

1. Record Nr.	UNINA9910814933903321
Autore	Dashwood Roderick H
Titolo	An Evidence-based Approach to Phytochemicals and Other Dietary Factors // by: Higdon, Jane, Drake, Victoria J.
Pubbl/distr/stampa	Stuttgart, [Germany] : , : Thieme, , 2013 ©2013
ISBN	3-13-169712-1
Edizione	[Second edition.]
Descrizione fisica	1 online resource (330 pages) : illustrations
Disciplina	615.321
Soggetti	Herbs - Therapeutic use Plant extracts - Therapeutic use
Lingua di pubblicazione	Tedesco
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	An Evidence-based Approach to Phytochemicals and Other Dietary Factors -- Title Page -- Copyright -- Foreword -- Preface to the Second Edition -- Preface to the First Edition -- Editorial Advisory Board -- Contents -- How To Use This Book -- Abbreviations -- 1 Fruits and Vegetables -- Disease Prevention -- Cardiovascular Disease -- Type 2 Diabetes Mellitus -- Cancer -- Osteoporosis -- Age-Related Eye Diseases -- Chronic Obstructive Pulmonary Disease -- Neurodegenerative Disease -- Intake Recommendations -- Summary -- 2 Cruciferous Vegetables -- Disease Prevention -- Cancer -- Nutrient Interactions -- Iodine and Thyroid Function -- Intake Recommendations -- Summary -- 3 Legumes -- Disease Prevention -- Type 2 Diabetes Mellitus -- Cardiovascular Disease -- Cancer -- Intake Recommendations -- Summary -- 4 Nuts -- Disease Prevention -- Cardiovascular Disease -- Type 2 Diabetes Mellitus -- Body Weight -- Safety -- Nut Allergies -- Adverse Effects -- Intake Recommendations -- Summary -- 5 Whole Grains -- Disease Prevention -- Type 2 Diabetes Mellitus -- Cardiovascular Disease -- Cancer -- Intestinal Health -- Intake Recommendations -- Increasing Whole-Grain Intake -- Summary -- 6 Coffee -- Some Bioactive Compounds in Coffee -- Chlorogenic Acid -- Caffeine -- Diterpenes -- Disease Prevention -- Type 2 Diabetes Mellitus -- Parkinson Disease -- Colorectal Cancer -- Cirrhosis and Liver Cancer -- Mortality -- Safety -- Health Risks

Associated with Coffee Consumption -- Adverse Effects -- Drug Interactions -- Nutrient Interactions -- Summary -- 7 Tea -- Definitions -- Types of Tea -- Cup Sizes -- Bioactive Compounds in Tea -- Flavonoids -- Caffeine -- Fluoride -- Disease Prevention -- Cardiovascular Disease -- Cancer -- Osteoporosis -- Dental Caries -- Kidney Stones -- Weight Loss -- Safety -- Adverse Effects -- Pregnancy and Lactation -- Drug Interactions.

