

Special Issue

Antioxidant Activity of Natural Bioactive Compounds in Food and Agricultural Byproducts

Message from the Guest Editors

The Special Issue will explore the potential of naturally occurring compounds with antioxidant properties derived from food matrices and agro-industrial residues. These bioactive molecules, such as polyphenols, flavonoids, carotenoids, and peptides, play a crucial role in mitigating oxidative stress and promoting health, while also offering sustainable solutions for waste valorization. This Special Issue will also cover both in vitro and in vivo studies, clarifying the fundamental role of reactive oxygen species (ROS) and their modulation in cell signaling, cell metabolism, epigenetic regulation, or other biological processes in any living organism. This Special Issue welcomes original research and reviews focused on the following topics:

- Identification, extraction, and characterization of antioxidant compounds from food and agricultural byproducts;
- Innovative and green technologies for compound recovery and stabilization;
- In vitro and in vivo evaluation of antioxidant activity and related health benefits;
- Applications in functional foods, nutraceuticals, cosmetics, and pharmaceuticals;
- Circular economy approaches and environmental impact assessments.

Guest Editors

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About the Journal

Message from the Editor-in-Chief

It has been recognized in medical sciences that in order to prevent adverse effects of “oxidative stress” a balance exists between prooxidants and antioxidants in living systems. Imbalances are found in a variety of diseases and chronic health situations. Our journal *Antioxidants* serves as an authoritative source of information on current topics of research in the area of oxidative stress and antioxidant defense systems. The future is bright for antioxidant research and since 2012, *Antioxidants* has become a key forum for researchers to bring their findings to the forefront.

Editor-in-Chief

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