

CONTENTS

Contributors

vii

1. Current Interventions for Controlling Pathogenic <i>Escherichia coli</i>	1
Nam Hee Kim, Tae Jin Cho and Min Suk Rhee	
1. Introduction	2
2. Sources of Contamination and Routes of Transmission	4
3. Interventions to Remove Pathogenic <i>Escherichia coli</i> From Livestock Products	8
4. Interventions to Remove Pathogenic <i>Escherichia coli</i> From Agricultural Products	13
5. Interventions to Eliminate Pathogenic <i>Escherichia coli</i> From Foodstuffs	18
6. Conclusion	30
Acknowledgments	31
References	31
2. Microbial Ecology and Process Technology of Sourdough Fermentation	49
Luc De Vuyst, Simon Van Kerrebroeck and Frédéric Leroy	
1. Introduction	50
2. The Sourdough Fermentation Process Is Affected by the Inoculation Manner	58
3. The Microbiota of Sourdoughs	64
4. Considerations of Region Specificity of Sourdoughs	107
5. Source Tracking of the Sourdough Microbiota	114
6. Effect of the Flour on the Sourdough Microbiota	117
7. Effects of Process Parameters on the Sourdough Microbiota	119
8. Conclusion	132
References	133
3. Diversity, Application, and Synthetic Biology of Industrially Important <i>Aspergillus</i> Fungi	161
Hee-Soo Park, Sang-Cheol Jun, Kap-Hoon Han, Seung-Beom Hong and Jae-Hyuk Yu	
1. Introduction	162
2. Diversity and Taxonomy of <i>Aspergillus</i>	163
3. Food Fermentation Using <i>Aspergillus</i>	168

4. Industrial and Pharmaceutical Application of <i>Aspergillus</i>	171
5. Synthetic Biology of <i>Aspergillus</i>	180
6. Conclusions and Perspective	185
Acknowledgments	186
References	186