



## Oxidative Stress, Lipid Peroxidation and Glycoxidation Products in Inflammation, Autoimmunity and Immunity-Driven Inflammation

Guest Editor:

**Dr. Fabrizio Gentile**

Department of Medicine & Health  
Sciences, Università del Molise,  
Campobasso, Italy

Deadline for manuscript  
submissions:

**closed (30 June 2022)**

### Message from the Guest Editor

An expanding body of evidence highlights the role of the products of lipid peroxidation (LPO) in the pathogenesis of autoimmunity and immunity-driven inflammation. They represent oxidation-specific epitopes, which act both as: 1) damage-associated molecular patterns, inciting flogosis and activating antigen-presenting cells by binding to pattern-recognition receptors; and 2) neoepitopes derived from the modification of self epitopes, which can be instrumental in breaking the tolerance of autoreactive T and B cells to self antigens. In fact, it has been repeatedly observed in both animal models and humans that the modification of self epitopes by LPO products not only prompts valid responses to modified epitopes, but also promotes their intramolecular spreading to unmodified epitopes of formerly tolerated self antigens. Moreover, the pleiotropic ability of LPO products to form adducts with a broad range of macromolecules may account for the observed intermolecular spreading of autoimmune responses between different protein and nucleic acid antigens. This Special Issue of *Antioxidants* aims to provide a rigorous update of this intriguing subject.





an Open Access Journal by MDPI

## 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.

## Author Benefits

**Open Access:** free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

**High Visibility:** indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [PubMed](#), [PMC](#), [FSTA](#), [PubAg](#), [CAPus / SciFinder](#), and [other databases](#).

**Journal Rank:** JCR - Q1 (*Food Science & Technology*) / CiteScore - Q1 (*Food Science*)

## Contact Us

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

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/antioxidants](http://mdpi.com/journal/antioxidants)  
[antioxidants@mdpi.com](mailto:antioxidants@mdpi.com)  
[X@antioxidants\\_OA](#)