Special Issue

Effects of Probiotics and Prebiotics on Gut–Brain Axis

Message from the Guest Editors

The gut-brain axis is a bidirectional communication network linking the gastrointestinal tract and central nervous system, influencing behavior, cognition, and emotional health. Probiotics and prebiotics can modulate this axis by altering gut microbiota composition and activity, with potential neurological and psychological benefits. This Special Issue, *"Effects of Probiotics and Prebiotics on Gut-Brain Axis"*, invites original research, reviews, and meta-analyses on:

- Probiotic/prebiotic effects on mood, cognition, and neurodevelopment;
- Microbial metabolites and neuromodulation;
- Gut microbiota's role in neuroinflammation and neurodegeneration;
- Clinical applications for psychiatric/neurological disorders;
- Diet-gut-brain interactions across the lifespan.

We welcome multidisciplinary submissions (nutrition, neuroscience, microbiology, psychiatry) to advance understanding of microbiota-targeted strategies for brain health.

Guest Editors

Dr. Letizia Paladino

1. Department of Theoretical and Applied Sciences, eCampus University, Novedrate, Italy

2. Department of Biomedicine, Neuroscience and Advanced Diagnostics, University of Palermo, Palermo, Italy

Prof. Dr. Antonella Marino Gammazza

1. Department of Biomedicine, Neurosciences and Advanced Diagnostics, University of Palermo, 90133 Palermo, Italy 2. Department of Biological, Chemical and Pharmaceutical Sciences and Technologies (STEBICEF), University of Palermo, 90133 Palermo, Italy

Deadline for manuscript submissions

25 January 2026



Nutrients

an Open Access Journal by MDPI

Impact Factor 5.0 CiteScore 9.1 Indexed in PubMed



mdpi.com/si/242942

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



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 peerreview 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

1. 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 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 (Nutrition and Dietetics)