

Studies on processing of coconut milk into yoghurt

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East Asian countries widely use coconut milk supplemented food items such as yoghurt and cheese. However, Sri-Lankans do not use such items since the use of these items, as food has not been in their culture. Furthermore, no serious effort has been made to look for the possibilities of manufacturing such items and popularizing them. The objective of this study was to develop a yoghurt using coconut milk as the main substrate.

The products (yoghurts) from different combinations of partly defatted coconut milk (CM) and reconstituted non fat milk (RNFM) such as 10:90, 20:80, 30:70, 40:60, 50:50 60:40 and a control (without CM) were analysed for fat, protein, solid non-fat and moisture. The yoghurt from combination of 50 % CM and 50 % RNFM was found to be the most acceptable on basis of composition since the fat content (%) in 50 % CM & 50 % RNFM is similar to that of control (with cow's milk). However, CM substitution cannot go above 50 % as the fat content increases with higher coconut milk substitution (more than 50 %). The composition of coco yoghurt produced is as follows, 3.5 % fat, 3.5 % protein, 10.8 % solid non-fat and 85.7 % moisture. The control had 3.5 % fat, 5.6 % protein 15.5 % solid non-fat and 81.0 % moisture.

The acceptability of this coco yoghurt was evaluated from 30 panelists. The results of this evaluation were tested using PROC CATMOD (Procedure of categorical modeling) in SAS (Statistical Analysis System) software package. Considering the probability of significance on Chi-Square test for appearance, colour, spoonability, taste, aroma and overall acceptability, the appearance and colour show significant difference ($p < 0.0001$) between the two products (coco yoghurt and control). There is no significant difference between the 2 products with respect to spoonability, taste, aroma and overall acceptability. That indicates that the panelists show equal preference to coco yoghurt and control (yoghurt with cow's milk). The coconut milk can be used as a substitute for cow's milk in the processing of yoghurt.

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