Record Nr. UNINA9910462870203321 **Titolo** Microbial production of food ingredients, enzymes and nutraceuticals [[electronic resource] /] / edited by Brian McNeil ... [et al.] Pubbl/distr/stampa Cambridge, UK;; Philadelphia, PA; Woodhead Pub., 2013 **ISBN** 0-85709-354-1 Descrizione fisica 1 online resource (641 p.) Collana Woodhead Publishing in food science, technology, and nutrition;; no. 246 McNeilBrian Altri autori (Persone) Disciplina 615.535 Soggetti Food - Microbiology Functional foods Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di contenuto Cover; Microbial production offood ingredients, enzymesand nutraceuticals; Copyright; Contents; Contributor contact details; Woodhead Publishing Series in Food Science, Technology and Nutrition; Foreword; 1 Bioprocessing as a route to food ingredients: an introduction; 1.1 Food fermentation as an ancient technology: an overview; 1.2 Solid substrate fermentations (SSF) and stirred tank reactor (STR) technology: relative industrial dominance; 1.3 Development of bioprocessing as a route to food ingredients: the history of koji; 1.4 Conclusion: food biotechnology past, present and future 1.5 ReferencesPart I Systems biology, metabolic engineering of industrial microorganisms and fermentation technology; 2 Systems biology methods and developments of filamentous fungi in relation to the production of food ingredients; 2.1 Introduction; 2.2 Filamentous fungi as cell factories for food biotechnology; 2.3 Systems biology of food-related filamentous fungi; 2.4 Beyond functional genomics to metabolic modelling; 2.5 Systems biology perspectives on food biotechnology and food safety; 2.6 Acknowledgements; 2.7 References 3 Systems biology methods and developments for saccharomyces cerevisiae and other industrial yeasts in relation to the production of

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Sommario/riassunto

Bacteria, yeast, fungi and microalgae can act as producers (or catalysts for the production) of food ingredients, enzymes and nutraceuticals. With the current trend towards the use of natural ingredients in foods, there is renewed interest in microbial flavours and colours, food bioprocessing using enzymes and food biopreservation using bacteriocins. Microbial production of substances such as organic acids and hydrocolloids also remains an important and fast-changing area of research. Microbial production of food ingredients, enzymes and nutraceuticals provides a comprehensive overview of micr