

Preface to Second Edition

Since the publication of the first edition of this book in 2000, the importance and popularity of cheese have increased further. Approximately 19×10^6 tonnes were produced in 2014, representing 35–40 % of milk production. The second edition covers mainly the same topics as the first edition. Two chapters, “Acceleration of Cheese Ripening” and “Analytical Methods for Cheese,” have been omitted; the former has been incorporated in “Biochemistry of Cheese Ripening.” One new chapter, “Legislation on Cheese” has been introduced, and a specialist has been recruited to write the chapter “Cheese Flavour.”

Cheese remains an active subject of research, and considerable progress has been made on the cheese that is summarized here. Advances have been made in aspects of cheese sciences during the past 15 years, but some areas are quite “mature,” and consequently new knowledge is limited. Significant advances have been made on the physico-chemical aspects of cheese, e.g. mechanism of the gelation of rennet-altered casein micelles, the rheology of rennet-induced milk gels, syneresis of rennet- or acid-induced milk gels and the functional properties of cheese. Advances are probably most noticeable, however, in the microbiology of cheese, made possible by advances in molecular biology techniques. Most cheese is consumed as “Table Cheese,” but the importance of cheese as an ingredient in composite foods, e.g., pizza, sauces, etc., is increasing, and the functionality of cheese in such applications has attracted much attention.

Fundamentals of Cheese Science provides comprehensive coverage of the scientific aspects of cheese, appropriate for anybody working with cheese, from lecturers, researchers and technologists to undergraduate and postgraduate students in food science and technology. The book assumes familiarity with biochemistry, microbiology and dairy chemistry, and it emphasizes fundamental principles rather than technological aspects.

The book is extensively referenced. References are divided into "Suggested Reading," comprised mainly of textbooks and reviews, and "References", i.e., primary references to support claims made.

Cork, Ireland

Patrick F. Fox
Timothy P. Guinee
Timothy M. Cogan
Paul L.H. McSweeney

Fundamentals of Cheese Science

Fox, P.F.; Guinee, T.P.; Cogan, T.M.; McSweeney, P.L.H.
2017, XV, 799 p. 271 illus., 78 illus. in color., Hardcover
ISBN: 978-1-4899-7679-6