

Special Issue

Nutrients and Nitrite

Message from the Guest Editors

Although nitrate and nitrite were previously considered to be inert end products of endogenously produced nitric oxide (NO) in the process of NO oxygenation, they are now known to be physiologically recycled in the blood and tissue to form NO and other bioactive nitrogen oxides. Decreased NO availability, caused by obesity and endothelial dysfunction, might be causally related to the development of lifestyle-related diseases, such as insulin resistance, ischemic heart disease, and hypertension. However, dietary intake of nitrite as a nutrient may compensate NO synthase (NOS)-dependent NO generation through the enterosalivary nitrate-nitrite-NO pathway by transmitting NO activity in various molecular forms, including NO and protein S-nitrosothiols. Potential topics in this special issue may include the above-mentioned metabolic disorders but are not limited to the association of nitrite-mediated NO activity with lifestyle-related diseases. In this special issue, we look forward to discussions on the prophylactic and therapeutic effects of nitrite intake as a nutrient in a variety of pathophysiological conditions.

Guest Editors

Prof. Dr. Jun Kobayashi

Dr. Isamu Murata

Dr. Kazuo Ohtake

Dr. Kunihiro Sonoda

Deadline for manuscript submissions

closed (31 January 2022)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/67098

*International Journal of
Molecular Sciences*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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)