Record Nr. UNINA9910254537603321 Omega-3 Fatty Acids: Keys to Nutritional Health / / edited by **Titolo** Mahabaleshwar V. Hegde, Anand Arvind Zanwar, Sharad P. Adekar Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2016 **ISBN** 3-319-40458-X Edizione [1st ed. 2016.] 1 online resource (XXI, 610 p. 95 illus., 69 illus. in color.) Descrizione fisica Disciplina 616.2 Soggetti Clinical nutrition Nutrition Food—Biotechnology Complementary medicine Health promotion Clinical Nutrition Nutrition **Food Science** Complementary & Alternative Medicine Health Promotion and Disease Prevention Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references at the end of each chapters and Nota di contenuto Nutrition, Life, Disease and Death -- Flax Bio-village Concept -- Status Paper on Linseed/Flax Agriculture -- Omega-3 Milk -- Omega-3 Egg -- Omega-3 Polyunsaturated Fatty Acids and Hyperlipidemias -- World Market of Omega-3 Fatty Acids -- Fortification of Food with Omega-3 Fatty Acids -- Importance of Polyunsaturated Acids from Marin Algae -- Emulsions of Omega-3 Fatty Acids for Better Bioavailability and Beneficial Health Effects -- Omega-3 Fatty Acids in Inflammatory Diseases -- Omega-3 Fatty Acids in Cancer: Insights into the Mechanism of Actions in Pre-clinical Cancer Models -- Linseed as a Functional Food for the Management of Obesity -- Role of Omega-3

Fatty Acids in Metabolic Syndrome -- Balancing Omega-6: Omega-3 Ratios in Oilseeds -- Omega-3 Fatty Acids and Diabetic Complications

-- Omega-3 Fatty Acids and Mitochondrial Functions -- Omega-3 Fatty Acids and Alzheimer's Disease -- Prevention of Oxidative Stress by Omega-3 Fatty Acids in the Brain -- Role of Omega-3 Fatty Acids for Eye Health -- DHA-Rich Algae Oil is a Safe and Effective Vegetarian Source of Omega-3 -- Role of N-3 (Omega-3) Polyunsaturated Fatty Acids in Postpartum Depression: Mechanisms and Implications for Prevention and Treatment -- Influence of Omega-3 Fatty Acids on Bone Turnover -- Interactions between Omega-3 Fatty Acids and Iron --Role of Omega-3 Fatty Acis in Major Cardiovascular Events-A Current View -- Modulation of Immune Response by Omega-3 in Health and Disease -- The Linoleic to Linolenic Intake Ration: The Fundamental Implications of Imbalance and Excess Looked at from both a Functional and Evolutionary Perspective-An Overview -- Bioactive Oxidised Products of Omega-6 and -3, Excess Oxidative Stress, Oxidised Dietary Intake, and Antioxidant Nutrient Deficiencies, in the Context of a Modern Diet -- In a Western dietary context excess oxidised linoleic acid (LA) of dietary and endogenous origin by; over-activation of PPARgamma so immune and inflammatory pathways, and cardiolipin damage, increases cardiovascular risk -- Linoleic and alpha-linolenic acid have central roles in brain energy substrate provision, endogenous lipid production, immune and repair function, via peroxisomal betaoxidation related pathways? -- The roles of Linoleic and Alpha Linolenic Acid, their oxylipins, PPAR alpha delta and gamma related peroxisomal pathways, on obesity in the context of a 'Western' diet --The crucial relevance of ALA and LA as primary peroxisomal betaoxidation substrates, of oxidised LA as the primary endogenous activator of PPAR gamma, and energy deficit as the primary activator of PPAR alpha -- Effects of Omega-3 Fatty Acids in Myocardial Infarction -- Alternative Origins for Omega-3 Fatty Acids in the Diet -- Maternal Long Chain Polyunsaturated Fatty Acids and Pregnancy Outcome --Role of Antioxidants in Human Health -- Role of Omega-3 Fatty Acids in Cardiovascular Disorders -- Beneficial Effect of Long-Chain Omega-3 Fatty Acids in Psoriasis -- Pharmacokinetics, Safety Profile of Omega-3 Polyunsaturated Fatty Acids -- Fish Oil Fatty Acids for Aging Disorders.

Sommario/riassunto

This volume argues for the importance of essential nutrients in our diet. Over the last two decades there has been an explosion of research on the relationship of Omega-3 fatty acids and the importance of antioxidants to human health. Expert authors discuss the importance of a diet rich in Omega-3 Fatty acids for successful human growth and development and for the prevention of disease. Chapters highlight their contribution to the prevention and amelioration of a wide range of conditions such as heart disease, diabetes, arthritis, cancer, obesity, mental health and bone health. An indispensable text designed for nutritionists, dietitians, clinicians and health related professionals, Omega-3 Fatty Acids: Keys to Nutritional Health presents a comprehensive assessment of the current knowledge about the nutritional effects of Omega-3 fatty acids and their delivery in foods.