



Antioxidants and Phytobiotics in Mitigation of Radiation-Induced Injury and Impairment of Redox Homeostasis

Guest Editor:

Dr. Nikolai V. Gorbunov

The Henry M. Jackson
Foundation for the Advancement
of Military Medicine, Inc.,
Bethesda, MD 20817, USA

Message from the Guest Editor

Acute ionizing irradiation (IR) affects cell/organ systems with different degrees of injury interfering with life processes. The subjects and aims of this Special Issue:

(i) To address redox biology of radiation injury and targeted redox therapy:

- Interplay between redox metabolome, redox signaling, and aseptic inflammation in sequela of acute radiation disease
- Antioxidants and redox-regulated miRNA in radiation injury
- Antioxidants and phytobiotics in transcriptional and translational regulation of acute radiation response
- Antioxidants and phytobiotics in epigenetic regulation of response
- Mitochondria-targeted antioxidants in mitigation of radiation injury
- Models and techniques for the assessment of the radiation oxidative, electrophilic and carbonyl stress.

(ii) To elucidate the role of antioxidants and other phytobiotics in mechanisms of redox response to ionizing irradiation.





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Editor-in-Chief

**Prof. Dr. Alessandra
Napolitano**

Department of Chemical
Sciences, University of Naples
"Federico II", Via Cintia 4, I-80126
Naples, Italy

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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Antioxidants Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
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