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Nota di contenuto	Fermented Milks; Contents; Preface to Technical Series; Preface; Contributors; 1 Types of Fermented Milks; 1.1 Background; 1.2 Evolution of the process; 1.3 Diversity of fermented milks; 1.4 Patterns of consumption; 1.5 Manufacture of fermented milks; 1.6 Conclusion; References; 2 Starter Cultures; 2.1 Introduction; 2.2 Types and nomenclature of the starter organisms; 2.2.1 Traditional lactic acid bacteria; 2.2.2 Non-traditional microflora; 2.2.3 Yeasts and moulds; 2.3 Partial characterisation of the starter microflora; 2.3.1 Carbohydrate metabolism; Fermentation pathways Sugar transportation and hydrolysis Generation of energy; 2.3.2 Citrate metabolism; 2.3.3 Formation of acetate, formate, acetaldehyde and ethanol; Pyruvate dehydrogenase complex; Pyruvate formate lyase; Acetolactate formation; Acetoin and diacetyl formation; 2.3.4 Production of exopolysaccharides; Structure and characterisation;

Chemical composition and biosynthesis; Influence of exopolysaccharides on texture; Role of exopolysaccharides in the microstructure of the gel; 2.3.5 Bacteriocins; Classification of bacteriocins; Class I ... characterisation, structural properties and mode of action
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 Class III ... characterisation, structural properties and mode of action; Application of bacteriocins in fermented milks; 2.4 Development of starter cultures; 2.4.1 Development of new bacterial strains; 2.4.2 Blending of cultures; 2.4.3 Characterisation of cultures; Acidification rate; Texture determination; Flavour assessment; Miscellaneous factors; 2.5 Production and preservation of commercial starter cultures; 2.6 On-site production and use of starter cultures; 2.6.1 Background 2.6.2 In-line inoculation with freeze-dried or frozen concentrated culture 2.6.3 Automatic inoculation system; 2.7 Future developments; Acknowledgements; References; 3 Manufacture of Yoghurt; 3.1 Background; 3.2 The basic requirements for making yoghurt; 3.2.1 Introduction; 3.2.2 Milk as the base material; 3.2.3 Standardisation of fat content and fortification of solids-non-fat content; 3.2.4 Other ingredients; 3.3 Initial processing; 3.4 Fermentation; 3.4.1 Background; 3.4.2 Microbiology of fermentation; 3.5 Coagulation of the milk; 3.6 Final processing; 3.6.1 Cooling 3.6.2 Fruit...yoghurt blending 3.6.3 Packaging; 3.7 Post-production problems; 3.8 Conclusion; References; 4 Properties of Yoghurt and their Appraisal; 4.1 Background; 4.2 Chemical composition; 4.2.1 Primary constituents; 4.2.2 Secondary constituents; 4.3 Assessment of physical characteristics; 4.3.1 Physical nature of yoghurt; 4.3.2 Physical characteristics of set yoghurt; Rheological properties; Rheological measurements; 4.3.3 Stirred and drinking yoghurts; 4.4 Colour; 4.5 Microbiological analysis; 4.6 Sensory properties and analysis; 4.6.1 Sensory analysis of yoghurt 4.6.2 Attribute profiling of yoghurt

Sommario/riassunto

Highly profitable and an important range of products within the dairy industry worldwide, the economic importance of fermented milks continues to grow. Technological developments have led to a wider range of products and increased popularity with consumers. In the second book to feature in the SDT series Fermented Milks reviews the properties and manufacturing methods associated with products such as yoghurt, buttermilk, kefir, koumiss milk-based fermented beverages and many other examples from around the globe, offering the reader: A practically-oriented and