Special Issue

Effects of Dietary Lipids on Immunity and Inflammation

Message from the Guest Editor

Dietary lipids play a fundamental role in immune regulation and inflammation by modulating immune cell differentiation, signaling pathways, and the onset or progression of inflammatory diseases. Their impact extends to gut microbiota modulation, recovery from exercise-induced injuries, neuroinflammation control, and disease management.

Long-chain fatty acids integrate into cell membrane phospholipids, altering membrane rafts and influencing inflammatory responses. Additionally, variations in lipid composition across different tissues are associated with dermatological conditions and impaired wound healing, emphasizing the complexity of lipid-mediated effects on health. With multi-biological functions, impaired phospholipid supply, has been linked to the pathogenesis of various diseases.

Epidemiological studies underscore both the protective and detrimental effects of lipid intake on disease incidence, reinforcing the need for further research. We invite researchers to submit original studies exploring the mechanisms by which dietary lipids influence immunity and inflammation, paving the way for innovative therapeutic strategies.

Guest Editor

Prof. Dr. Elaine Hatanaka

Interdisciplinary Post-Graduate Program in Health Sciences, Institute of Physical Activity Sciences and Sports, Cruzeiro do Sul University, Sao Paulo 01506-000, Brazil

Deadline for manuscript submissions

closed (15 October 2025)



Nutrients

an Open Access Journal by MDPI

Impact Factor 5.0 CiteScore 9.1 Indexed in PubMed



mdpi.com/si/235480

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

mdpi.com/journal/ nutrients





Nutrients

an Open Access Journal by MDPI

Impact Factor 5.0 CiteScore 9.1 Indexed in PubMed





About the Journal

Message from the Editorial Board

Nutrients is an on-line open access journal that was first published in 2009. Nutrients adheres to rigorous peer-review and editorial processes and publishes only high quality manuscripts that address important issues related to the impacts of nutrients on human health. The Impact Factor of Nutrients has risen rapidly since its establishment and it is now ranked in the first quartile of journals publishing in the field of nutrition and dietetics research.

Editors-in-Chief

Prof. Dr. Lluis Serra-Majem

- Centro de Investigación Biomédica en Red Fisiopatología de la Obesidad y la Nutrición (CIBEROBN), Institute of Health Carlos III, 28029 Madrid, Spain
- Research Institute of Biomedical and Health Sciences (IUIBS),
 University of Las Palmas de Gran Canaria, 35001 Las Palmas, Spain
 Preventive Medicine Service, Centro Hospitalario Universitario
 Insular Materno Infantil (CHUIMI), Canarian Health Service, 35016 Las

Prof. Dr. Maria Luz Fernandez

Department of Nutritional Sciences, University of Connecticut, Storrs, CT 06269, USA

Author Benefits

Palmas, Spain

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, MEDLINE, PMC, Embase, PubAg, AGRIS, and other databases.

Journal Rank:

JCR - Q1 (Nutrition and Dietetics) / CiteScore - Q1 (Nutrition and Dietetics)