Special Issue

The Role of Lactic Acid Bacteria and Their Metabolites in Fermented Foods: From Mechanisms of Action to Technological Applications and Human Health Effects

Message from the Guest Editor

This Special Issue delves into the fascinating world of lactic acid bacteria (LAB) and their crucial role in the fermentation of diverse food products. Focus on the following Metabolites and Specific Effects: **Lactic Acid**
Organic Acids
Bacteriocins
Exopolysaccharides
Aroma Compounds
Enzymes
Vitamins and Bioactive Peptides We encourage submissions that explore the potential health benefits associated with LAB and their metabolites in fermented foods. Examples include the following aspects: **1. Improved gut health**
2. Enhanced nutrient bioavailability
3. Anti-inflammatory and immune-modulatory effects
This Special Issue aims to provide a comprehensive overview of the multifaceted roles LAB and their metabolites play in fermented foods. By focusing on specific examples and potential health effects, we encourage submissions that contribute significantly to our understanding of this crucial area of food microbiology.

Guest Editor

Prof. Dr. Małgorzata Ziarno
Department of Food Technology and Assessment, Institute of Food Science, Warsaw University of Life Sciences-SGGW (WULS-SGGW), Nowoursynowska 159c St., 02-776 Warsaw, Poland

Deadline for manuscript submissions

31 May 2026

Microorganisms

an Open Access Journal by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed

mdpi.com/si/206902

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

mdpi.com/journal/microorganisms

Microorganisms

an Open Access Journal by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed

mdpi.com/journal/microorganisms

About the Journal

Message from the Editor-in-Chief

"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

Editor-in-Chief

Dr. Nico Jehmlich
Department of Molecular Toxicology, UFZ-Helmholtz Centre for Environmental Research, 04318 Leipzig, Germany

Author Benefits

High Visibility:

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

Journal Rank:

JCR - Q2 (Microbiology) / CiteScore - Q1 (Microbiology (medical))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 20 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the second half of 2025).

MDPI