

Special Issue

Targeting Gut Microbiome with Functional Foods: Novel Interventions for Glucose and Lipid Metabolism Disorders

Message from the Guest Editors

The gut microbiome plays a critical role in the regulation of host glucose and lipid metabolism, and its dysregulation is closely associated with the development of various metabolic diseases, including type 2 diabetes, hyperglycemia, hyperlipidemia, obesity, and non-alcoholic fatty liver disease. This Special Issue aims to gather high-quality research and reviews on the use of microbiome-modulating functional foods to prevent and ameliorate metabolism-related pathologies. We welcome contributions that explore the efficacy and mechanisms of probiotics, postbiotics, and bioactive compounds in reshaping gut microbial communities and improving metabolic outcomes. Studies focusing on molecular pathways linking gut microbiota to glucose homeostasis, lipid profiling, insulin sensitivity, and energy balance are especially encouraged. Multi-omics approaches and mechanistic validations that provide deeper insights into diet-microbiota-metabolism interactions will be given high priority.

Guest Editors

Dr. Zirui Huang

Dr. Rui-Bo Jia

Prof. Dr. Bin Liu

Deadline for manuscript submissions

closed (30 April 2026)



Foods

an Open Access Journal
by MDPI

Impact Factor 5.1
CiteScore 8.7
Indexed in PubMed



mdpi.com/si/259004

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

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





Foods

an Open Access Journal
by MDPI

Impact Factor 5.1
CiteScore 8.7
Indexed in PubMed



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



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.

Editor-in-Chief

Prof. Dr. Arun K. Bhunia

1. Department of Food Science, Purdue University, West Lafayette, IN 47907, USA
2. Department of Comparative Pathobiology, Purdue University, West Lafayette, IN 47907, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, FSTA, AGRIS, PubAg, and other databases.

Journal Rank:

JCR - Q1 (Food Science and Technology) / CiteScore - Q1 (Health Professions (miscellaneous))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the second half of 2025).