

Special Issue

Processing and Fermentation of Grain Products: From Digestibility to Bioactivity

Message from the Guest Editors

This Special Issue welcomes manuscripts that address the biochemical mechanisms, process optimizations, and innovative applications of grain fermentation and processing. Topics of interest include submerged (SmF) and solid-state (SSF) fermentation for improving digestibility, reducing antinutritional factors (phytates, tannins), and enhancing mineral bioavailability through microorganism–matrix interactions. We also encourage contributions that explore the generation and release of bioactive compounds—such as GABA, peptides with ACE-inhibitory activity, and bound phenolics—during fermentation. Particular emphasis will be given to research on the following topics:

- Biotransformation of agro-industrial by-products and upcycled grains into high-value protein and functional ingredients;
- Modulation of glycemic responses (conversion of digestible starch to resistant starch; production of short-chain fatty acids);
- Fermentation-driven lipid remodeling and antioxidant enhancement;
- Microbiome-oriented approaches and the translation of in vitro benefits into in vivo and human health outcomes;
- Integration of fermentation with circular economy principles and sustainable food systems.

Guest Editors

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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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