

1. Record Nr.	UNINA9910744506203321
Autore	Jafari Seid Mahdi
Titolo	Handbook of Food Bioactive Ingredients : Properties and Applications / / edited by Seid Mahdi Jafari, Ali Rashidinejad, Jesus Simal-Gandara
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2023
ISBN	3-031-28109-8
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (1576 pages)
Altri autori (Persone)	RashidinejadAli Simal-GandaraJesus
Disciplina	664.07
Soggetti	Food science Food - Analysis Chemistry Food - Microbiology Biotechnology Food Science Food Chemistry Food Microbiology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	An overview of different food bioactive ingredients -- Hydroxybenzoic acids -- Hydroxycinnamic acids -- Flavones -- Flavonols -- flavanones -- Flavanols -- Isoflavones -- Anthocyanins -- Chalcones -- Ellagitannins -- Gallotannins -- Procyanidins -- Stilbenes -- Lignans -- Carotenoids and sterols -- Lycopene -- -Carotene -- Lutein -- Zeaxanthin -- Astaxanthin -- Fucoxanthin -- Bixin -- Crocins -- Phytosterols -- Marine bioactive peptides (fishes, algae, cephalopods, molluscs, and crustaceans) -- Non-marine animal bioactive peptides (dairy, meat, and egg) -- Plant bioactive peptides (oilseed, legume, cereal, fruit, and vegetable) -- Microbial bioactive peptides (from bacteria, yeasts, and molds) -- Fish and marine oils -- Plant oils rich in essential fatty acids. .
Sommario/riassunto	Bioactive ingredients, including both bioactive compounds and bioactive live organisms, are present in small amounts in natural

sources such as fruits and vegetables. These ingredients have been continuously investigated during the last few decades and the epidemiological data suggest that their intake is associated with significant decreased risk of various disorders and chronic diseases owing to their anti-oxidant, anti-bacterial and anti-inflammatory qualities. Some of these natural ingredients such as catechins, curcumin, resveratrol, oleuropein, quercetin, rutin, hesperidin, sulforaphane, ellagic acid, and anthocyanins, have been studied as factors with possible direct or indirect effect on specific molecular pathways which are playing vital roles in the association with the pathophysiology of the chronic diseases such as cancer. In light of this, natural foods and food-derived products rich in bioactives have received recent growing attention. It has been reported that frequent consumption of fruits, vegetables, and their associated natural products have many health-promoting benefits that protect against degenerative illnesses including heart disease, arthritis, cancer, immune system decline, brain dysfunction, inflammation and cataracts. Functional foods and medicinal supplements containing encapsulated bioactive materials will be the future of new emerging products in the food and pharma industries. Such products present therapeutical and medicinal properties that can prevent and/or cure specific chronic diseases and disorders. Handbook Of Bioactive Ingredients provides a systematic overview of different food bioactive ingredients describing their chemistry, structure, functionality, safety/toxicity, oral delivery and their applications in functional foods. Detailed chapters will describe various bioactive ingredients including polyphenolic compounds such as phenolic acids, flavonoids and anthocyanins, carotenoids, sterols such as non-oxygenated carotenoids, xanthophylls and phytosterols, bioactive peptides such as marine bioactive peptides, animal bioactive peptides, plant bioactive peptides, microbial bioactive peptides, essential fatty acids like fish and marine oils and plant oils, live organisms like probiotics and yeasts, essential oils and oleoresins like monoterpenes, sesquiterpenes and oleoresins, vitamins and minerals including liposoluble vitamins, hydrosoluble vitamins and trace minerals), and other bioactive compounds including prebiotics, oligosaccharides, dietary fibers and beta-glucan. This book is the first comprehensive collection of scientific evidence from published literature on natural bioactive ingredients.

---