

Studies on the Physical, Chemical and Sensory Properties of Peanut Yoghurt

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ABSTRACT

Peanuts are one of major crops in Taiwan. It's economic value is ranked only next to that of rice, sweet potato and sugar cane. Peanut contain vitamine E, polyunsaturated fatty acids such as linolenic acid and arachidonic acid, and phytosterol which are beneficial to human health. In order to increase the choices of yoghurt products for the consumers, we try to research yoghurt with peanut flavor. The ratios of the milk to peanut milk was 1:1, 1:2 and 1:3. The milk mixtures are pasteurized at 85 °C for 30min and cooled to 37 °C, then inoculated with the starter culture containing which ABLS and incubated at 37 °C for 3-4hr. The set yoghurts were stored at 4 °C. The physical, chemical and sensory properties of the products were determined. The results were shown as follows:

For all replacement levels studied, the yoghurt prepared with the ratio of milk to peanut milk by 1:1 was rated superior in titratable acidity, viscosity and curd tension and lactic acid bacterial counts to the yoghurt products that were prepared from the ratios of milk:peanut milk by 1 : 2 and 1 : 3. The L-value and a-value were found the highest in the product prepared with the ratio of milk:peanut milk by 1 : 1. pH values of the products prepared with different ratios of milk:peanut milk decreased with the storage time increased. The lactic acid bacterial counts of the products prepared with different ratios of milk:peanut milk were found as the following increasing order: 1 : 1 > 1 : 2 > 1 : 3. Sensory evaluations indicated the product prepared with the ratio of milk:peanut milk by 3:1 had the highest scores of overall acceptance. This result also revealed the consumers preferred the peanut flavour to milky flavour in Taiwan. The organic acids of all the products were also determined.

Keywords : Peanuts、milk、yoghurt

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