Principles of Microbiological Troubleshooting in the Industrial Food Processing Environment
Food Microbiology and Food Safety Series

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Principles of Microbiological Troubleshooting in the Industrial Food Processing Environment

Jeffrey L. Kornacki
Editor

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This book is borne out of many experiences with many people in hundreds of food processing facilities mainly in North America. The principles of food safety and food quality microbiology range from simple to complex, as does the experience of those in charge of maintaining food safety and quality. Many in our culture assume that the principles are simple, like, “Wash your hands after using the rest room.” However, in my experience, the vast majority of companies that produce foods contaminated with pathogenic bacteria or spoilage organisms are not willfully negligent as some may think. Rather companies often fail for other reasons which could include equipment inadequately designed for appropriate sanitation, poorly constructed facilities, and paradigms that prevent them from recognizing true microbiological risk.

Quality assurance/food safety managers become the point persons to deal with food contamination situations. It is a heavy burden that you bear and this book, while useful to anyone wishing to investigate sources of contamination in food processing facilities, is really written with you in mind. This book is written in hopes that it makes your load lighter, your confidence greater, and the food your company produces safer.

McFarland, WI

Jeffrey L. Kornacki
Acknowledgments

The technical editor of this book, Dr. Kornacki, wishes to express his heartfelt thanks to a number of individuals who were instrumental in forming his perspectives on in-plant microbiological investigations.

First I want to thank my father, Thomas Kornacki, a retired criminal investigator of 35 years, whose investigations were quite a bit more dangerous but no less complex in their own way. Thanks for your amazing example of observation, logic, and persistence; you are one of a kind. I hope some of your rigorous approach to problems has been passed down to me.

I also want to thank Emeritus Professor Wayne Becker, who awakened me to a fascination with living cells and then Emeritus Professor Robert Deibel, both of whom taught inspired courses that I attended in cell biology and Food Bacteriology, respectively, in the 1970s. These courses created in me a passion to one day become a microbiological investigator and troubleshooter in the food industry.

Heartfelt thanks are due my graduate Major Professor, the late Elmer Marth, who very graciously allowed me to pursue graduate degrees under his guidance and leadership. How little I knew then the practical value of his insights, vast contribution to the field of food microbiology, and incredible example of diligence, thoroughness, and analysis.

I also owe a great debt of gratitude to Dr. Damien Gabis and Dr. Russell Flowers of Silliker Laboratories whose philosophy, example, and approaches matured me immensely as a microbiological troubleshooter through our many food processing plant visits together in the late 1980s and early 1990s. Thanks are also due to Dave Evanson, Dr. Richard Smittle, and Steve Decker also of Silliker for the same reason.

Apart from these individuals, their insights and guidance, the excellent contributions of the authors of this book, and the fine example and encouragement of many other professional colleagues through the years, this book would not have been possible.

I would be remiss to omit the fine contribution of the authors that contributed to Chapter 2, many of whom are of national and international reputations. I wish to recognize the fine contributions of Robert Behling (Bacillus cereus), Joseph Eifert (Arcobacter), Marilyn Erickson (Clostridium botulinum), Joshua Gurtler (Cronobacter sakazakii), Erick Line and Bradley Stawick (Campylobacter), Roy Radcliff (Mycobacterium paratuberculosis), Elliot Ryser (Listeria monocytogenes),
and Drs. Ryser and Yan (Staphylococcus aureus and Clostridium perfringens). I am also very grateful for the fine work of Drs. Moorman, Pruett and Weidman with Chapter 10.

May you all be kings! (Proverbs 25:2)

Thanks also to Mr. Dwight Clough for his considerable assistance with many of the nuts and bolts of putting this book together.

McFarland, WI

Jeffrey L. Kornacki

September 9, 2009
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