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Fermentation; Bacillus spp. Involved in Fermentation; Other Bacteria Involved in Fermentation; Molds Involved in Fermentation; Microbial Growth During Drying; Use of Starter Cultures for Fermentation of Cocoa; References

Chapter 5: Fungi and Mycotoxin Occurrence in Cocoa Introduction; Fungi in Cocoa and Cocoa Products; Mycotoxins in Cocoa and Cocoa Products; Ochratoxin A; Ochratoxin A in Cocoa and Chocolate; Aflatoxins B<sub>1</sub>, B<sub>2</sub>, G<sub>1</sub>, and G<sub>2</sub>; Aflatoxins in Cocoa and Chocolate; Mycotoxin Regulation in Cocoa and Cocoa By-products; Summary; References; Chapter 6: Nonnutritive Constituents in Chocolate and Cocoa; Introduction; Contaminants, Toxic Effects, and Regulatory Values; Metals; Lead; Cadmium; Nickel; Pesticides; Mycotoxins; Aflatoxins; Ochratoxin A; Agricultural Practices and Cocoa Bean Processing

Growing and Harvesting Distribution; Fertilizing; Diseases; Harvesting; Processing; Contamination Pathways; Metals; Physiological Uptake; Airborne Fallout; Ion Adsorption; Contamination by Soil; Shell Fragments; Contamination by Grinding Equipment; Contamination During Chocolate Manufacture; Pesticides; Mycotoxins; Current Status of Contaminants; Metals; Lead; Cadmium; Nickel; Pesticides; Ochratoxin A; Strategies to Reduce Contaminants; References; Chapter 7: Chocolate and Cocoa Aroma; Introduction; Cocoa-Specific Aroma Components of Dark Chocolates and Cocoa Powder

Fermentation of Cocoa Beans Is Required for the Formation of Cocoa-Specific Aroma Precursors

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#### Sommario/riassunto

Chocolate in Health and Nutrition represents the first comprehensive compilation of the newest data on the actions of the flavonoids and microorganisms associated with the beneficial effects of chocolate. This unique text provides practical, data-driven resources based upon the totality of the evidence to help the reader understand the basics, treatments and preventive strategies that are involved in the understanding of the role chocolate may play in healthy individuals as well as those with cardiovascular disease, diabetes or neurocognitive declines. Of equal importance, critical issues that involve patient concerns, such as dental caries and food preferences in children, potential effects on weight gain, addiction and withdrawal are included in well-referenced, informative chapters. The latest research on the role of chocolate in normal health areas including mood, pain and weight management, cardiovascular disease and related conditions are presented. Chocolate in Health and Nutrition provides health professionals in many areas of research and practice with the most up-to-date, well referenced and comprehensive volume on the current state of the science and medical uses of chocolate. .

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