
Contents

<i>Preface</i>	iii
<i>Contributors</i>	vii

Part I: Physicochemical Bases of Protein Functionality

Food Proteins: An Overview <i>Srinivasan Damodaran</i>	
2. Thermal Denaturation and Coagulation of Proteins <i>J. I. Boye, C.-Y. Ma, and V. R. Harwalkar</i>	25
3. Protein-Stabilized Foams and Emulsions <i>Srinivasan Damodaran</i>	57
4. Protein Gelation <i>David Oakenfull, John Pearce, and Ralph W. Burley</i>	111
5. Protein-Lipid and Protein-Flavor Interactions <i>Jean-Marc Chobert and Thomas Haertlé</i>	143
6. Protein-Polysaccharide Interactions <i>Vladimir B. Tolstoguzov</i>	171

Part II: Structure-Function Relationships of Food Proteins

7. Structure-Function Relationships of Caseins <i>Douglas G. Dalgleish</i>	199
8. Structure-Function Relationships of Whey Proteins <i>Philippe Cayot and Denis Lorient</i>	225
9. Structure-Function Relationships of Soy Proteins <i>Shigeru Utsumi, Yasuki Matsumura, and Tomohiko Mori</i>	257

10.	Structure-Function Relationships of Wheat Proteins <i>F. MacRitchie and D. Lafiandra</i>	293
	Structure and Functionality of Egg Proteins <i>Etsushiro Doi and Naofumi Kitabatake</i>	325
12.	Structure-Function Relationships of Muscle Proteins <i>Youling L. Xiong</i>	341

Part III: Processing Technology to Improve Functionality of Proteins in Food Systems

13.	Enzyme and Chemical Modification of Proteins <i>Klaus Dieter Schwenke</i>	393
14.	Genetic Engineering of Food Proteins <i>Carl A. Batt</i>	425
15.	Functionality of Protein Hydrolysates <i>Per Munk Nielsen</i>	443
16.	High-Pressure Effects on Proteins <i>K. Heremans, J. Van Camp, and A. Huyghebaert</i>	473
7.	Protein and Protein-Polysaccharide Microparticles <i>Christian Sanchez and Paul Paquin</i>	503
18.	Edible Protein Films and Coatings <i>John M. Krochta</i>	529
19.	Effects of Processing and Storage on the Nutritional Value of Food Proteins <i>P. A. Finot</i>	551
20.	Extraction of Milk Proteins <i>J. L. Maubois and G. Ollivier</i>	579
21.	Chemical and Physical Methods for the Characterization of Proteins <i>P. K. Nandi</i>	597
22.	Applications of Immunochemistry for Protein Structure Control <i>Alain Paraf and C. Y. Boquien</i>	

Index