. In the next 8 chapters the following subjects are dealt with: Chapter 2 is about toxicology in general (toxicology, food toxicology, toxicity testing methods, ADI-concept, limits, epidemiological studies); Chapter 3 gives an overview of residues (pesticides, including DDT, the effect of integrated plant protection, ecology, antibiotics, growth promoters and other pharmaceutical products used in the animal husbandry, feed additives, solvents, disinfectants, compounds migrating from i.e. packaging materials into the foods); Chapter 4 gives insight into contaminants (heavy metals, polycyclic-aromatic carbohydrates, polychlorinated biphenyls, dioxine, musk in fragrances, air fresheners etc.); Chapter 5 touches the issue of manure/fertilisers, nitrate, nitrite, nitrosamine problem); Chapter 6 reviews reaction products in foods (i.e. Maillard-products, heterocyclic-aromatic amines, D-amino acids, etc.); Chapter 7 deals with natural substances as potential health risk factors (i.e. glycoalkaloids, lectins, enzyme inhibitors, phytoestrogens, mycotoxins, alcohol, dietary fibre, antioxidants, free radicals, carotinoids, biogenic amines etc.); Chapter 8 thoroughly examines food additives (including functional foods); Chapter 9 summarises recent knowledge on nutrition and health (including the indicators of public health, nutrition and cancer, food allergy and intolerance etc.)

At the end of the book there is a list of references consisting of more than 800 citations, and an index helps the reader to find the subjects of interest.

The author – and the reviewer – recommend this book to specialists in nutrition, chemists, pharmacists, physicians, vets, teachers and students, and everybody who is dealing with ecological, agricultural, food processing problems and to those who are interested in healthy nutrition. The book, besides its scientific content, is fascinating to read.

E. KOVÁCS