SOY-BASED PROBIOTIC YOGHURT – A LITERATURE REVIEW

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Soy-based food product has attracted wide attention as an alternative source to animal protein due to its ability to address the protein malnutrition in the world. However, soy products have yet to gain widespread acceptance due to their distasteful flavours and flatulence effects. Soy-based probiotic yoghurt is known to address these undesirable factors and offers excellent benefits. In addition, production, consumption, and consumer awareness are yet to be understood. This review aimed to fill the knowledge gap on processing details, physico-chemical, rheological, microbiological, sensorial characteristics, and health benefits into a single document and to identify the barriers, solutions and to suggest new improvements to increase the market demand. The focus of the review and objectives were identified based on a preliminary literature survey. An advanced literature survey was performed to collect additional information. New improvements for further research were also suggested and reasonable conclusions were made. Many reports showed that it is possible to produce probiotic soy yoghurt with a better taste profile, reduce flatulence while maintaining chemical constituents to provide expected health benefits. Many processing techniques are available, and processing steps significantly affect the characteristics. The chemical constituents of soy yoghurt supported that it is a rich protein source with essential amino acids, minerals and vitamins needed for humans. The bioactive peptides, isoflavones, and phytosterols in soy yoghurt reduce risk factors in cardiovascular disease and diabetes, alleviate menopausal symptoms, and lower the risk of developing arthritis and concern. Soy yoghurt is a valuable food source to reduce protein malnutrition for people who do not have access to other protein sources. It possesses incredible health benefits to human health. However, awareness of soy yoghurt's cost, availability, and health benefits need to be improved among consumers, producers, and the scientific community for further improvements and to increase consumption of soy yoghurt.

Keywords: Flatulence, Isoflavones, Probiotic, Protein malnutrition