



Oxidative and Nitrosative Stress in Male Reproduction

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Message from the Guest Editors

Infertility is a highly prevalent disease, and oxidative stress significantly contributes to the aetiology of male infertility. Oxidative stress impairs sperm function, and a high percentage of infertile men display elevated levels of seminal reactive oxygen species (ROS) and reactive nitrogen species (RNS). Spermatozoa are highly vulnerable to oxidative stress, and detrimental damage associated with high levels of ROS can affect several biomolecules, including lipids, proteins and DNA. Similarly, like ROS, the exposure of spermatozoa to high levels of RNS results in impaired sperm function, as evidenced by the loss of quality and the decrease in crucial sperm functions, including motility and ATP production.

This Special Issue invites investigators to submit original research, short communication and review articles to discuss the pivotal role of oxidative and nitrosative stress in different aspects of sperm function. We encourage contributions that describe the potential benefits of antioxidants as a means of improving sperm quality under conditions of oxidative and nitrosative stress.





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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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