



## Antioxidants and Oxidative Stress: Implication in Muscle Diseases

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submissions:

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### Message from the Guest Editors

Reactive Oxygen Species (ROS) represent fundamental key players in a large variety of physiological mechanisms. However, despite the development of a composite antioxidant system, their excessive levels can establish oxidative stress, a condition which is responsible for the initiation and progression of tissue/organ injury. The role of oxidative stress in muscle homeostasis is quite intricate and far to be elucidated. Within physiological levels ROS exert essential actions in muscle homeostasis by regulating excitation-contraction coupling, growth, proliferation, differentiation and muscle adaptation. The underlying mechanisms are represented by ROS interactions with redox-sensitive transcription factors, leading to increased gene expression of antioxidant enzymes, cytoprotective proteins and other enzymes involved in muscle specific metabolic functions.

On these bases, we invite you to submit your latest research findings or a review article to this Special Issue, which will be focused on antioxidants and oxidative stress in muscle diseases. Both in vitro and in vivo studies relating to these topics will be suitable for the current issue. We look forward to your contribution.





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## Editor-in-Chief

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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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