

DOCUMENTATION

Review of books

(In this section we publish reviews of the books from which we receive a copy in our library)

Antioxidants in Health and Disease.– A. Zampelas and R. Micha, Eds.– CRC Press, Taylor & Francis Group, Boca Raton, FL, USA, 2015.– XX + 320 pages.– ISBN 978-1-4465-8003-9.

The beneficial effect of foods on both human health and disease prevention has been known from Greek times when Hippocrates wrote “Let food be thy medicine and medicine be thy food”. However, in recent decades and mostly in western countries, a great concern for the consumption of healthy food products has increased considerably. This has produced an augmented interest in the study of antioxidants because of their potential relationship with the beneficial effects of foods. This book summarizes much of this information and discusses the last results indicating that the consumption of large amounts of antioxidant-rich supplements might not be so healthy.

The book is divided in four sections. The first one, entitled “Interest in antioxidants: why and how?”, is a general introduction to the subject and includes two chapters: “Reactive oxygen species. Production, regulation, and essential functions”, R. B. Ruker (20 pages, 48 references) and “Major dietary antioxidants and their food sources”, M. Polissiou and D. Daferera (21 pages, 51 references). The second section is entitled “Antioxidants in Health”. It contains five chapters dedicated to the role of antioxidants in human growth, development, and behaviors. The chapters are: “Oxidative stress in pregnancy”, U. L. Teo and A. Shennan (6 pages, 28 references); “The role of antioxidants in children’s growth and development”, F. Pérez de Heredia, L. E. Díaz, A. Hernández, A. M. Veses, S. Gómez-Martínez and A. Marcos (17 pages, 82 references); “Adulthood and old age”, A. E. Koutelidakis and M. Kapsokefalou (11 pages, 54 references); “Smoking, oxidative stress, and antioxidant intake”, A. Baschali and D. Karayiannis (19 pages, 35 references); and “Physical exercise”, M. Atalay, J. Lappalainen, A. Korkmaz and C. K. Sen (12 pages, 55 references). The third section is dedicated to the role of antioxidants in the prevention and development of diseases. Its title is “Antioxidants in various disease states” and includes the following eight chapters: “Coronary heart disease and stroke”, A. Zampelas and I. Dimakopoulos (33 pages, 119 references); “Diabetes”, V. Lambadiari, F. Kousathana and G. Dimitriadis (13 pages, 100 references); “Cancer”, E. Andreou (34 pages, 116 references); “Antioxidants in neurodegeneration. Truth or myth?”, F. Capani, G. Barreto, E. Blanco and C. H. Lillig (15 pages, 124 references); “Gastrointestinal disorders”, M. Georgoulis, I. Kechribari and M. D. Kontogianni (18 pages, 70 references); “Antioxidants in obesity and inflammation”, C. Koliaki, A. Kokkinos and N. Katsilambros (15 pages, 71 references); “Modulation of immune response by antioxidants”, K. Becker, F. Überall, D. Fuchs and J. M. Gostner (14 pages, 85 references); “HIV/AIDS”, H. Englert and G. Nkengfack (16 pages, 69 references). The fourth section is dedicated to herbs, a source rich in antioxidants and used for a long time in disease prevention. Its title is “Role of herbs” and contains the chapter “Role of herbs and spices in health and longevity and in disease”, K. Srinivasan (20 pages, 74 references).

In summary, a book that provides an up-to-date overview of the subject trying to clarify the pros and cons of the use of antioxidants in human health. This volume can be of interest for professionals of very different fields, including medicine, nutrition, and food science, and also for the general public interested in knowing what is now known about the role of antioxidants in health and disease.

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