

Special Issue

Probiotics, Prebiotics, Postbiotics: From Mechanisms to Applications

Message from the Guest Editor

The scope of this Special Issue covers innovative applications in functional foods and formulation technologies to improve strain stability and bioavailability during production, storage, and gastrointestinal transit. Additionally, this Special Issue will emphasize the optimization of probiotic encapsulation techniques for intestine-targeted delivery, their controlled-release efficacy, and their potential in personalized nutritional interventions. Submissions may focus on mechanistic studies (e.g., gut microbiota modulation, short-chain fatty acid synthesis), animal models, clinical trials, or translational research, while addressing challenges such as strain specificity, scalable manufacturing processes, and regulatory safety evaluations. We welcome multidisciplinary contributions across fields including microbiology, food engineering, pharmaceutical research and development, and nutritional sciences to advance the frontiers of applications of probiotics/prebiotics/postbiotics in therapeutic strategies, functional food development, and precision health management.

Guest Editor

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Deadline for manuscript submissions

closed (10 December 2025)



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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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