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Regulation of Autophagy by Natural Compounds and Their Antioxidant Activity

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Message from the Guest Editors

A relatively unexplored field of study is the role of fundamental biological processes such as autophagy as a cellular response to a redox imbalance and the role of natural compounds in modulating this response in physiological and pathological contexts. The interplay between reactive oxygen species (ROS) and natural compounds as autophagy modulators is the focus of different studies based on different cellular models (such as cancer vs. normal cells). Furthermore, although connections between ROS and autophagy are observed under various pathological conditions, the mode of activation of autophagy and the potential protective or cytotoxic functions are not fully understood. This Special Issue focuses on studies that could “connect the dots” between the effects of natural compounds as inducers of autophagy and ROS imbalance in different cellular contexts to better understand the roles of autophagy in several chronic degenerative diseases and aging and utilize it as a therapeutic target.



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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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