

Improving the safety and quality of milk

Volume 2: Improving quality in
milk products

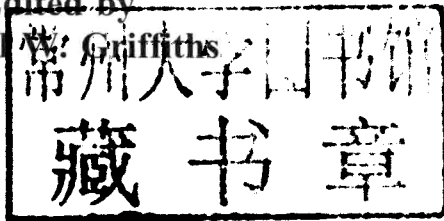
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Volume 2: Improving quality in milk products

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Improving the safety and quality of milk

Related titles:

Dairy processing: improving quality

(ISBN 978-1-85573-676-4)

With its distinguished international team of contributors, *Dairy processing* summarises key developments in the field and how they enhance dairy product safety and quality. The first part of the book discusses raw milk composition, production and quality. Part II reviews developments in processing from hygiene and HACCP systems to automation, high-pressure processing and modified atmosphere packaging. The final part considers developments for particular products such as fermented dairy products and cheeses.

Dairy-derived ingredients: food and nutraceutical uses

(ISBN 978-1-84569-465-4)

Advances in technologies for the extraction and modification of valuable milk components have opened up new opportunities for the food and nutraceutical industries. New applications for dairy ingredients are also being found. *Dairy-derived ingredients* reviews the latest developments in these dynamic areas. The first part covers modern approaches to the separation of dairy components and manufacture of dairy ingredients. The second part focuses on the biological functionality of dairy components and their nutraceutical applications. The final part of the book addresses the technological functionality of dairy components and their applications in food and non-food products.

Foodborne pathogens: hazards, risk analysis and control Second edition

(ISBN 978-1-84569-362-6)

Effective control of pathogens continues to be of great importance to the food industry. The first edition of *Foodborne pathogens* quickly established itself as an essential guide for all those involved in the management of microbiological hazards at any stage in the food production chain. This major new edition strengthens that reputation, with extensively revised and expanded coverage, including more than ten new chapters. Part I focuses on risk assessment and management in the food chain. Chapters in this section cover pathogen detection, microbial modelling, the risk assessment procedure, pathogen control in primary production, hygienic design and sanitation, among other topics. Parts II and III then review the management of key bacterial and non-bacterial foodborne pathogens.

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Preface

Since I first started my career in dairy research at the now defunct Hannah Research Institute in 1974, the dairy industry worldwide has faced many changes. With regard to food safety, it has witnessed the emergence of food-borne pathogens not previously associated with dairy products, such as *Listeria monocytogenes* and *Escherichia coli* O157:H7 along with the introduction of preventive food safety management systems (HACCP) to limit the impact of these pathogens. This year has seen the publication of the sequence of the entire cow genome, a feat that opens up innumerable possibilities. The use of this information will allow us, for example, to improve production costs through identification of traits related to feed conversion, to produce milk with specific characteristics and to impact animal welfare by selection of animals with increased disease resistance. These are just a few of the benefits the industry may reap. With more research it is also becoming apparent that milk and milk products are not the nutritional minefield that many would have us believe, in fact dairy products possess bioactive components that show substantial promise for health promotion.

It is the intent of this book to provide up-to-date coverage of several facets related to the production and processing of safe, wholesome and nutritious dairy products, not only from bovine milk but also from other domesticated ruminants. The first volume includes chapters related to milk safety and quality and focuses on the microbiological and chemical safety of raw milk and technologies for analyzing and processing milk. In the second volume, nutritional, sensory and sustainability issues are addressed as well as those associated with other milk-producing mammals and specific milk products.

I would like to thank all the contributing authors for their hard work and patience in waiting for edits. I would particularly like to acknowledge the

contribution of Dr Richard Robinson, who sadly died during the production of this book. Dr Robinson was well known by all in the dairy industry for his research and the many books he edited.

On a personal note I would like to thank my wife, Susan, for her understanding and support, my two daughters, Megan and Bethan, and their respective husbands, Darren and Eric, and my four grandchildren, Rhys, Emma, Sophie and Evan, for keeping me young at heart.

I would also like to thank Dairy Farmers of Ontario for all the support they have given me over the last 20 years.

To all the readers of this book, I hope you learn from it and that it makes you realize that the proper production and processing of milk is complex and is carried out by professional and dedicated farmers and processors.

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