

Special Issue

The Interplay of Oxidative Stress, the Gut–Brain Axis, and Neurodegenerative Diseases

Message from the Guest Editor

The antioxidant and anti-inflammatory effects of polyphenols for enhancing human stress resilience in health and disease have received more attention. Recently, the gut–brain axis (GBA) has gained attention for preventing and therapeutically impacting neuropathologies and gastrointestinal diseases. Polyphenols and polyphenol-combined nanoparticles in synergy with probiotics are shown to improve their gut bioavailability and blood–brain barrier (BBB) permeability, thus inhibiting oxidative stress, metabolic dysfunction, and inflammation linked to gut dysbiosis and the consequent onset and progression of nervous system disorders. The Special Issue mainly focuses on oxidative stress and the role of hormetic nutrients by summarizing their neuroprotective and anti-inflammatory properties as well as pharmacological interventions in gut–brain disorders.

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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