

## BOOK REVIEWS

**SAFE FOOD:  
BACTERIA, BIOTECHNOLOGY,  
AND BIOTERRORISM**

(California Studies in Food and Culture, 5.) By Marion Nestle. 350 pp., illustrated. Berkeley, University of California Press, 2003. \$27.50. ISBN 0-520-23292-5.

**F**OOD SAFETY IS POLITICAL.” SO CLAIMS THE title of the introduction to Marion Nestle’s book *Safe Food*, and this assertion is solidly confirmed in the pages that follow. In her instructive monograph, Nestle exposes the political workings of the system that supposedly guarantees the safety of our food. The operation of this system is unfamiliar to many, but Nestle’s well-researched and carefully documented arguments convince me that the topic should be of concern to anyone who eats.

Most Americans believe that the United States has the safest food supply in the world. But is this belief justified? Does the public know what the government does and does not do regarding food inspection? How many people believe that their ground sirloin is tested for *Escherichia coli* O157:H7, their chicken for campylobacter, and their cold cuts for listeria? How many know whether their taco shells are made from transgenic corn? Do people assume that the package label reflects this information? And most important, do they know who decides what is done to ensure food safety and why?

The answers to these questions are surprisingly predictable when one considers the workings of other regulatory systems in our society. In *Safe Food*, we learn of food producers that place the interests of stockholders above those of the public, byzantine government agencies that work at cross-purposes, the flow of personnel between government and industry that confuses the goals of the watchdog with those of the watched, and a spectrum of citizens’ groups that engage in activities ranging from responsible public advocacy to street theatrics and “biovandalism.” In essence, all the troubling problems of the military–industrial complex seem also to be manifested in our food-production system.

*Safe Food* addresses all these elements in two major sections and a conclusion that roughly correspond with the three Bs in the book’s subtitle. Part

one, “Resisting Food Safety,” includes an account of the government agencies concerned with food safety — there are no fewer than 12 — and their sometimes inexplicable regulatory responsibilities. For example, the reader learns that the U.S. Department of Agriculture (USDA) oversees the production of hot dogs in pastry dough, whereas the Food and Drug Administration (FDA) regulates hot dogs in rolls. Beef broth and dehydrated chicken soup are regulated by the USDA, but chicken broth and dehydrated beef soup are regulated by the FDA.

After this look at the regulatory side of the process, Nestle turns to a discussion of food producers’ historical resistance to regulation. Since 1906, one role of USDA meat inspectors has been to exclude diseased animals from the food supply. The suggestion to refocus oversight on specific pathogens by instituting Hazard Analysis and Critical Control Point (HACCP) systems at critical points in food production has been repeatedly deferred by political and legal actions since the early 1980s. For example, from 1971 until the mid-1990s, the meat industry argued successfully that foodborne pathogens such as *E. coli* O157:H7 are inherent components of raw meat and therefore not “adulterants” that are subject to regulation.

Part two of the book recounts the efforts of biotechnology firms to introduce genetically modified foods onto the farm and into the food supply. This introduction was accomplished with the complicity of government agencies but largely without the knowledge or consent of the public. Industry aggressively promotes genetically engineered foods as the solution to world hunger. But what evidence supports this claim? And what of the hidden dangers of so-called Frankenfoods to our health and economy that some outspoken critics predict? Nestle stresses two major themes here: the exploitation of science-based justifications for points of view on either side of the question, and the notion that public opinion in these matters is often based on values, a sense of dread, and a healthy distrust of institutions, rather than on scientific principles.

The conclusion, which deals with bioterrorism, may be the weakest part of the book. Here the author uses examples of novel foodborne diseases, such

as mad cow disease, to show how authorities might react to a deliberate contamination of the food supply. A few minor inaccuracies in the argument are more annoying than substantive, but the premise itself is a bit of a stretch.

The last major revolution in food safety in this country followed the publication of Upton Sinclair's 1906 fictional exposé, *The Jungle*. Remarkably, our system for securing the food supply has grown in size and complexity but only marginally in scope since then. *Safe Food* will probably not generate the public uproar that Sinclair's book did, but it expresses in scholarly terms the compelling reasons for undertaking another reorganization of the system. An advocate holding a passionate and transparent point of view, Nestle concludes her book with a list of specific suggestions for the food industry, the federal government, and the public. As citizens, consumers, and patient advocates, physicians would be wise to be informed about these issues and their possible solutions.

N. Cary Engleberg, M.D.

University of Michigan Medical School  
Ann Arbor, MI 48109  
cengleb@umich.edu

### THERAPY OF INFECTIOUS DISEASES

Edited by Larry Baddour and Sherwood L. Gorbach. 815 pp., illustrated. Philadelphia, Saunders, 2003. \$99.  
ISBN 0-7216-8145-X.

THERE WAS A TIME WHEN IT COULD BE SAID, with some confidence, that "now that infectious diseases have been controlled by antibiotics, we can turn our attention to more interesting problems" (medical grand rounds, Peter Bent Brigham Hospital, 1955) and that "if any more infectious diseases specialists were trained, they would be culturing one another" (R.G. Petersdorf, Annual Meeting of the Infectious Diseases Society of America, 1985). Those good times are gone forever.

After the temporary success of antimicrobial drugs against infectious diseases, the balance has now tilted in favor of the microbes. The genetic plasticity of microbes, along with the selective force of the use of antimicrobial drugs, has produced a global Darwinian explosion of antibiotic-resistant pyogenic bacteria, malaria, and tuberculosis. The severe acute respiratory syndrome, AIDS, and other emerging infectious diseases are additional heavy burdens.

*Therapy of Infectious Diseases*, edited by Baddour and Gorbach, arrives at a time when we need the best advice we can get on how to use preventive measures and antimicrobial drugs as wisely as possible. This is not another pocketbook of recipes that match a bug or a disease to a suitable antibiotic. Instead, the book comprises a series of high-quality, well-referenced, disease-oriented chapters. Each chapter provides a short but adequate description of the cause of the disease, its pathogenesis, its clinical diagnosis, and its prognosis, followed by detailed accounts of current therapy. There are many tables that summarize recent, peer-reviewed guidelines for the diagnosis and management of bacterial, rickettsial, viral, protozoal, and parasitic infections. There is also a good chapter on bioterrorism.

Half the authors are currently assistant professors or of lower rank. They add a fresh quality to the book. There are two excellent chapters by surgeons on obstetrical-gynecologic and abdominal infection. There is also a classic chapter on head and neck infections. There are so many good chapters on specific topics that it is not possible in this short review to single all of them out for praise. The editors wisely elected not to include therapy for AIDS because of the complexity of and rapid changes in this field, but they provide an excellent chapter on the infectious complications of this disease.

There are several problems with this book that can be addressed in the next edition. Only 8 of the 62 authors are pediatricians. The editors could either include chapters on pediatric infectious diseases and provide pediatric doses or exclude the subject of infections in childhood. The chapters on upper respiratory infections could be reduced from the current 73 pages (9.3 percent of the text) by eliminating the exhaustive lists of randomly controlled trials. It would be helpful to add chapters on the use of antibiotics in patients with renal or hepatic failure, the management of sepsis syndromes, the emergence of resistant microorganisms, and recommendations for medical and surgical prophylaxis and immunization.

Two issues are troubling. I am uneasy about the use of macrolides and doxycycline for the empirical treatment of community-acquired pneumonia because of the resistance of *Streptococcus pneumoniae* to these drugs. I doubt that ampicillin should be used as a first-line drug for the treatment of pyelonephritis in pregnancy because of high rates of resistance of *Escherichia coli*. But these are minor problems with an otherwise excellent book.