

Book reviews

Tamime and Robinson's Yoghurt – Science and Technology, Third Edition

A. Y. TAMIME and R. K. ROBINSON (Eds)

Woodhead Publishing Limited, Cambridge, UK and CRC Press LLC, Boca Raton, FL, 2007
Woodhead Publishing ISBN 978-1-84569-213-1, CRC Press ISBN 978-1-4200-4453-9, xvi + 791 pages

This updated treatise of all possible aspects of yoghurt science is undoubtedly the most comprehensive book ever written on a single fermented dairy food. An immediately identified strength of the current volume is the logical flow of the order of chapters and subchapters, which results in a highly readable book. '*Tamime and Robinson's Yoghurt – Science and Technology*' is divided into 10 chapters, the first of which introduces the reader to the origin of fermented milks and their evolution process. Detailed information is given on the diversity and consumption patterns of fermented milks and the methods of yoghurt production. Generalised schemes for the classification of yoghurt products are also provided in this part of the book.

The next three chapters (2–4) focus upon the multitude of factors influencing the quality of yoghurt during the preparation of the milk base, various processing stages, packaging, storage and distribution. Special attention is paid to the aspects of plant cleaning and hygiene and the treatment of effluents.

Chapter 5 deals with the wide range of yoghurt products available worldwide. Most yoghurt manufacturers in many industrialised countries are concentrating on minor modifications that may boost sales to consumers seeking possible health benefits. However, the market for yoghurt tends to be rather conservative, and future developments will most likely have to acknowledge this resistance to change.

Chapters 6 to 8 are concerned with the microbiology and biochemistry of yoghurt. Topics covered include growth characteristics of *Streptococcus thermophilus* and *Lactobacillus delbrueckii* subsp. *bulgaricus* in milk, preservation and production of starter cultures, metabolism of carbohydrates, proteins, lipids (fats) and vitamins.

The penultimate chapter (9) discusses the nutritional value of the major constituents of yoghurt, and the effects of yoghurt consumption on human health are also reviewed. Probiotic yoghurts are known to have more positive therapeutic effects than traditional yoghurts do. However, great care must be exercised in statements about the health-promoting properties of probiotic yoghurts. The authors stress the point that, with the current state of knowledge, a health claim for adult consumers that 'this product contains a culture which may improve the health of the digestive tract' appears to be the only truthful conclusion.

The final chapter (10) provides information on quality control in yoghurt manufacture. The general principles of HACCP and the importance of implementing and monitoring a HACCP system are discussed in detail. Special emphasis is placed on the quality issues of raw materials and retail products.

In summary, this volume, which includes a whopping 175 pages of references in total, is an excellent source of detailed information on yoghurt and will be of great value to those who are versed in the field and newcomers alike.

L. VARGA

**Handbook of waste management and co-product recovery in food processing
Volume 2**

K. WALDRON (Ed.)

Woodhead Publishing Ltd. Cambridge, UK, and CRC Press LLC, Boca Raton, FL, 2009,
ISBN 978-1-84569-391-6, ISBN 978-1-84569-705-1, 651 pages

Volume 2 of the book consists of 24 chapters. The second volume of the *Handbook of waste management and co-product recovery in food processing* has just been published.

This volume comprises further selected contributions from an array of internationally recognised experts who have reviewed the latest developments in this area. A particular emphasis has been put on assessing environmental impact and addressing this issue through close-loop approaches, and presenting overviews of recent developments in exploiting co-products in food and non-food areas.

The book is divided to four parts, dealing with special aspects of the above-mentioned topics. The titles of each part give a good overview of the information included into the chapters. There are four main parts:

Part I: Economic and legislative drivers for waste management and co-product recovery

This part contains three chapters that focus on a holistic view of the waste management concept and co-product recovery, with special emphasis on the economics and cost-benefit relations highlighting some of the key challenges such as novel-food legislation.

Part II: Environmental systems analysis and closed-loop factories

Part II contains eight chapters that focus on environmental systems analysis (which measures the impact of process changes in the food industry) and approaches to reduce environmental impact through closed-loop approaches and recycling.

Part III: Exploitation of co-products in food production

Part III contains six chapters that explore approaches to exploit co-products in the production of food and feed ingredients.

Part IV: Non-food exploitation of wastes and co-products

The final part of Volume 2 provides a series of seven chapters that cover the non-food exploitation of food-chain wastes and co-products.

In summary, Volume 2 of *Handbook of waste management and co-product recovery in food processing* complements the recently published Volume 1, and demonstrates that the large body of research and development throughout the world is providing opportunities for innovation and wealth creation within an environmental context.

We are pleased to recommend this excellent book for both practitioners and theoretical specialists.

F. PÁNDI