







Special Issue Reprint

# Recent Advances and Future Trends in Fermented and Functional Foods

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Health and wellness are among the core segments of quickly-changing consumer goods, with ever-increasing health consciousness among consumers around the globe. Functional foods and beverages, formulated from natural ingredients with targeted physiological functions, are at the heart of research and development in the food industry. The application of modern biotechnology methods in the food and agricultural industry is expected to alleviate hunger today and help avoid mass starvation in the future. Modern food biotechnology has in recent years been transforming existing methods of food production and preparation far beyond the traditional scope. Currently, at the global level, food biotechnological research has focused on traditional process optimization (starter culture development, enzymology, fermentation), food safety and quality, nutritional quality improvement, functional foods, and food preservation (improving shelf life). The fermentation of substrates considered for human consumption has been applied for centuries as a process that enhances shelf life, sensory properties, and nutritional value. Special emphasis has also been given to newly growing concepts, such as functional foods and probiotics. The application of biotechnology in the food sciences has led to an increase in food production and has enhanced the quality and safety of food.





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