1. Record Nr. UNINA9910132232403321

Autore	Noomhorm Athapol <1952->
Titolo	Functional foods and dietary supplements : processing effects and health benefits / / edited by Athapol Noomhorm, Imran Ahmad, and Anil Anal
Pubbl/distr/stampa	Chichester, England : , : Wiley-Blackwell, , 2014 ©2014
ISBN	1-118-22782-4 1-118-22780-8 1-118-22785-9
Descrizione fisica	1 online resource (527 p.)
Disciplina	613.2
Soggetti	Functional foods Dietary supplements - Therapeutic use Natural foods - Health aspects
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Functional Foods and Dietary Supplements; Contents; List of Contributors; Preface; I Fundamentals of Functional Food Processing; 1 Functional Foods, Nutraceuticals and Probiotics as Functional Food Components; 1.1 Functional food; 1.1.1 Functional components from plant origin; 1.1.2 Functional components from animal resources; 1.1.3 Examples of functional foods widely popular in the market; 1.2 Nutraceuticals; 1.3 Functional food market; 1.4 Probiotics; 1.4.1 Role of probiotics; 1.5 Prebiotics; 1.5.1 Sources of prebiotic; 1.5.2 Functional probiotic products; 1.6 Probiotic market; References 2 Bioactive Components in Foods2.1 Proteins; 2.1.1 Food sources of peptides; 2.1.2 Health benefits of proteins and peptides; 2.1.3 Functional product development containing proteins and peptides; 2.1.4 Processing techniques of proteins and peptides; 2.2 Carbohydrate; 2.2.1 Classification of carbohydrates; 2.2.2 Functional carbohydrates and their health benefits; 2.2.3 Functional foods containing good carbohydrates; 2.3 Lipids; 2.3.1 Classification of

lipids; 2.3.2 Functional lipids; 2.3.3 Health benefits; 2.4 Phenols; 2.4.1 Content of polyphenols in food
2.4.2 Health benefits of the polyphenolic foods2.4.3 Processing techniques of polyphenols; 2.5 Flavonoids; 2.5.1 Health benefits; 2.5.2 Flavonoid-containing dietary foods; 2.5.3 Processing techniques of flavonoids; 2.6 Anthocyanins; 2.6.1 Chemical structure; 2.6.2 Health benefits; 2.6.3 Processing techniques of anthocyanin; 2.7 Glucosinolates; 2.7.1 Chemistry of glucosinolates; 2.7.2 Health benefits; 2.7.3 Processing techniques of glucosinolates; References; II Major Sources of Functional Foods; 3 Processing Effects on Functional Components in Cereals and Grains; 3.1 Introduction
3.2 Functional components in cereals and grains3.2.1 Functional components in rice and their health benefits; 3.2.2 Functional components in corn and their health benefits; 3.2.3 Functional components in soybean and their health benefits; 3.2.4 Functional components in legumes and their health benefits; 3.3 Processing of cereals and grains and its effect on the functional components; 3.3.1 Rice; 3.3.2 Corn; 3.3.3 Soybeans; 3.3.4 Legumes; 3.4 Conclusion; References; 4 Tropical Fruits; 4.1 Introduction; 4.2 Mango; 4.2.1 Polyphenolic constituents of mango; 4.2.2 Functional properties of mango
4.2.3 Processing effects4.3 Guava; 4.3.1 Composition of guava; 4.3.2 Functional properties of guava; 4.3.3 Processing effects; 4.4 Pomegranate; 4.4.1 Chemical composition of pomegranate; 4.4.2 Functional properties of pomegranate; 4.4.3 Processing effects; 4.5 Summary and future trends; References; 5 Bioactive Compounds in Meat and their Functions; 5.1 Introduction; 5.2 Bioactive peptides; 5.2.1 Hydrolysis; 5.2.2 Fermentation; 5.3 l-Carnitine; 5.4 Coenzyme Q10; 5.5 Carnosine; 5.6 Taurine; 5.7 Creatine; 5.8 Glutathione; 5.9 Lipoic acid; 5.10 Opioids; 5.11 Conjugated linoleic acid (CLA)
5.12 Omega-3 PUFA

Sommario/riassunto

This book highlights the effects of food processing on the active ingredients of a wide range of functional food materials, with a particular focus on foods of Asian origin. Asian foods, particularly herbs, are becoming increasingly accepted and demanded globally, with many Western consumers starting to recognize and seek out their health-giving properties. This book focuses on the extraction of ingredients which from materials which in the West are seen as "alternative" - such as flour from soybeans instead of wheat, or bran and starch from rice - but which have long histories in