Record Nr. UNINA9910778314003321 Autore Mellon Fred Titolo Mass spectrometry of natural substances in foods / / Fred A. Mellon, Ron Self, James R. Startin Pubbl/distr/stampa Cambridge: ,: Royal Society of Chemistry, , 2000 ©2000 **ISBN** 1-84755-129-7 1 online resource (xii, 299 pages): illustrations Descrizione fisica Collana RSC food analysis monographs Altri autori (Persone) SelfRon StartinJames R Disciplina 664/.07 Soggetti Food - Analysis Food - Composition Mass spectrometry 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. Nota di contenuto Introduction to principles and practice of mass spectrometry Introduction to organic mass spectrometric data Food flavourings and taints Bioactive non-nutrients in foods Amino acids, peptides and proteins Lipids Sugars and carbohydrates Quantification and metabolism of inorganic nutrients Analysis and metabolism of vitamins in foods Stable isotope studies of organic macronutrient metabolism Pyrolysis mass spectrometry of foods This product is not available separately, it is only sold as part of a set. Sommario/riassunto There are 750 products in the set and these are all sold as one entity. Introducing the principles, practice and applications of mass spectrometric techniques in the study of natural substances in foods, this book conveys the depth and breadth of modern mass spectrometry in relation to food analysis. It covers traditional techniques such as electron and chemical ionisation and newer soft ionisation techniques such as matrix-assisted laser desorption ionisation and electrospray. All of these techniques are especially relevant in food quality and safety studies and in biopolymer analysis. The ability to analyse biopolymers

> by mass spectrometry is having a major impact on the study of food structure components, food proteins, food pathogens and food

components produced from genetically modified organisms. The principles and practice of mass spectrometry are covered in the early chapters and are followed by applications in flavour analysis and the determination of non-nutrient, biologically-active, natural substances in foods. The analysis and metabolic studies of amino acids, peptides, proteins, lipids, sugars, carbohydrates and vitamins is also discussed, with separate chapters on mineral and micronutrient metabolism and techniques of pyrolysis mass spectrometry. Mass Spectrometry of Natural Substances in Food will be a valuable resource for food scientists, food analysts and others working in food research, nutrition and safety.