Record Nr. UNINA9910877811903321 Autore Stadler Richard H Titolo Process-induced food toxicants: occurrence, formation, mitigation, and health risks / / Richard H. Stadler, David R. Lineback Hoboken, N.J., : Wiley, c2009 Pubbl/distr/stampa 1-282-00891-9 **ISBN** 9786612008917 1-61344-866-X 0-470-43010-9 0-470-43009-5 Descrizione fisica 1 online resource (744 p.) Altri autori (Persone) LinebackDavid R Disciplina 615.9/54 615.954 664.02 Soggetti Food preservatives Food - Toxicology Processed foods Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. PROCESS-INDUCED FOOD TOXICANTS: CONTENTS: PREFACE: Nota di contenuto CONTRIBUTORS: PART I SPECIFIC TOXICANTS RELATED TO PROCESSING TECHNOLOGY; 1 Introduction to Food Process Toxicants; 2 Thermal Treatment: 2.1 Acrylamide: 2.2 Acrolein: 2.3 Heterocyclic Aromatic Amines; 2.4 Hazards of Dietary Furan; 2.5 Hydroxymethylfurfural (HMF) and Related Compounds; 2.6 Chloropropanols and Chloroesters; 2.7 Maillard Reaction of Proteins and Advanced Glycation End Products (AGEs) in Food; 2.8 Polyaromatic Hydrocarbons; 3 Fermentation; 3.1 Ethyl Carbamate (Urethane); 3.2 Biogenic Amines; 4 Preservation 4.1 N-Nitrosamines, Including N-Nitrosoaminoacids and Potential Further Nonvolatiles 4.2 Food Irradiation; 4.3 Benzene; 5 High-Pressure Processing; 6 Alkali and/or Acid Treatment; 6.1 Dietary Significance of Processing-Induced Lysinoalanine in Food; 6.2 Dietary Significance of

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GENERAL CONSIDERATIONS; 7 Application of the HACCP Approach for

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Process-Induced Food Toxicants combines the analytical, health, and risk management issues relating to all of the currently known processing-induced toxins that may be present in common foods. It considers the different processing methods used in the manufacture of foods, including thermal treatment, drying, fermentation, preservation, fat processing, and high hydrostatic pressure processing, and the potential contaminants for each method. The book discusses the analysis, formation, mitigation, health risks, and risk management of each hazardous compound. Also discussed are new technologies an