

Comparative Study on the Physico-chemical Composition of Industrial Yoghurt and Indigenous Dahi

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Abstract: This study was conducted to compare the physico-chemical and organoleptic properties of industrial yoghurt and conventional made dahi. According to the statistical analysis non-significant differences were observed in pH values and acidity percentage amongst all types of dahi samples, but significant differences were observed in fat and total solids percentages. The highest total solids and fat percentage was recorded from the sample C with an average of 13.81150 ± 0.20178 and 5.071 ± 0.123364 , respectively where as lowest total solids and fat percentage was recorded from sample A with an average of 12.348 ± 0.1202419 and 2.48 ± 0.0504891 , respectively. According to the results of organoleptic evaluation the maximum score was given by the panel of judges to sample C.

Key words: Physico-chemical composition, organoleptic properties, yoghurt

Introduction

Yoghurt or dahi is a fermented and coagulated milk product with a smooth texture, having mildly sour taste and pleasant flavour. It is obtained from pasteurized or boiled milk by souring with natural or otherwise using lactic acid fermenting bacteria, i.e. *Streptococcus thermophilus* and *Lactobacillus bulgaricus* (FAO, 1977). The commercial yoghurt of today is usually made by fermenting milk with mixed culture of *Streptococcus thermophilus* and *Lactobacillus bulgaricus* each of these organisms acidify milk and produce specific yoghurt flavour and aroma.

Dahi is a counterpart of yoghurt, the most popular cultured milk product of Indo-Pakistan having its own particular physical, chemical, microbiological and organoleptic qualities (Davis, 1975). The method of manufacturing of dahi in Pakistan is classified into two types those manufactured on industrial scale and those prepared by traditional method, which is most prevalent and is adopted in homes and milk vending shops, but its quality is of substandard and variable due to number of factors that include use of low quality milk, unsuitable starter culture, unfavourable incubation temperatures and contamination from poorly cleaned utensils (Rice, 1952). The physico-chemical characteristics such as acidity, pH, taste, flavour and consistency