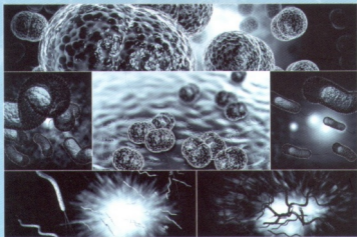


# FOOD SAFETY

Rapid Detection and Effective  
Prevention of Foodborne Hazards



*Editor*

Lan Hu, MD, PhD

**AAP** | APPLE  
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# Food Safety

## Rapid Detection and Effective Prevention of Foodborne Hazards

This volume focuses on the general concepts, mechanisms, and new applications of analytical and molecular biology techniques for detecting, removing, and preventing chemical and biological hazards from food. Edited by a microbiologist and medical officer with over 20 years of laboratory and research experience in bacteriology, molecular biology, infectious disease, and food safety, and who has trained with the U.S. Food and Drug Administration (FDA), the book provides an abundance of valuable information on food safety and foodborne hazards in our food and drink.

Today, food safety is a growing concern not only of food-related professionals and policymakers but also of the general public. Foodborne hazards, including chemical and biological hazards, can cause food intoxication, infectious diseases, cancers, and other health risks. Foodborne diseases are a major public health and economic burden in both the developed and developing countries.

In the United States alone, the incidence of foodborne illness is approximately 9.4 million cases with about 56,000 hospitalizations and 1,351 deaths every year.

Written in an easy-to-read and user-friendly style, each chapter introduces a chemical or biological hazard and addresses:

- What kinds of disease does the foodborne hazard cause
- Why is it necessary for us to study it
- What routes does it take to enter our food and how does it cause us to become sick
- How do we identify it

Chapters then go on to present new technologies employed to detect, isolate, and/or identify the hazard and prevention procedures such as:

- How can the current application of new technology be used to detect the foodborne hazards
- How do we prevent the diseases caused by the foodborne hazards

### ABOUT THE EDITOR

**Lan Hu, MD, PhD**, is a microbiologist and medical officer with over 20 years of laboratory and research experience in bacteriology, molecular biology, infectious disease, and food safety. She has extensive knowledge in multiple fields, including medicine, microbiology, biology, immunology, and epidemiology. Trained formally on how the U.S. Food and Drug Administration (FDA) reviews biology, drugs, food, and devices, she has in-depth knowledge of the regulations, laws, and procedures related to products and public health. Dr. Hu has worked at several research institutes, such as the National Institutes of Health (NIH), the Naval Medical Research Center (NMRC), and the FDA as a medical officer and a research microbiologist. She has received several awards for her work, including a Fellows Award for Research Excellence (1999 and 2000) from the NIH and the Young Investigator Award from the 10th International Workshop on *Campylobacter, Helicobacter and Related Organisms*. Dr. Hu has written a number of articles and book chapters and also acts as a reviewer for several scientific journals.

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