Candida and Candidiasis

Richard A. Calderone, editor

American Society for Microbiology Press, Washington, 2001; 472 pages.

Yeast of the genus Candida have exploded into prominence in recent years as opportunistic and nosocomial fungal pathogens. However, the most recent textbook on these organisms was written in 1988. Candida and Candidiasis is a worthy successor in providing comprehensive information on the biology of these organisms.

A total of 28 chapters cover the general properties, virulence factors, cell biology, immunity, genomics, diseases, and laboratory aspects of Candida species, with particular emphasis on its most prominent member, Candida albicans. The strongest chapters are those covering research aspects of these organisms. Complex subjects like the chemistry of the cell wall, host recognition and adherence, the cell biology of the yeast-hyphal transformation, and extracellular hydrolases as virulence factors in C. albicans are well summarized with clear, useful graphics and current references. The book is beautifully laid out, with a series of color plates that help describe phenotype switch variants and chromosome maps.

The clinical chapters appear rather superficial for an infectious diseases clinician but may be useful to a student seeking basic material. The chapter on identification and subtyping contains information available in other sources for less than the cost of this book. A discussion of current practices in antifungal susceptibility testing of Candida species would have been helpful. Chapters 2 and 4 contain repetitious material, including photographs of C. dubliniensis. A consolidated chapter on the epidemiology of Candida infections should be considered for the next edition. The chapters covering the cell biology are most useful, either as a comprehensive overview or as a reference text for researchers and students interested in the biology of these organisms.

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Food Safety for Professionals (Second Edition)

Mildred M. Cody and M. Elizabeth Kunkel

American Dietetic Association Chicago, Illinois; 198 pages

Drs. Cody and Kunkel have compiled an informative overview of food safety issues that is targeted toward dietetics professionals in particular but is also useful for food safety professionals. The guide contains many of the standard elements found in dietetics textbooks, including charts of infectious agents, information on specific foods and safety concerns, and basic food safety programs. The authors have wisely amended the standard textbook approach by including information on consumer needs and behaviors, a review of food safety surveillance programs, and a discussion of food safety laws and regulations. This edition includes additional chapters on suggestions for continuing education for dietetics professionals and an expanded list of resources, including online references.

This guide includes many useful details in a understandable format. The text is replete with tables (e.g., Descriptions of Specific Foodborne Bacterial Pathogen; Major Food Laws in the United States), which make the wealth of information easily readable. An extensive glossary specific to dietetic practice is included. The text also contains a continuing education self-assessment instrument for dietitians.

The breadth of the text is both its strength and weakness: a vast amount of material is covered, but inevitably, general statements are bound to leave out subtleties useful to the reader. In addition, foodborne illnesses caused by bacterial pathogens are emphasized; therefore, much of the discussion is focused on control measures for bacteria. The text incorrectly states, “...bacteria cause most of the cases of foodborne illness in the United States...” Most cases of foodborne illnesses are caused by unidentified agents. Of the illnesses of known origin, most are caused by viruses (1). On the other hand, the authors wisely include a discussion of parasites, an often overlooked as a cause of foodborne disease.

Similarly, the statement “FDA can order a product recall (or seize goods in the field)” on page 104 is inaccurate. While FDA can seize goods or request that a firm initiate recalls of food products, the agency's authority does not currently extend to mandatory recalls for most foods. FDA can, however, require a recall of infant formula under certain circumstances. The text would benefit from a deeper discussion of the role of the respective federal agencies in protecting the U.S. food supply. In addition, several important issues are not addressed or are not discussed thoroughly (e.g., global food safety considerations, the national food safety system, HACCP regulations for meat and poultry, seafood, and juice).

To their credit, the authors include a discussion of chronic sequelae of foodborne infections, an important area of consideration, particularly for dietitians.

The text makes heavy use of Internet references. These references provide an abundance of current information but risk becoming out-of-date if the sites disappear or are not routinely updated.

Overall, the book is a valuable resource for its soup-to-nuts information approach. The book, a gold mine