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Redox Imbalances in Dysmetabolism-Related, Neurodegenerative Diseases: Can Phytochemicals Exert Beneficial Effects?

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Message from the Guest Editors

Originally considered ‘health-promoting’ by virtue of their radical-scavenging or direct antioxidant effects on cellular biomolecules, phytochemicals (PhCs) are now believed to effectively modulate the inflammatory response by intercepting reactive species at the level of critical signalling pathways. Coherently, growing evidence shows that certain PhCs could play a beneficial role in neurodegenerative diseases. Indeed, the inhibition of the self-feeding cycle between chronic neuroinflammation, insulin resistance, and oxidative stress has emerged as a possible mechanism for the neuroprotective effects of particular PhCs.

The aim of this Special Issue is to bring together updated research on the redox-dependent, molecular interconnections between dysmetabolism and neurodegeneration both in vitro and in vivo. Moreover, studies on the mechanisms underlying the protective effects of phytochemicals and their synergistic interactions with pharmaceuticals will also be considered. Authors are invited to submit manuscripts in the form of both original research and review articles.



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Special Issue



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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.

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