

Special Issue

Advances in Food Nutritional Biochemistry: Omics, Bioavailability and Gut Health

Message from the Guest Editors

The biochemical composition of foods, their transformation during digestion, and their ultimate biological effects on the human body are at the heart of nutritional biochemistry. In recent years, the integration of omics technologies has opened new frontiers in understanding the complex interplay between nutrients, metabolism, and gut microbiota. This Special Issue highlights advances in food nutritional biochemistry, with a focus on food-based investigations that integrate omics technologies, in vitro digestion modelling, and interactions at the gastrointestinal level. Particular attention is given to studies addressing the molecular and metabolic characterization of traditional and functional foods, the bioaccessibility and bioavailability of food-derived compounds, and the impact of food components (such as food-grade nanoparticles) on gut health and epithelial function. In keeping with the interdisciplinary spirit of this Special Issue, contributions are encouraged to maintain a strong connection to food matrices, processing, composition, and functionality, ensuring relevance to both food science and human nutrition.

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Deadline for manuscript submissions

5 February 2026



Foods

an Open Access Journal
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Impact Factor 5.1
CiteScore 8.7
Indexed in PubMed



mdpi.com/si/246945

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About the Journal

Message from the Editor-in-Chief

Foods (ISSN 2304-8158) is an open access and peer reviewed scientific journal that publishes original articles, critical reviews, case reports, and short communications on food science. Articles are released monthly online, with unlimited free access. Currently, *Foods* has been indexed by the Science Citation Index Expanded (SCIE - Web of Science), PubMed, and Scopus. Our aim is to encourage scientists, researchers, and other food professionals to publish their experimental and theoretical results as much detail as possible. We therefore invite you to be one of our authors, and in doing so share your important research findings with the global food science community.

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