Record Nr. UNINA9910768457603321 Effect of Emerging Processing Methods on the Food Quality: **Titolo** Advantages and Challenges / / edited by Shahin Roohinejad, Mohamed Koubaa, Ralf Greiner, Kumar Mallikarjunan Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa **ISBN** 3-030-18191-X Edizione [1st ed. 2019.] 1 online resource (208 pages) Descrizione fisica Disciplina 338.47664 664.024 Microbiology Soggetti Organic chemistry Food Microbiology **Organic Chemistry** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Assessment of food quality using profiling techniques: Pros and cons aspects -- Handling the data generated by profiling techniques for evaluation the food quality -- High pressure processing -- Pulsed electric fields -- Ultraviolet -- Pulsed light -- Irradiation --Ultrasounds. This text comprehensively covers novel, innovative technologies used Sommario/riassunto in the food and beverage industries in order to provide safe and healthy foods for consumers. The research provided in these chapters aims to show that the traditional pasteurization and commercial sterilization of foods result in unacceptable quality and nutrient retention, creating an important need for alternative methods used to minimize undesirable reactions such as thermal decomposition or degradation. Emerging processing methods to minimize heat induced alterations in foods and their applications are covered in-depth, demonstrating that these methods are useful not only for the inactivation of microorganisms and enzymes but also for improving the yield and development of

ingredients and marketable foods with higher quality and better

nutritional characteristics. Effect of Emerging Processing Methods on the Food Quality: Advantages and Challenges not only covers the advantages of using innovative processing methods, but also the disadvantages and challenges of using these techniques on food quality. Each chapter focuses on a different emerging processing technique, breaking down the sensory, textural and nutritional aspects for different food products in addition to the advantages and challenges for each method. New technologies and advanced theories are a major focus, pointing to innovative new paths for the quality and safety assurance in food products. From pulsed electric fields to ultrasounds, this work covers all aspects of emerging processing techniques for fruits and vegetables, foods and dairy products.