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Descrizione fisica	1 online resource (525 pages)
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Soggetti	Food - Microbiology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Leading textbook presenting all aspects of food microbiology Food Microbiology: An Introduction presents the basics of microorganisms that impact food safety and quality, the roles of beneficial microbes, food safety regulations, and proper practices for safe and healthy foods throughout all aspects of the supply chain. This Fifth Edition has been updated to reflect advances in research and technology and threats to the global food supply while retaining the pedagogy and structure that students and professors appreciate. Written in a clear and easy-to-understand style, the book is divided into four sections: Part I introduces the fundamentals of food microbiology, including a brief history of the field, the growth processes of food microorganisms, the biology of spores and sporeformers, techniques for enumeration and detection of organisms in food, description of rapid and automated microbial methods, and a new chapter focused on antimicrobial resistance. Part II addresses important regulatory issues and focuses on foodborne pathogenic microorganisms with chapters describing the most common bacterial species that cause foodborne diseases, as well as discussion of parasites, viruses, and prions. Part III explores nonpathogenic microbes important in food, including those responsible for fermentations and food spoilage. Part IV focuses on the control of microorganisms in food, including chemical antimicrobials, biological

and physical methods of food preservation, nonthermal processing, and food safety systems. Food Microbiology: An Introduction also includes updated information on:

- * The growing threats of antimicrobial resistance and climate change and their potential impacts on the global food supply
- * Use of next-generation sequencing techniques in the identification of microbes in food
- * Expanded discussion on sanitizers, disinfectants, and nonthermal processing treatments
- * Up-to-date information on the Food Safety Modernization Act, hazard analysis and critical control points, and good manufacturing practices

Food Microbiology: An Introduction is an essential textbook for undergraduate and graduate students in food science, nutrition, and microbiology, providing the knowledge and tools necessary to navigate the complexities of food microbiology in the 21st century.
