Evaluation of Physico-Chemical Quality Characteristics of Yoghurt and Yoghurt Drinks Available in the Sri Lankan Market

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Yoghurt is a widely consumed, most popular fermented dairy product in Sri Lanka which has numerous health benefits. The demand for yoghurt is increasing day by day acquiring a higher proportion of the overall dairy market. As a result, a number of yoghurt manufacturers emerge throughout the country. But there is a lack of data on physico-chemical quality characteristics of yoghurt and yoghurt drinks available in the market. Therefore, this study is aimed to evaluate the physico-chemical quality of yoghurt and yoghurt drinks with respect to the SLS 824:2018 standard. Eighteen yoghurt brands were purchased from retail shops and supermarkets considering an equal number of set-yoghurt and yoghurt drink brands. Physico-chemical quality characteristics such as fat (%), protein (%), milk solids non-fat (MSNF %), total sugars (%), and preservatives were analyzed and added synthetic colors were also identified. According to the results, fifteen brands were complying with the standard but three brands did not comply with the minimum requirement of the fat content. Specifications laid down in the standard for protein, MSNF, total sugars, and sorbic acid were fulfilled by the all selected yoghurt brands. But several brands did not comply with the maximum value specified in the standard for benzoic acid which is not permitted to use in yoghurt as a food preservative. Tartrazine was detected as a synthetic color only in three selected yoghurt brands. It is observed that large-scale, well-known yoghurt manufacturers mostly produce their products complying with the specifications in the standard. Many quality defects were identified in small-scale, regional yoghurt brands. Therefore, it is suggested to improve the knowledge of small-scale manufacturers in order to improve the quality of the products up to the SLS standard.

Keywords: Physico-chemical, Quality, Standard, Yoghurt, Yoghurt drink

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