

Special Issue

Role of Oxidative Stress, Antioxidants, and Gut Microbiota in Obesity and Metabolic Disorders

Message from the Guest Editor

Obesity and metabolic diseases, including type 2 diabetes, metabolic syndrome, and non-alcoholic fatty liver disease, represent urgent global health challenges. Extensive research has demonstrated that oxidative stress and chronic low-grade inflammation are central drivers of disease onset and progression. Emerging evidence also emphasizes the critical role of gut dysbiosis in linking oxidative stress to metabolic dysfunction. Modulation of gut microbiota composition and function may, therefore, represent an innovative therapeutic strategy, complementing antioxidant-based approaches. This Special Issue invites original research articles, reviews, and perspectives that address the role of antioxidants in treating obesity and metabolic diseases. We particularly encourage submissions that explore biological mechanisms, gut microbiota interactions, and translational clinical outcomes. By integrating multidisciplinary insights, this Special Issue aims to advance scientific understanding and foster the development of innovative strategies to alleviate the global burden of metabolic disease

Guest Editor

Dr. Lunawati Bennett

Pharmaceutical Sciences, Union University College of Pharmacy,
Jackson, TN, USA

Deadline for manuscript submissions

closed (30 April 2026)



Biomedicines

an Open Access Journal
by MDPI

Impact Factor 4.5
CiteScore 7.8
Indexed in PubMed



mdpi.com/si/256767

Biomedicines
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biomedicines@mdpi.com

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





Biomedicines

an Open Access Journal
by MDPI

Impact Factor 4.5
CiteScore 7.8
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access journal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to *Biomedicines*, be it original research, review articles, or developing Special Issues of current key topics.

Editor-in-Chief

Prof. Dr. Felipe Fregni

1. Neuromodulation Center and Center for Clinical Research Learning, Spaulding Rehabilitation Hospital and Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114, USA
2. Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA 02115, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPUS / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Pharmacology and Pharmacy) / CiteScore - Q1 (Medicine (miscellaneous))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.2 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the first half of 2026).