Special Issue

Exploring Endoplasmic Reticulum Stress in Disease: The Therapeutic Potential of Natural Pro- and Antioxidant Compounds in Redox Modulation

Message from the Guest Editors

The endoplasmic reticulum (ER) is responsible for folding and modifying proteins before transporting them within the cell. Pathological conditions like nutrient deprivation, oxidative stress, and changes in calcium levels can lead to ER stress due to an imbalance between protein-folding capacity and the demand for properly folded proteins. ER stress is implicated in various diseases, and understanding the role of ER stress in disease pathogenesis may drive novel therapeutic strategies targeting the ER stress response. Natural products are gaining attention for their potential to either mitigate or trigger oxidative and ER stress, yet further research is needed to fully understand their biochemical mechanisms in ER stress modulation to develop effective treatments. This special issue aims to deepen the understanding and provide new perspectives on the effectiveness of plant-derived compounds, nutraceuticals, and functional foods in modulating ER stress for the treatment of associated diseases.

Guest Editors

Dr. Giacomo Pepe
Dr. Vincenzo Vestuto
Dr. Manuela Giovanna Basilicata

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Antioxidants
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
antioxidants@mdpi.com

mdpi.com/journal/antioxidants

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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

Prof. Dr. Alessandra Napolitano
Department of Chemical Sciences, University of Naples "Federico II", Via Cintia 4, I-80126 Naples, Italy

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