Special Issue

Lactic Acid Bacteria: Evaluation of Benefits on Human Health and Improvement of Food Safety

Message from the Guest Editors

Lactic acid bacteria (LAB) are key microbes that convert carbohydrates into lactic acid. Industrial food fermentations rely on their enzymes and metabolites to improve dairy, wine, bread, vegetable and meat products. Many LAB species are GRAS and serve as starter cultures, enhancing flavour, nutrient bioavailability and shelf-life while reducing harmful compounds. They also secrete bacteriocins and other antimicrobials that inhibit food-borne pathogens. Beyond preservation, LAB and their postbiotics act as probiotics, benefiting human and animal gut health by producing vitamins, polyphenols, GABA and polysaccharides that modulate immunity and beneficial microbiota. This Special Issue highlights LAB and postbiotics for safer, higher-quality foods and improved consumer health.

Guest Editors

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Editor-in-Chief

Dr. Badal C. Saha

Retired, National Center for Agricultural Utilization Research, USDA-ARS, Peoria, IL, USA

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