



The Effect of Food-Derived Compounds on Brown Fat Cell Function

Guest Editor:

Prof. Dr. Nobuyuki Takahashi

Laboratory of Physiology and Metabolism, Department of Food Safety and Nutritional Science, Faculty of Applied Bioscience, Tokyo University of Agriculture, Tokyo, Japan

Deadline for manuscript submissions:

20 September 2024

Message from the Guest Editor

The biology of brown and beige adipocytes has advanced rapidly in recent years. These types of adipocytes have the ability to convert lipids accumulated by themselves and by white adipocytes into heat. This function of brown and beige adipocytes to consume accumulated lipids is expected to have various effects, including anti-obesity and anti-diabetic effects. However, their cell biological origin is still unknown. In addition, brown and beige adipocytes interact with various other cell types, including immune system cells such as macrophages, and the thermogenic function is regulated by these interactions. Furthermore, it has been shown that various food-derived components can exert anti-obesity effects by modulating the functions of these adipocytes. Therefore, this Special Issue welcomes a wide range of original and review articles focused on the latest developments in the molecular and cellular biology of various nutrients and compounds that regulate the function of brown and/or beige adipocytes.





an Open Access Journal by MDPI

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

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.

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 (Inorganic Chemistry)

Contact Us

*International Journal of Molecular
Sciences* Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/ijms
ijms@mdpi.com
X@IJMS_MDPI