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Nota di contenuto	Sustainable Food Processing; Contents; List of Contributors; List of Figures; List of Tables; 1 Introduction; 1.1 Introduction; 1.2 Key drivers for sustainable food processing; 1.2.1 Food security; 1.2.2 Population health; 1.2.3 Social justice; 1.2.4 Global change; 1.2.5 Resource depletion; 1.2.6 Environmental impact; 1.2.7 Eco-labelling; 1.3 Book objective; 1.4 Book structure; 1.4.1 Section One: Principles and assessment of sustainability; 1.4.2 Sustainability and food processing applications; 1.4.3 Sustainability in manufacturing operations; 1.4.4 Distribution and consumption of food ReferencesSection 1: Principles and Assessment; 2 Current Concepts and Applied Research in Sustainable Food Processing; 2.1 Introduction;

2.1.1 The transition from the rural producer to the future urban consumer in the 2050 world; 2.1.2 Strategic approaches by food companies to the food sustainability policy challenges; 2.2 Sustainable procurement; 2.2.1 The interface between nutritional and sustainability criteria; 2.2.2 The relevance of consumer science to sustainable food processing; 2.2.3 Communication programmes for healthy diets and their relevance to processors

2.3 Sustainable food supply management 2.3.1 Food processing and the carbon footprint; 2.3.2 Food processing and water resources; 2.4 Concluding observations; References; 3 Environmental Sustainability in Food Processing; 3.1 Introduction; 3.2 Environmental issues related to food processing; 3.2.1 Packaging, food loss and food waste; 3.2.2 Food processing and energy efficient technology; 3.2.3 Waste management; 3.2.4 International trade; 3.2.5 Health consciousness and balanced diets; 3.3 Greenhouse gas (GHG) emissions from food processing; 3.4 Impact of climate change on food processing

3.5 Discussion 3.6 Conclusions; References; 4 Life Cycle Assessment and Sustainable Food Processing; 4.1 Introduction; 4.2 The LCA methodology; 4.2.1 Types of LCA; 4.2.2 Goal and scope; 4.2.3 Life Cycle Inventory; 4.2.4 Life Cycle Impact Assessment; 4.2.5 Interpretation; 4.2.6 Reporting; 4.3 What has LCA revealed about the sustainability of food processing?; 4.3.1 Dairy; 4.3.2 Meat; 4.3.3 Seafood; 4.3.4 Processed food products, including packaging and storage; 4.4 Life Cycle Assessment and the Sustainability of Food Processing; References; 5 Environmental Impact Assessment (EIA) 5.1 Introduction 5.2 Defining the objectives; 5.3 Wastes from food processing; 5.4 EIA methodology; 5.5 Environmental indicators; 5.6 Functional units; 5.7 Evaluation of results; 5.8 Conclusions; References;

6 Risk Analysis for a Sustainable Food Chain; 6.1 Introduction; 6.2 Approaches to risk analysis for a sustainable food chain; 6.3 Risk assessment (RA) strategies in the food chain; 6.3.1 Quantitative and qualitative RA in the food chain; 6.3.2 Stages of risk assessment; 6.4 Risk management (RM); 6.5 Risk communication (RC) strategies; 6.6 Role of risk analysis from farm to fork

6.7 Conclusion

Sommario/riassunto

With global inequalities becoming more pronounced, ingredient costs climbing, and global warming a major political issue, food producers must now address environmental concerns, social responsibility and economic viability when designing their food processing techniques for the future. Sustainable food processing is all about finding new ways of meeting present needs without comprising future viability, given constantly changing economic and environmental conditions. This is not just a corporate social responsibility issue, but relates directly to efficiency, cost-saving and profitability, and
