Record Nr. UNINA9910787567103321 Interactive probiotics / / editor, Enrica Pessione, Department of Life **Titolo** Sciences and Systems Biology, University of Torino, Italy Pubbl/distr/stampa Boca Raton:,: CRC Press,, [2014] ©2014 **ISBN** 0-429-07202-3 1-4665-7555-7 Descrizione fisica 1 online resource (274 p.) Disciplina 612.39 Soggetti **Probiotics** Actinobacteria **Biochemistry** Lactobacillales Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Includes bibliographical references. Nota di bibliografia Nota di contenuto 1. Probiotic social life, biochemical cross-talk and ecological relationships among bacteria / Enrica Pessione -- 2. Fighting off human infections: a new role for bacteriocin molecules / Konstantinos Papadimitriou, Voula Alexandraki and Effie Tsakalidou -- 3. Lactic acid bacteria to modulate virulence expression in pathogenic bacteria : an alternative to killing? / Sergine Even, Damien Bouchard and Yves Le Loir -- 4. Probiotic-mediated modulation of host gene expression / Sarah O'Flaherty -- 5. Bifidobacteria and their interaction with the gastrointestinal environment / Borja Sanchez, Irene Gonzalez-Rodriguez, Clara G. de los Reyes-Gavilan, Patricia Ruas-Madiedo and Abelardo Margolles -- 6. New probiotics: dairy propionibacteria and the modulation of gut microbiota and physiology / Stephanie-Marie Deutsch and Gwenael Jan -- 7. Neuro-active compounds produced by probiotics: towards a microbiota-(gut-) brain axis control? / Roberto Mazzoli -- 8. Nutraceutical and antioxidant potential of probiotics: the

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proteomics: how proteomics can contribute to risk assessment and biomolecular understanding / Stephan Fuchs and Katharina Riedel -- 11. Prebiotic enhancement of probiotic potential: oligosaccharides triggering modification of protein profiles in lactic acid bacteria / Avishek Majumder, Morten Ejby, Gabriella C. van Zanten, Anne Knudsen, Sampo J. Lahtinen, Birte Svensson and Susanne Jacobsen.

This book underlines the importance of reciprocal interactions between probiotics and humans in terms of stress induction, epigenetic control of cellular responses, oxidative status, bio-active molecules biosynthesis, moonlighting proteins secretion, endogenous toxins neutralization, and several other biological functions. It explores how these responses can affect metabolism and metabolic-related disorders, gutbrain axis balance, mood, inflammatory, allergic and anti-infective reactions, cancer, and ageing. The book explores how probiotics create a dynamic and fluid network of signals able to control the balance between healthy and altered human status--Provided by publisher.