

Contents

<i>Preface</i>	iii
<i>Contributors</i>	vii
1. Effects of Processing on Proteins: An Overview <i>John W. Finley</i>	1
2. Protein-Water Interactions: Water as a Plasticizer of Gluten and Other Protein Polymers <i>Louise Slade, Harry Levine, and John W. Finley</i>	9
3. Effects of Heating on Protein Functionality <i>S. Nakai and E. Li-Chan</i>	125
4. Thermally Induced Mutagens in Protein Foods <i>Arthur J. Miller</i>	145
5. Nutritional and Toxicological Consequences of Browning During Simulated Crust-baking <i>Mendel Friedman, Michael R. Gumbmann, and I. Irving Ziderman</i>	189
6. Effect of Extrusion Cooking on the Nutritional Quality of Plant Proteins <i>R. Dixon Phillips</i>	219
7. Protein Crosslinking <i>Michael S. Otterburn</i>	247

vi / Contents

8.	D-Glucose-L-Alanine Interactions: Their Role in Maillard Polymer Formation and Strecker Degradation Reactions <i>Milton S. Feather</i>	263
9.	Effect of Maillard Browning Reaction on the Chemical Properties of Various Proteins <i>Gow-Chin Yen, Tung-Ching Lee, and C. O. Chichester</i>	273
10	Enzymes that Affect Protein Quality of Foods <i>Robert L. Ory, George J. Flick, Jr., and Rebecca Y. Cook</i>	291
11.	Modification to Change Functional Properties of Proteins <i>Soichi Arai and Michiko Watanabe</i>	315
12.	The Contribution of Nonmuscle Proteins to Texture of Gelled Muscle Protein Foods <i>E. Allen Foegeding and Tyre C. Lanier</i>	331
13.	Wheat Proteins: Aspects of Structure that Determine Breadmaking Quality <i>W. Bushuk and F. MacRitchie</i>	345
14.	Functionality of Protein Components of Soft Wheat Flour in Cookie Applications <i>Karel Kulp and Maureen C. Olewnik</i>	371
	<i>Index</i>	380