1. Record Nr. UNINA9910523900103321 Autore Deora Navneet Singh Titolo Challenges and Potential Solutions in Gluten Free Product Development // edited by Navneet Singh Deora, Aastha Deswal, Madhuresh Dwivedi Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2022 **ISBN** 3-030-88697-2 Edizione [1st ed. 2022.] Descrizione fisica 1 online resource (191 pages) Collana Food Engineering Series, , 2628-8095 Disciplina 664.6 Soggetti Food science Food Science Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Current Advances in Celiac Disease and Gluten-Free Diet: Consequences and Improvement Strategies -- Nutritional Aspects of Gluten-Free Products -- Alternative Approaches Towards Gluten-Free Dough Development -- Role and Application of Starch and starch derivatives in Gluten-Free Systems -- Role of Microbial fermentations in Gluten Free Product Development -- Functionality of Alternative Protein in Gluten-Free Product Development: Case Study --Texturisation and modification of vegetable proteins -- Cereal-based protein -- Protein from legume source -- Egg protein -- Regulatory and Labeling -- Gluten detection in foods -- Novel Approaches in Gluten-Free Breadmaking: Case Study -- Sourdough in gluten-free bread-making -- Aeration Strategies -- Nutritional Enhancement --Changing flour functionality through physical treatments -- Role of Hydrocolloids in gluten-free breads -- Prebiotic gluten-free bread --Global Gluten Free Market Trends -- Index. This work provides researchers with a thorough overview of all aspects Sommario/riassunto related to the development of gluten-free food products. In summarizing and offering critical reviews of published works and focusing on current advances and technologies in gluten free product development, this book covers all of the important subjects related to this increasingly important aspect of the food industry. Important case

studies in gluten-free breadmaking and alternative proteins are

presented, making this a rich and singular source for food manufacturers and scientists seeking practical knowledge on the challenges and solutions involved in the development of gluten-free foods. Challenges and Potential Solutions in Gluten Free Product Development covers the latest advances and strategies for gluten-free diets including the important nutritional factors involved. Traditional and alternative approaches for the development of gluten-free dough, including starch applications and microbial fermentations, are extensively covered. Alternative proteins including those from vegetables, cereals, legumes and eggs are presented. Novel approaches for gluten-free breadmaking such as aeration strategies, prebiotics, hydrocolloids and nutritional enhancements are also covered in depth. With further chapters dedicated to regulatory aspects, gluten detection methods and the global market, this book presents full and up-to-date coverage of the development and manufacture of gluten-free products.