

Special Issue

Exploring Plant-Derived Bioactive Compounds: The Role of Peptides, Polysaccharides, and Antioxidants in Nutraceutical Development and Health Promotion

Message from the Guest Editor

Plant-derived bioactive peptides, polysaccharides, and other nutraceuticals are critical active components in traditional medicine and functional foods, studies on their structure–activity relationships (SARs), particularly in relation to the mechanisms underlying modern diseases (e.g., metabolic syndrome and cancer), can drive cross-scale insights from molecular architecture to mechanistic elucidation. Oxidative stress and chronic inflammation are central pathological mechanisms underpinning metabolic disorders (such as hyperlipidemia) and cancer progression. Peptides, polysaccharides, and other nutraceuticals can intervene in these processes by modulating signaling pathways. This Special Issue will publish original research articles and reviews focusing on the antioxidant, hypolipidemic, antitumor, and other potentials of plant-derived peptides and polysaccharides and other nutraceuticals. Contributions should emphasize elucidating the structure–activity relationships (SARs) and underlying molecular mechanisms of these bioactive compounds pertinent to addressing key health challenges, including oxidative stress, hyperlipidemia, tumor progression, etc.

Guest Editor

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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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