

CONTENTS

Part One	Biotechnology in Food Production and Processing	
	1. Biotechnology: Applications of Genetics to Food Production	3
	2. Impact of Biotechnology on the Food Industries	21
	3. Impact of Biotechnology on Food and Nutrition	37
	4. Impact of Biotechnology on the Nutritional Quality of Foods	95
Part Two	Methods and Processes in Biotechnology	
	5. Methods and Applications of Molecular Cloning	139
	6. Analytical Methods in the Structure Elucidation of Fermentation Products: Low Molecular Weight Compounds	163
	7. Fermentation Systems and Processes	193
	8. Bioprocess Control	223
	9. Animal Cell Culture Methods	253
	10. Methods in Plant Tissue Culture	271
	11. Immobilization of Microbial and Cultured Plant Cells	287
Part Three	Modification and Bioconversion of Raw Materials	
	12. Technology for the Development of New Breeding Lines and Plant Varieties for the Food Industry	323
	13. Single-Cell Protein: Production Modification and Utilization	347
	14. Functional Proteins from Yeast Nucleoprotein for Food Uses: Methods for Isolation	363
	15. Molecular Cloning of Carbohydrases for the Food Industry	393
	16. Bioconversions: Enzyme Technology	413
Part Four	Food Ingredients and Processing Aids from Biotechnological Processes	
	17. Corn Sweeteners	443
	18. Plant Tissue Culture for Lipid Production	461
	19. Cold- Adapted Enzymes from Fish	495
	20. Bacterial Starter Cultures	529
Part Five	Regulatory and Social Aspects of Biotechnology	
	21. Regulatory Aspects of the Use of Modern Biotechnological Methods in the Food Industry	559
	22. Biotechnology and Food: A Social Appraisal	575
	Index	601