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## Advanced Microbial Biotechnologies for Food Nutrition and Human Well-Being

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### Message from the Guest Editors

Dear Colleagues,

Microbial biotechnology refers to any technological application that utilizes microbial systems, microorganisms or their derivatives to manufacture or modify products or processes for specific purposes. This type of biotechnology is closely related to food nutrition and human well-being. The balance of microorganisms in the human body is key factor to maintain health. As a cell factory, microorganisms can synthesize bioactive compounds, such as enzymes and polysaccharides.

This research topic mainly focuses on microbial biotechnology to synthesize health promotion substances, health-promoting/disease prevention microbiota and their metabolites, and their mechanisms to promote human well-being. Additionally, it will explore product opportunities and challenges of microorganisms and microbial metabolites in the food industry from perspective of nutrition, health, safety, and sustainability. Furthermore, the food safety assessment of microbial-biotechnology-derived food and control of harmful microorganisms, potential adverse consequences of modified microbes, any microbial genomic tools to increase food safety are also part of this research topic.



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