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Descrizione fisica	1 online resource (234 p.)
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Altri autori (Persone)	TamimeA. Y
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Probiotic Dairy Products; Contents; Preface to Technical Series; Preface; Contributors; 1 Microbiota of the Human Gut; 1.1 Background; 1.2 The human gastrointestinal tract and its microbiota; 1.3 Functions of the gastrointestinal microbiota; 1.4 Influences on the GI tract and its microbiota; 1.5 Beneficial microbiota: probiotics and health aspects; 1.5.1 Enzymatic activity and improved digestion; 1.5.2 Clostridium difficile-associated intestinal disease; 1.5.3 Antibiotic-associated diarrhoea; 1.5.4 Acute diarrhoea and gastroenteritis; 1.5.5 Extra-intestinal applications 1.5.6 Other potential applications 1.5.7 Product considerations; 1.5.8 Prebiotics; 1.6 Conclusions; References; 2 Genomic Characterisation of Starter Cultures; 2.1 Introduction; 2.2 The Omic approaches; 2.2.1 Background; 2.2.2 Exploration of genomic sequences; 2.2.3 Tools for converting genomic sequences to biologically relevant information; 2.2.4 What can genomics be used for?; Comparative genomics; Tracking of strains; Strain characterisation; Strain improvement; Safety

assessment; Improving production conditions; Mode of action; 2.3 State of the art
2.3.1 Publicly available genome sequences 2.3.2 Evolutionary genomics of lactic acid bacteria; 2.3.3 Complete genome sequences of potentially probiotic micro-organisms; *Lactococcus lactis* subsp. *lactis* IL1403; *Bifidobacterium longum* NCC2705; *Lactobacillus johnsonii* NCC533; *Lactobacillus plantarum* WCFS1; *Lactobacillus acidophilus* NCFM; 2.3.4 Metagenomics; Metagenomic analyses; 2.4 Future perspectives; 2.4.1 Nutrigenomics; 2.4.2 Mode of action of probiotics; 2.4.3 Development of new probiotics; 2.5 Conclusions; References
3 Production and Maintenance of Viability of Probiotic Micro-organisms in Dairy Products
3.1 Introduction; 3.2 Probiotic micro-organisms; 3.2.1 General characteristics; 3.2.2 Examples of commercial starter cultures blends; 3.3 Economic value; 3.4 Types of probiotic dairy product; 3.4.1 Fermented milks and beverages; Nordic cultured buttermilk (*piima*, *Imjlk*) and *kefir* (drinking-type); Non-drinking fermented milk products; *Skyr*, *ymer* and strained yoghurt (concentrated fermented milks); Quality appraisal of probiotic fermented milks; 3.4.2 Cheeses; Methods of introduction in cheese
Strain selection 3.4.3 Ice-cream and frozen desserts; 3.4.4 Miscellaneous dairy products; Probiotic sweet milk; Fat spread; Dried products; Long shelf-life fermented milk drinks or beverages; Milk- and water-based cereal puddings; 3.5 Viability of probiotic micro-organisms; 3.5.1 Composition of the fermentation medium; 3.5.2 Viability as affected by oxygen; 3.6 Methods to improve the viability of probiotic micro-organisms in the product; 3.6.1 Selection of bacterial strain(s); 3.6.2 Type of packaging container; 3.6.3 Rate of inoculation; 3.6.4 Two-stage fermentation
3.6.5 Microencapsulation technique

Sommario/riassunto

Following significant developments in recent understanding of milk systems and an explosion in interest in the use of probiotics and prebiotics as functional foods *Probiotic Dairy Products* looks at advancements in the dairy industry and reviews the latest scientific developments in regard to the 'functional' aspects of dairy and fermented milk products and their ingredients. The first title in Blackwell Publishing's prestigious Society of Dairy Technology Series, this key text includes coverage of: Production systems Gut microflora Genomic characterisation of probiot
