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Storage Carbohydrate) -- Plant Development, Architecture and Reproductive Cycle -- 4. Nutritional Enhancement -- Vitamin Enhancement -- Mineral Enhancement -- Essential Amino Acids -- Essential and Very-Long-Chain Fatty Acids -- V. GE Strategies to Reduce Poverty -- 1. Increasing the Potential of Biofuel Crops -- 2. Value Added Products -- Alkaloids -- Terpenoids -- Flavonoids -- Recombinant Proteins (Pharmaceuticals) -- Industrial And Technical Products -- VI. Barriers to the Uptake of GE Technology -- 1. Trade Barriers -- GE Trade: The Case of EU versus US -- Trade Barriers Affecting Industrialized and Developing Countries -- 2. Intellectual Property -- 3. Regulation. 4. Media Manipulation and Public Perception -- Breaking the Barriers -- VII. Conclusions and Outlook -- References -- BIO (SINGLE CELL) PROTEIN:ISSUES OF PRODUCTION, TOXINSAND COMMERCIALISATION STATUS -- Abstract -- 1. Introduction -- 2. Microorganisms: An Assesst in SCP Production! -- 2.1. Yeast -- 2.2. Algae -- 2.3. Bacteria -- 2.4. Fungi -- 3. Sources for SCP Production and Cultivation Methods -- 4. Toxins of Microflora and Their Removal -- 4.1. Toxins Produced by Bacteria and Their Removal -- 4.2. Toxins Produced by Fungi (Mycotoxins) and Their Removal -- 5. Nucleic Acids and Its Removal -- 6. New Developments for Improvement in SCP Production -- 6.1. Application of New Substrates in Solid State Fermentation (SSF) forSCP Production and Commercialization of SCP -- 8. Applications of SCP -- 8.1. As Feed -- 8.2. SCP for Human Consumption -- 9. Risk Assessment of SCP in Food and Feed -- Conclusion -- References -- FOOD SECURITY AND MATERIALISM -- Abstract -- Introduction -- Allen and Wilson (2005) findings plus new analyses and data -- Study 1 -- Study 2 -- Study 3 -- Conclusion -- References -- AN EXAMINATION OF GENDER DIFFERENCES IN THERELATIONSHIP BETWEEN REPORTING A FOODHARDSHIP AND PHYSICAL HEALTH -- Abstract -- Introduction -- Food Hardships and Health -- Data, Measures and Methods -- Results -- Conclusion -- References -- INVESTIGATING VIRAL HEPATITISA DYNAMICS IN CAMPANIA, ITALY -- Abstract -- 1. Introduction -- 2. Materials -- 3. Methods -- 3.1. Sociodemographic Model -- 3.1.1. Dynamic Network of Contacts -- 3.2. Epidemic Transmission Model -- 3.3. Intervention Measures -- 3.4. Model Parametrization -- 4. Results and Discussion -- 5. Conclusion -- Acknowledgments -- References -- SEAFOOD AS A FUNCTIONAL FOOD IN DECREASINGTHE RISK FOR THE METABOLIC SYNDROME -- Abstract -- Introduction -- Obesity and Related-Diseases. Functional Food: Concepts and Claims -- Seafood as a Functional Food -- Conclusion -- Acknowledgements -- References -- UNDERUTILISED FISH SPECIES: THEIR POTENTIALAS FRESH FILLETS AND PROCESSED PRODUCTS -- Abstract -- Introduction -- Results and Outcomes -- Evaluation of Silver Smelt (Study 1) -- Assessment of 15 UUFS (Study 2) -- Assessment of 21 UUFS (Study 3) -- Sensory Evaluation of 15 UUFS (Study 4) -- Adding Value to UUFS by Sous Vide Processing (Study 5 -- Part 1) -- Adding Value to Albacore Tuna by Marinading (Study 5 -- Part 2) -- Adding Value to UUFS by Freeze-Chilling and MAP (Study 5 -- Part 3) -- Tests on Blue Whiting (Study 6) -- Conclusions -- Annexe 1. Glossary of Fish Species Tested -- Acknowledgements -- References -- IMPROVEMENT OF POULTRY MEAT NUTRITIONALVALUE AND QUALITY THROUGH DIFFERENTNATURAL SOURCES AND MINERAL DIETARYSUPPLEMENTS -- 1. Introduction -- 2. Dietary Fat Source Addition -- 2.1. Addition of n-3 PUFA -- 2.2. Addition of Conjugated Linolenic Acid -- 3. Supplementation with Antioxidant Vitamins -- 3.1. Tocopherol Supplementation -- 3.2. Ascorbic Acid Supplementation -- 4. Addition of Bioactive Natural Compounds: Isoprenoids

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Sommario/riassunto

Food security is taken for granted in the industrialized world, where stable political and social structures ensure that everyone has access to safe and nutritious food sufficient to maintain a healthy and active lifestyle. The picture in the developing world is very different. This important topic is the focus of our new book. One of the persistent myths concerning food insecurity is that it is caused by a shortfall in food production. Quite to the contrary, there is plenty of food to go around. The reasons for food insecurity are complex, but one of the main factors is poverty. Biotechnology provides a range of tools that can be used to improve agriculture in the developing world. This book considers some of the biotechnology-based approaches to improving agriculture and food security in the developing world. Despite the wealth present in American society, high rates of food insecurity, food insufficiency, and hunger are a significant problem in the United States. Some adults have obsessive concerns about their food supply. A study in this book suggests that this may, in part, be a symptom of materialistic tendencies developed in childhood in response to an insufficient food supply. A further study presents the effect of reports of food hardships on the presence of chronic health conditions. This book continues with specific research in seafood and meat regarding the abundance of these products, food security concerns as well as health related issues.