Nutrient Interactions -- Summary -- 8 Carotenoids -- Bioavailability and Metabolism -- Biological Activities -- Vitamin A Activity -- Antioxidant Activity -- Light Filtering -- Intercellular Communication -- Immune System Function -- Deficiency -- Disease Prevention -- Lung Cancer -- Prostate Cancer -- Cardiovascular Disease -- Age-Related Macular Degeneration -- Cataracts -- Sources -- Food Sources -- Supplements -- Safety -- Toxicity -- Adverse Effects -- Safety in Pregnancy and Lactation -- Drug Interactions -- Interactions with Foods -- Interactions Among Carotenoids -- Summary -- 9 Chlorophyll and Chlorophyllin -- Bioavailability and Metabolism -- Biological Activities -- Complex Formation with Other Molecules -- Antioxidant Effects -- Modification of the Metabolism and Detoxification of Carcinogens -- Therapeutic Effects -- Disease Prevention -- Aflatoxin-Associated Liver Cancer -- Disease Treatment -- Internal Deodorant -- Wound Healing -- Sources -- Food Sources -- Supplements -- Safety -- Summary -- 10 Curcumin -- Bioavailability and Metabolism -- Biological Activities -- Antioxidant Activity -- Anti-inflammatory Activity -- Glutathione Synthesis -- Effects on Biotransformation Enzymes Involved in Carcinogen Metabolism -- Induction of Cell-Cycle Arrest and Apoptosis -- Inhibition of Tumor Invasion and Angiogenesis -- Disease Prevention -- Cancer -- Disease Treatment -- Cancer -- Inflammatory Diseases -- Cystic Fibrosis -- Alzheimer Disease -- Sources -- Food Sources -- Supplements -- Safety -- Adverse Effects -- Pregnancy and Lactation -- Drug Interactions -- Summary -- 11 Flavonoids -- Bioavailability and Metabolism -- Absorption and Metabolism -- Biological Activities -- Direct Antioxidant Activity -- Metal Chelation -- Effects on Cell-Signaling Pathways -- Biological Activities Related to Cancer Prevention. Biological Activities Related to Cardiovascular Disease Prevention -- Disease Prevention -- Cardiovascular Disease -- Cancer -- Neurodegenerative Disease -- Sources -- Food Sources -- Supplements -- Safety -- Adverse Effects -- Drug Interactions -- Nutrient Interactions -- Summary -- 12 Soy Isoflavones -- Bioavailability and Metabolism -- Biological Activities -- Estrogenic and Antiestrogenic Activities -- Estrogen-Receptor-Independent Activities -- Disease Prevention -- Cardiovascular Disease -- Hormone-Associated Cancers -- Osteoporosis -- Cognitive Decline -- Disease Treatment -- Menopausal Symptoms -- Sources -- Food Sources -- Supplements -- Infant Formulas -- Safety -- Adverse Effects -- Drug Interactions -- Summary -- 13 Isothiocyanates -- Bioavailability and Metabolism -- Biological Activities -- Effects on Biotransformation Enzymes Involved in Carcinogen Metabolism -- Preservation of Normal Cell-Cycle Regulation -- Inhibition of Proliferation and Induction of Apoptosis -- Inhibition of Histone Deacetylation -- Anti-inflammatory Activity -- Antibacterial Activity -- Disease Prevention -- Cancer -- Genetic Variation in Isothiocyanate Metabolism and Cancer Risk -- Sources -- Food Sources -- Supplements -- Safety -- Adverse Effects -- Pregnancy and Lactation -- Drug Interactions -- Summary -- 14 Indole-3-Carbinol -- Bioavailability and Metabolism -- Biological Activities -- Effects on Biotransformation Enzymes Involved in Carcinogen Metabolism -- Alterations in Estrogen Activity and

Metabolism -- Induction of Cell-Cycle Arrest -- Induction of Apoptosis -- Inhibition of Tumor Invasion and Angiogenesis -- Disease Prevention -- Cancer -- Disease Treatment -- Diseases Related to Human Papilloma Virus Infection -- Systemic Lupus Erythematosus -- Sources -- Food Sources -- Supplements -- Safety -- Adverse Effects -- Pregnancy and Lactation.

Drug Interactions -- Summary -- 15 Lignans -- Bioavailability and Metabolism -- Biological Activities -- Estrogenic and Antiestrogenic Activities -- Estrogen-Receptor-Independent Activities -- Disease Prevention -- Cardiovascular Disease -- Hormone-Associated Cancers -- Osteoporosis -- Sources -- Food Sources -- Supplements -- Safety -- Adverse Effects -- Summary -- 16 Fiber -- Definitions of Fiber -- US Institute of Medicine Classification System -- Other Classification Systems -- Biological Activities -- Lowering Serum Cholesterol -- Decreasing Postprandial Glycemia -- Softening Stool -- Disease Prevention -- Cardiovascular Disease -- Type 2 Diabetes Mellitus -- Cancer -- Diverticular Disease -- Weight Control -- All-Cause Mortality -- Disease Treatment -- Diabetes Mellitus -- Irritable Bowel Syndrome -- Sources -- Food Sources -- Isolated Fibers and Supplements -- Safety -- Adverse Effects -- Drug Interactions -- Nutrient Interactions -- Intake Recommendations -- Adequate Intake -- Summary -- 17 Organosulfur Compounds from Garlic -- Bioavailability and Metabolism -- Allicin-Derived Compounds -- -Glutamylcysteines and S-Allylcysteine -- Biological Activities -- Related to Cardiovascular Disease Prevention -- Biological Activities Related to Cancer -- Antimicrobial Activity -- Disease Prevention -- Cardiovascular Disease -- Cancer -- Sources -- Food Sources -- Supplements -- Safety -- Adverse Effects -- Pregnancy and Lactation -- Drug Interactions -- Summary -- 18 Phytosterols -- Definitions -- Bioavailability and Metabolism -- Absorption and Metabolism of Dietary Cholesterol -- Absorption and Metabolism of Dietary Phytosterols -- Biological Activities -- Effects on Cholesterol Absorption and Lipoprotein Metabolism -- Other Biological Activities -- Disease Prevention -- Cardiovascular Disease -- Cancer -- Disease Treatment.

