

Special Issue

Carotenoids: Biological Properties, and Function in Human Health

Message from the Guest Editors

Carotenoids are present in plant pigments and in both photosynthetic and non-photosynthetic organisms. They have valuable biological properties, among which the most documented is the activity of the provitamin A. Due to the presence in the molecule of a number of double bonds, carotenoids readily react with electrophiles. Carotenoids are classified as both prevention and intervention antioxidants—they may inactivate free radicals by forming adducts with them or electron transfer. Scientific evidence has strongly shown that regular intake of dietary carotenoids reduces the risk of oxidative stress and civilization diseases. In the human body, they perform many important functions, since they prevent atherosclerosis, are involved in maintaining the immune function, maintain the health of the eyes and skin, and reduce the risk of macular degeneration, cataract, cancer, and diseases of the cardiovascular system.

This Special Issue is dedicated to original research articles and review articles which cover the latest findings on the biological properties of carotenoids, their function in human health, and methods for their determination.

Guest Editors

Dr. Agnieszka Nawirska-Olszańska

Department of Fruit, Vegetable and Plant Nutraceutical Technology,
Wrocław University of Environmental and Life Sciences, C. K. Norwida
str. 25, 50-375 Wrocław, Poland

Dr. Joanna Kolniak-Ostek

Department of Fruit, Vegetable and Plant Nutraceutical Technology,
The Faculty of Biotechnology and Food Sciences, Wrocław University of
Environmental and Life Sciences, Chelmonskiego 37, 51-630 Wrocław,
Poland

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,
20133 Milano, Italy

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