Record Nr. UNINA9910144385303321 Food biodeterioration and preservation [[electronic resource] /] / edited **Titolo** by Gary S. Tucker Pubbl/distr/stampa Oxford, U.K.;; Ames, Iowa,: Blackwell Pub., 2008 **ISBN** 1-282-12291-6 9786612122910 0-470-69784-9 0-470-69796-2 Descrizione fisica 1 online resource (270 p.) Altri autori (Persone) **TuckerGary** Disciplina 664/.028 Soggetti Food - Preservation Food spoilage Food - Microbiology

Lingua di pubblicazione Inglese
Formato Materiale a stampa

Livello bibliografico Monografia

Nota di contenuto

Note generali Description based upon print version of record.

Nota di bibliografia Includes bibliographical references and index.

Food Biodeterioration and Preservation; Contents; 7.7 Conclusions; 8.2.8 Microbial interactions; Contributors; Preface; 1 Control of Biodeterioration in Food; 1.1 Overview; 1.2 A summary of the different kinds of biodeterioration: 1.2.1 Chemical biodeterioration: 1.2.2 Physical biodeterioration; 1.3 Kinds of living organisms involved in biodeterioration; 1.3.1 Bacteria; 1.3.2 Fungi; 1.3.3 Algae, mosses and liverworts; 1.3.4 Higher plants; 1.3.5 Insects; 1.3.6 Birds, mammals and reptiles; 1.4 Food biodeterioration; 1.4.1 The composition of food 1.5 A description of the mechanisms of food biodeterioration 1.5.1 Fermentation: 1.5.2 Fermentation biochemistry: 1.5.3 Putrefaction: 1.5.4 Lypolysis; 1.6 Micro-organisms involved in biodeterioration reactions; 1.6.1 Factors that affect microbial growth; 1.6.2 Bacteria; 1.6.3 Moulds; 1.6.4 Yeasts; References; 2 Principles of HACCP: The Importance of HACCP Systems in Food Manufacturing; 2.1 Introduction and historical perspective; 2.2 The HACCP principles and codex (CAC 1997): 2.3 HACCP implementation: important considerations: 2.3.1 Prerequisite programmes

2.3.2 Application of the HACCP principles and the importance of

training 2.4 The importance of HACCP in food manufacturing: the preventative mindset; 2.4.1 Food design; 2.4.2 Food manufacturing; 2.4.3 Globalization and trade; 2.5 The legal position; 2.6 Closing thoughts; Appendices; Appendix 1: Example of the make-up of an HACCP team; Appendix 2: Example of a product description; Appendix 3: Examples of process flow diagrams; Appendix 4: Hazard analysis tool as an example guide; Appendix 5: Examples of hazard analysis and CCP decision logic; Appendix 6: Example of the HACCP control chart References Thermal Processing: 3.1 Introduction: 3.2 Product classification; 3.3 Microbial destruction; 3.3.1 End-point thermal death time curve; 3.3.2 Survivor curve; 3.3.3 Thermal resistance curve; 3.4 Cold-spot temperature histories; 3.5 Lethality calculations; 3.5.1 The general method; 3.5.2 Other calculation methods; 3.6 Quality attributes; 3.7 Retort systems; 3.7.1 Steam retorts; 3.7.2 Overpressure retorts: References: 4 Food Chilling: 4.1 Theory: 4.1.1 Effect of chilling on micro-organisms; 4.1.2 Effect of chilling on enzymes and biochemical reactions

4.1.3 Effect of chilling on physical processes4.1.4 Effect of chilling on physiological processes; 4.2 Chilling operations; 4.3 Chilling equipment; 4.3.1 Refrigeration systems; 4.3.2 Moving air; 4.3.3 Direct contact; 4.3.4 Jacketed heat exchangers; 4.3.5 Immersion/spray; 4.3.6 Ice; 4.3.7 Vacuum; 4.3.8 Cryogenic; 4.4 Chilled storage; 4.4.1 Controlled atmosphere storage rooms; 4.5 Transportation; 4.5.1 Overland transport; 4.5.2 Sea transport; 4.5.3 Air transport; 4.6 Retail display; 4.6.1 Unwrapped products; 4.6.2 Wrapped products; 4.7 Conclusions; References; 5 Freezing; 5.1 Introduction 5.2 The physical and chemical aspects of freezing

Sommario/riassunto

This book discusses how the agents of food biodeterioration operate, and examines the commercially-used industrial methods available to control them, allowing the production of safe and wholesome foods. There is an emphasis on the equipment employed to carry out the various methods of preservation.