

Special Issue

New Insights into Adipose Tissue Metabolic Function and Dysfunction, 4th Edition

Message from the Guest Editor

Adipose tissue is widely known as an endocrine organ that can modulate systemic metabolism due to its effects on energy storage, adipokine production, and adaptive thermogenesis. This endocrine function is carried out in various organs, such as the liver, kidney, pancreas, and brain, thus contributing to homeostatic regulation, energy balance, insulin sensitivity, and vascular–endothelial function.

The dysregulation of adipocyte differentiation, metabolism, and endocrine functions leads to adipose tissue dysfunction, which triggers the activation of molecular pathways involved in the physiopathology of overall metabolic diseases, such as obesity, inflammation, insulin resistance, and type 2 diabetes. New therapeutic approaches targeting adipose tissue and its signaling molecules and heterogeneity could provide potential advances in understanding its pathophysiology and in treating several metabolic syndromes.

This Special Issue aims to collect publications on new insights into the pathogenesis, molecular pathways, and beneficial effects of novel and safe treatments for metabolic diseases associated with adipose tissue dysfunction.

Guest Editor

Dr. Federica Mannino

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

Deadline for manuscript submissions

30 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/239980

*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)