

Special Issue

Lactation and Breast Milk—the Appropriate System for Postnatal Programming and Disease Prevention

Message from the Guest Editors

During the last few decades, the scientific understanding of breast milk has evolved from being seen as a food source to being a complex system of maternal signaling and programming for the developing infant. The purpose of this Special Issue is to provide up-to-date evidence demonstrating that breast milk serves dual functions as both a source of nutrition and as a postnatal epigenetic programming system. This programming system is crucial for the appropriate development of the gastrointestinal, immunological, metabolic, and neuroendocrine systems, and ultimately helps to prevent diseases such as obesity, diabetes mellitus, and cancer. Breast milk ensures that the infant receives species- and genome-specific feeding and programming, which cannot be replicated by artificial substitutes. The infant's transition from the intrauterine environment to the extrauterine life is continued by the tight control of the mammary glands. This allows for both breast-mediated feeding and programming. We would be delighted to receive your manuscript as an expert in the field supporting our major focus on breast milk-derived infant programming.

Guest Editors

Prof. Dr. Bodo Melnik

Department of Dermatology, Environmental Medicine and Health Theory, University of Osnabrück, Am Finkenhügel 7a, D-49076 Osnabrück, Germany

Prof. Dr. Ralf Weiskirchen

Institute of Molecular Pathobiochemistry, Experimental Gene Therapy and Clinical Chemistry (IFMPEGKC), RWTH University Hospital Aachen, D-52074 Aachen, Germany

Deadline for manuscript submissions

5 August 2025



Nutrients

an Open Access Journal
by MDPI

Impact Factor 4.8
CiteScore 9.2
Indexed in PubMed



mdpi.com/si/194471

Nutrients

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

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





Nutrients

an Open Access Journal
by MDPI

Impact Factor 4.8
CiteScore 9.2
Indexed in PubMed



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



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. Lluís Serra-Majem

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

Prof. Dr. Maria Luz Fernandez

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

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

Journal Rank:

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