1. Record Nr. UNINA9910830322803321

Titolo	Handbook of probiotics and prebiotics [[electronic resource] /] / edited by Yuan Kun Lee, Seppo Salminen
Pubbl/distr/stampa	Hoboken, NJ, : John Wiley & Sons, c2009
ISBN	1-282-03079-5 9786612030796 1-61344-867-8 0-470-43262-4 0-470-43261-6
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (618 p.)
Altri autori (Persone)	LeeY. K (Yuan Kun) SalminenSeppo
Disciplina	660.62 664.001/579
Soggetti	Probiotics Intestines - Microbiology Food - Microbiology Microorganisms - Therapeutic use
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Rev. ed. of: Handbook of probiotics / Yuan-Kun Lee ... [et al.].
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	HANDBOOK OF PROBIOTICS AND PREBIOTICS; CONTENTS; PREFACE; CONTRIBUTORS; PART I PROBIOTICS; 1 Probiotic Microorganisms; 1.1 Definitions; 1.2 Screening, Identification, and Characterization of Lactobacillus and Bifidobacterium Strains; 1.2.1 Sources of Screening for Probiotic Strains; 1.2.2 Identification, Classification, and Typing of Bifidobacterium Strains; 1.2.2.1 Taxonomy; 1.2.2.2 Identification and Typing; 1.2.3 Identification, Classification, and Typing of Lactobacillus Strains; 1.2.3.1 Taxonomy; 1.2.3.2 Identification and Typing 1.2.4 Characterization of Probiotic Properties in Bifidobacterium and Lactobacillus Strains1.2.4.1 Survival to GIT Stressing Conditions; 1.2.4.2 Adhesion/Colonization to/of GIT; 1.2.4.3 Antimicrobial Activity; 1.2.4.4 Other Probiotic Properties; 1.2.5 Conclusion; 1.3 Detection and Enumeration of Gastrointestinal Microorganisms; 1.3.1 Methods for Intestinal Microbiota Assessment; 1.3.1.1 Culture-Dependent Methods;

1.3.1.2 Culture-Independent Methods; 1.3.2 Detection and Enumeration in Dairy Products; 1.3.3 Detection and Enumeration of Specific Probiotics in the Gut
1.3.4 The Problem of the Viability and Physiological State of Intestinal Bacteria1.3.5 Conclusions; 1.4 Enteric Microbial Community Profiling in Gastrointestinal Tract by Terminal-Restriction Fragment Length Polymorphism (T-RFLP); 1.4.1 T-RFLP; 1.4.2 Universal and Group-Specific Primers; 1.4.3 Fluorescent Dyes; 1.4.4 DNA Extraction; 1.4.5 PCR Amplification; 1.4.6 Generation of Terminal Restriction Fragments (TRF) by Digestion of Amplicons with Restriction Enzymes; 1.4.7 Software and Data Processing; 1.4.8 Microbial Diversity in Different Intestinal Compartments of Pigs
1.4.9 Tracking the Fate of Orally Delivered Probiotics in Feces1.4.10 Conclusion; 1.5 Effective Dosage for Probiotic Effects; 1.5.1 Acute (Rotavirus) Diarrhea in Children; 1.5.2 Antibiotic-Associated Diarrhea; 1.5.2.1 Combination of L. acidophilus + bifidobacteria or Streptococcus thermophilus; 1.5.2.2 L. rhamnosus GG or Saccharomyces boulardii Applied Singly; 1.5.3 Helicobacter pyroli; 1.6 Incorporating Probiotics into Foods; 1.6.1 Probiotic Ingredients; 1.6.2 Factors Affecting the Viability of Probiotics in Foods; 1.6.2.1 Choice of Probiotic Organism/Food Combinations
1.6.2.2 Physiologic State of the Probiotic1.6.2.3 Temperature; 1.6.2.4 pH; 1.6.2.5 Water Activity; 1.6.2.6 Oxygen; 1.6.2.7 Toxicity of Ingredients; 1.6.2.8 Growth Factors, Protective, and Synergistic Ingredients; 1.6.2.9 Freeze-Thawing; 1.6.2.10 Sheer Forces; 1.6.3 Synbiotics; 1.6.4 Delivery Systems; 1.6.4.1 Microencapsulation; 1.6.4.2 Delivery Devices; 1.6.5 Probiotic Foods; 1.6.6 Conclusions; 1.7 Safety of Probiotic Organisms; 1.7.1 Current Proposals for Probiotic Safety; 1.7.2 Taxonomic Identification; 1.7.3 Pathogenicity; 1.7.4 Antibiotic Resistance and Susceptibility
1.7.5 Immune Modulation

Sommario/riassunto

Since the publication of the first edition in 1999, the science of probiotics and prebiotics has matured greatly and garnered more interest. The first handbook on the market, Handbook of Probiotics and Prebiotics: Second Edition updates the data in its predecessor, and it also includes material topics not previously discussed in the first edition, including methods protocols, cell line and animal models, and coverage of prebiotics. The editors supplement their expertise by bringing in international experts to contribute chapters. This second edition brings together the information needed for t