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CropsChapter 13. The Use of Biotechnology to Reduce the Dependency of Crop Plants on Fertilizers, Pesticides, and Other Agrochemicals; Chapter 14. Animal Biotechnology; Chapter 15. Application of Micro-RNA in Regenerative Nutraceuticals and Functional Foods; Chapter 16. Microbial Production of Organic Acids and Its Improvement by Genome Shuffling; Part III. New Frontier in Food Manufacturing Process; Chapter 17. Microalgal Biotechnology in the Production of Nutraceuticals Chapter 18. The Innovation of Technology for Microalgae Cultivation and Its Application in Functional Foods and the Nutraceutical IndustryChapter 19. Production of Nattokinase as a Fibrinolytic Enzyme by an Ingenious Fermentation Technology; Chapter 20. Synthesis of Antihypertensive GABA-Enriched Dairy Products Using Lactic Acid Bacteria; Chapter 21. Production of High-Quality Probiotics Using Novel Fermentation and Stabilization Technologies; Chapter 22. Tracking the Careers of Grape and Wine Polymers Using Biotechnology and Systems Biology Chapter 23. The Impact of Supercritical Extraction and Fractionation Technology on the Functional Food and Nutraceutical IndustryChapter 24. The Application of Nanotechnology to Functional Foods and Nutraceuticals to Enhance Their Bioactivities; Part IV. Quality Assurance and Safety: Design and Implementation; Chapter 25. Enhancing the Nutritional Quality of Fruit Juices; Chapter 26. Probiotics; Chapter 27. Use of High Pressure Technology to Inactivate Bacterial Spores in Foods; Chapter 28. Regulations of Biotechnology Chapter 29. Global Food Biotechnology Regulations and Urgency for Harmonization

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Sommario/riassunto

Modern food biotechnology is now a billion-dollar industry, producing functional foods and nutraceuticals that offer a whole host of increased health benefits, including prevention against illness, and chronic and degenerative conditions. Written by a team of top-tier researchers and scientists from around the world, Biotechnology in Functional Foods and Nutraceuticals brings you up to speed on the cutting-edge research advances taking place in the field. The book begins with an overview of recent advances in biotechnology and their contributions to food science.

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