

Exploring Traditional Fermented Foods in Thailand and Their Health Benefits

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Fermented foods play a significant role in Thai cuisine, with a majority of Thai individuals incorporating some form of fermented product into their daily diets. The historical significance of Thai fermented foods primarily revolves around food preservation techniques employed to sustain availability across different seasons. Thai fermented foods can be categorized into various groups, including fishery products, animal products, fruit products, vegetable products, rice products, soybean products, and other assorted items. The expertise and understanding of natural fermentation processes among Thai citizens have been transmitted across generations, often relying on naturally occurring bacterial cultures as starters for fermentation. Generally, Thai fermented foods undergo fermentation primarily through the action of lactic-acid bacteria (LAB), often followed by yeast and fungi. Research on their health benefits primarily focuses on the isolation and characterization of potent LAB strains within fermented foods. These studies have revealed various health-promoting properties, including antimicrobial effects, production of gamma-aminobutyric Acid (GABA), synthesis of exopolysaccharides (EPS), and immune modulation. In the future, the application of metagenomics or metabolomics will be essential for studying fermented foods in terms of safety, quality, taste, and health.