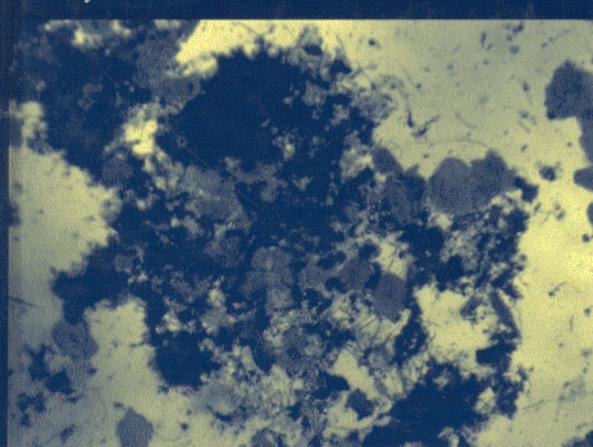
Food Safety Handbook

Ronald H. Schmidt Gary E. Rodrick



CONTENTS

Pre	eface	xi
PA	RT I CHARACTERIZATION OF FOOD SAFETY AND RISKS Edited by Joan Rose	1
1	DEFINITION OF FOOD SAFETY Robert (Skip) A. Seward II	3
2	CHARACTERIZATION OF FOOD HAZARDS Robert (Skip) A. Seward II	11
3	RISK ANALYSIS FRAMEWORKS FOR CHEMICAL AND MICROBIAL HAZARDS Margaret E. Coleman and Harry M. Marks	19
4	DOSE-RESPONSE MODELING FOR MICROBIAL RISK Chuck Haas	47
5	EXPOSURE ASSESSMENT OF MICROBIAL FOOD HAZARDS Richard C. Whiting	59

6 EXPOSURE AND DOSE-RESPONSE MODELING FOR FOOD CHEMICAL RISK ASSESSMENT Carl K. Winter	73
7 ECONOMIC CONSEQUENCES OF FOODBORNE HAZARDS Tanya Roberts, Jean Buzby, and Erik Lichtenberg	89
PART II FOOD HAZARDS: BIOLOGICAL Edited by LeeAnne Jackson	125
8 PREVALENCE OF FOODBOURNE PATHOGENS LeeAnne Jackson	127
9 PHYSIOLOGY AND SURVIVAL OF FOODBOURNE PATHOGENS IN VARIOUS FOOD SYSTEMS G.E. Rodrick and R.H. Schmidt	137
10 CHARACTERISTICS OF BIOLOGICAL HAZARDS IN FOODS R. Todd Bacon and John N. Sofos	157
11 CONTEMPORARY MONITORING METHODS Jinru Chen	197
PART III FOOD HAZARDS: CHEMICAL AND PHYSICAL Edited by Austin R. Long and G. William Chase	211
12 HAZARDS FROM NATURAL ORIGINS John J. Specchio	213
13 CHEMICAL AND PHYSICAL HAZARDS PRODUCED DURING FOOD PROCESSING, STORAGE, AND PREPARATION Heidi Rupp	233
14 HAZARDS ASSOCIATED WITH NUTRIENT FORTIFICATION Anne Porada Beid	265

		CONTENTS	VÌÌ
15	MONITORING CHEMICAL HAZARDS: REGULATOR INFORMATION Daphne Santiago	Υ	277
16	HAZARDS RESULTING FROM ENVIRONMENTAL, INDUSTRIAL, AND AGRICULTURAL CONTAMINAN Sneh D. Bhandari	TS.	291
PAI	RT IV SYSTEMS FOR FOOD SAFETY SURVEILLANCE AND RISK PREVEN Edited by Keith R. Schneider	NTION	323
17	IMPLEMENTATION OF FSIS REGULATORY PROG FOR PATHOGEN REDUCTION Pat Stolfa	RAMS	325
18	ADVANCES IN FOOD SANITATION: USE OF INTERVENTION STRATEGIES Judy W. Arnold		337
19	USE OF SURVEILLANCE NETWORKS Craig W. Hedberg		353
20	HAZARD ANALYSIS CRITICAL CONTROL POINT (HACCP) Debby Newslow		363
РΑ	RT V FOOD SAFETY OPERATIONS IN FO PROCESSING, HANDLING, AND DISTRIBUTION Edited by Barry G. Swanson	OOD	381
21	FOOD PLANT SANITATION Henry C. Carsberg		383
22	FOOD SAFETY CONTROL SYSTEMS IN FOOD PROCESSING Joellen M. Feirtag and Madeline Velázquez		403
23	FOOD SAFETY AND INNOVATIVE FOOD PACKAGE	ing	411

Michael L. Rooney

24	SAFE HANDLING OF FRESH-CUT PRODUCE AND SALADS Dawn L. Hentges	425
25	GOOD MANUFACTURING PRACTICES: PREREQUISITES FOR FOOD SAFETY Barry G. Swanson	443
PA	RT VI FOOD SAFETY IN RETAIL FOODS Edited by Ronald H. Schmidt and Gary E. Rodrick	453
26	COMMERCIAL FOOD SERVICE ESTABLISHMENTS: THE PRINCIPLES OF MODERN FOOD HYGIENE Roy Costa	455
27	INSTITUTIONAL FOOD SERVICE OPERATIONS Ruby P. Puckett	523
28	FOOD SERVICE AT TEMPORARY EVENTS AND CASUAL PUBLIC GATHERINGS Donna L. Scott and Robert Gravani	549
PA	RT VII DIET, HEALTH, AND FOOD SAFETY Edited by Mary K. Schmidl	571
29	MEDICAL FOODS Mary K. Schmidl and Theodore P. Labuza	573
30	FOOD FORTIFICATION R. Elaine Turner	607
31	SPORTS NUTRITION Joanne L. Slavin	627
32	DIETARY SUPPLEMENTS Cathy L. Bartels and Sarah J. Miller	641
33	FUNCTIONAL FOODS AND NUTRACEUTICALS Ronald H. Schmidt and R. Elaine Turner	673

	_
CONTENTS	ix
CONTENTS	10

PA		ORLD-WIDE FOOD SAFETY ISSUES ited by Sara E. Valdés Martinez	689
34	=	•	691
35	IMPACT OF Erik Lichtenber	FOOD SAFETY ON WORLD TRADE ISSUES	725
36	UNITED STA CERTIFICAT Rebeca López		741
37		UNION REGULATIONS WITH AN EMPHASIS CALLY MODIFIED FOODS	759
38	ALIMENTAR	OOD STANDARDS PROGRAM: CODEX IUS endez and John R. Lupien	793
	Index		801