

## Special Issue

# The Role of Oxidative Stress and Antioxidants in Human Disease

### Message from the Guest Editor

Oxidative stress is a condition where there is an imbalance between free radicals (reactive oxygen species) and antioxidants in the body. Free radicals are highly reactive molecules that can damage cells, proteins, and DNA, contributing to aging and various diseases, including cancer, cardiovascular diseases, and neurodegenerative disorders. Antioxidants are molecules that neutralize free radicals, preventing or reducing damage. Natural antioxidants, such as vitamins C and E, polyphenols, and flavonoids, are found in fruits, vegetables, nuts, and whole grains. They play a crucial role in maintaining health by protecting cells from oxidative damage. The body also produces endogenous antioxidants, like glutathione, which further defend against oxidative stress. Balancing oxidative stress with sufficient antioxidants is essential for preventing chronic diseases and promoting overall well-being. Consuming a diet rich in natural antioxidants is a key strategy for managing oxidative stress. This Special Issue will focus on new insights into the role of oxidative stress and antioxidants in human diseases.

### Guest Editor

Dr. Federica Mannino

Department of Clinical and Experimental Medicine, University of Messina, Via C. Valeria, 98125 Messina, Italy

### Deadline for manuscript submissions

20 September 2025



## International Journal of Molecular Sciences

an Open Access Journal  
by MDPI

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/si/214820](https://mdpi.com/si/214820)

*International Journal of  
Molecular Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[ijms@mdpi.com](mailto:ijms@mdpi.com)

[mdpi.com/journal/  
ijms](https://mdpi.com/journal/ijms)





# International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/journal/  
ijms](https://mdpi.com/journal/ijms)



## About the Journal

### Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

---

### Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences,  
Sez-Biochimica, Faculty of Medicine, Università Politecnica delle  
Marche, Via Ranieri 65, 60100 Ancona, Italy

---

### 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, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore  
- Q1 (Organic Chemistry)