Microbial Food Contamination

Charles L. Wilson and Samir Droby, eds.
 Boca Raton, FL: CRC Press, 2001
 US \$99.95, 290 pages, hardcover

This book is a useful general reference concerning microbial contamination and food safety. It is not a guide to the medical treatment of foodborne illnesses, but it might be a useful reference for the medical practitioner to have at his or her disposal when encountering cases, questions, or issues related to foodborne disease.

This publication is not a textbook, but rather, a publication of proceedings from a US-Israel Binational Agricultural Research and Development workshop on microbial food contamination. The book has 17 chapters with 32 contributing authors or coauthors. As such, it is a bit eclectic, with topics ranging from "Toxicity Associated With Fumonisin-Contaminated Corn" to "A Brief Introduction to the Kosher Laws and Possible Implications for Food Safety."

This book is topical in light of current concern over international terrorism and contamination of the food supply. Although it does not specifically address terrorism, it does delve into the international ramifications of foodborne infections and toxins on international trade. Perhaps the most generally useful chapters are those concerning "Innovative Technology To Reduce Microbial Food Contamination" and "Virus and Protozoan Parasites on Food." The chapters by 2 investigators from the US Department of Agriculture Food Safety Research Unit on "Irradiation and Other Physically Based Control Strategies for Foodborne Pathogens" are particularly

helpful in understanding how potentially life-threatening pathogens in our food supply can be minimized by irradiation and other physical methods such as high-intensity electric field pulses and oscillating magnetic field pulses. There are a couple of very scientifically detailed chapters on "Aflatoxin B₁" and the "Genetic and Biological Control of Aflatoxigenic Fungi"; these are contrasted with some promisingly titled (eg, "The Impact of Foodborne Infections and Toxins on International Trade: Israeli Examples") but very perfunctory chapters. An unexpected bonus is the inclusion of an interesting chapter on kosher food laws and their relationship to food safety. From this chapter, we learn that insect-based food dyes such as cochineal/carmine red pigments are not used in kosher food products, and thus, the secondary bonus of potential insect-related allergenic reactions are avoided. However, the requirement that meat and poultry be prepared by removing veins, arteries, prohibited fats, and the sciatic nerve may increase the possibility of pathogen transmission from humans because of the increased handling necessary in these preparations. The final portion of the book is devoted to an explanation of the "Codex Alimentarius," which is an international compilation of food safety standards established to protect the health and safety of world food consumers.

I would recommend this book to reference libraries and those individuals that teach food safety and sanitation. It would be of particular interest to food scientists and microbiologists.

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