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Extracellular Polysaccharide Production and Biofilm Formation on Resistance; Conclusion; References
3 Antibiotic Resistance in Pathogenic SalmonellaIntroduction; Salmonella spp. as a Pathogen; Salmonella Characteristics; Salmonella Classification; Pathogenesis of Salmonella; Salmonellosis; Pathogenic Mechanisms; Salmonella and Antibiotics; General Concepts; Salmonellosis and Clinical Antibiotic Treatment; Mechanisms of Antimicrobial Action; Salmonella MDR Strains; Factors that Influence Salmonella Antibiotic Resistance; Conclusions; References; 4 Antimicrobial Resistance and Campylobacter jejuni and C. coli; Introduction; Resistance Mechanisms; Fluoroquinolones; Macrolides; Tetracyclines
Aminoglycosides-Lactam Group of Antimicrobials; Development of Resistance; Genetic Adaptive Mechanisms in Resistant Bacteria; Consequences of Resistance on Bacterial Fitness; Resistance Detection; Genetic Methods in the Detection of Resistance Determining Targets; Genomic Analysis of Resistance; Clinical Breakpoints and Epidemiological Cut-Off Values; Resistance Levels in Different Countries and Sources; References; 5 Antimicrobial Resistance in Yersinia enterocolitica; Introduction; Human Infections; Diagnosis; Treatment; Epidemiology; Virulence Factors; Antimicrobial SUSCEPTIBILITY
Mechanisms of Antimicrobial ResistanceMechanisms of Resistance to -lactams; Mechanisms of Resistance to Aminoglycosides; Mechanisms of Resistance to Quinolones; Concluding Remarks; References; 6 Antimicrobial Resistance in Vibrio Species; Introduction; Epidemiology and Underreporting; Vibrio vulnificus; Vibrio parahaemolyticus; Data Limitations and Emerging Methods for Assessing Antibiotic Resistance; Conclusions; References; 7 Antimicrobial Resistance in Shigella Species; Introduction; Antibiotic Resistance; North America; South America; Europe; Africa; Asia; Final Thoughts; References
8 Antimicrobial Resistance in Listeria spp.

Sommario/riassunto

Antimicrobial Resistance and Food Safety: Methods and Techniques introduces antimicrobial resistant food-borne pathogens, their surveillance and epidemiology, emerging resistance and resistant pathogens. This analysis is followed by a systematic presentation of currently applied methodology and technology, including advanced technologies for detection, intervention, and information technologies. This reference can be used as a practical guide for scientists, food engineers, and regulatory personnel as well as students in food safety, food microbiology, or food science. Includes analysis of al