Benign Prostatic Hyperplasia -- Sources -- Food Sources -- Foods Enriched with Plant Sterols and Plant Stanols -- Supplements -- Safety -- Adverse Effects -- Sitosterolemia (Phytosterolemia) -- Pregnancy and Lactation -- Drug Interactions -- Nutrient Interactions -- Summary -- 19 Resveratrol -- Bioavailability and Metabolism -- Biological Activities -- Direct Antioxidant Activity -- Estrogenic and Antiestrogenic Activities -- Biological Activities Related to Cancer Prevention -- Biological Activities Related to Cardiovascular Disease Prevention -- Disease Prevention -- Cardiovascular Disease -- Cancer -- Longevity -- Sources -- Food Sources -- Supplements -- Safety -- Adverse Effects -- Pregnancy and Lactation -- Estrogen-Sensitive Cancers -- Drug Interactions -- Summary -- 20 Essential Fatty Acids (Omega-3 and Omega-6) -- Bioavailability and Metabolism -- Biological Activities -- Membrane Structure and Function -- Vision -- Nervous System -- Eicosanoid Synthesis -- Regulation of Gene Expression -- Deficiency -- Essential Fatty Acid Deficiency -- Omega-3 Fatty Acid Deficiency -- Disease Prevention -- Visual and Neurological Development -- Pregnancy and Lactation -- Cardiovascular Disease -- Alzheimer Disease and Dementia -- Disease Treatment -- Coronary Heart Disease -- Diabetes Mellitus -- Inflammatory Diseases -- Major Depression and Bipolar Disorder -- Schizophrenia -- Alzheimer Disease and Dementia -- Sources -- Food Sources -- Biosynthesis -- Supplements -- Infant Formula -- Safety -- Adverse Effects -- Infant Formula -- Pregnancy and Lactation -- Contaminants in Fish --

Contaminants in Supplements -- Drug Interactions -- Nutrient Interactions -- Intake Recommendations -- US Institute of Medicine -- International Recommendations -- American Heart Association -- Summary -- 21 Choline -- Function -- Structural Integrity of Cell Membranes. Cell Signaling.

Sommario/riassunto

From Reviews of the First Edition: Dr. Higdon has given the healthcare providers, especially dietitians, nurses, physicians, and researchers who seek to understand phytochemicals an authoritative yet easy to use book. -- *Phytomedicine: International Journal of Phytotherapy & Phytopharmacology* highly recommend this monograph for physicians, dietitians, and other health practitioners as well as the health-aware public. It captures what you need to know in a succinct but comprehensive fashion. -- *American Journal of Lifestyle Medicine* Now in a completely updated second edition, *An Evidence-based Approach to Dietary Phytochemicals and Other Dietary Factors* is a trusted resource for all health professionals who need to interpret the explosion of information on the role of a plant-based diet in health and disease. It consolidates a wealth of scientifically accurate, peer-reviewed data on plant foods, dietary phytochemicals, and dietary supplements, and includes information on essential intake recommendations, dietary sources, nutrient and drug interactions, phytochemicals in disease prevention, possible adverse effects, and much more. Special features: All chapters revised and updated, with new sections on choline, coenzyme Q10, L-Carnitine, lipoic acid, and other dietary factors. Logically structured for quick access to information begins with the evidence-based benefits of fruits and vegetables, legumes, nuts, whole grains, coffee, and tea; and goes on to the scientific and clinical data on individual dietary phytochemicals and classes of phytochemicals, including carotenoids, flavonoids, fiber, and more. Summaries at the end of each chapter for rapid review. Peer-reviewed by experts in the field, ensuring that all material is accurate and up-to-date. The well-constructed appendix includes not only a quick reference to diseases and foods and where to find them in the book; but also useful tables on phytochemical-drug interactions, phytochemical-nutrient interactions, and phytochemical-rich foods; a summary of the glycemic index of dietary carbohydrates; and a comprehensive glossary of terms. Concisely synthesizing a huge amount of epidemiological and clinical research and emphasizing the importance of a phytochemical-rich diet over dietary supplements, this book is ideal for nutritionists, dietitians, nurses, and other health care professionals who need to educate patients about sound food choices. Students in graduate programs in nutrition, food science, pharmacy, and allied health fields will also find the abundance of rigorous, scientifically accurate information essential in their studies.
