SOME STUDIES OF THE MILK-CURDS OF SRI LANKA

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An investigation was carried out to identify the microorganisms present in the Milk-curds from different parts of Sri Lanka. Streptococci, Lactobacilli (Thermobacteria, Betabacteria) and Yeast were found to be invariably present in all samples.

In the process of curdling the pH of the milk changes from 6.8 to about 4.0 as a result of acids produced by the bacteria. The rates of acid production and the final pHs reached by Streptococci and Lactobacilli species are different. Yeast does not produce acids and does not usually grow in the milk in the absence of bacteria. There seems to be no synergistic effect between the bacteria. There seems to be no synergistic effect between the bacterial species but some synergism between yeast and lactobacilli could be observed.

Streptcocci and lactobacilli also differ in their preferred ranges of pH.

When curd is prepared using pure cultures of streptococci, lactobacilli and their combination with or without yeast, tastes and aromas of the curds produced are different. In an investigation carried out with the taste-panel it was found that curd prepared with a pure culture of *Streptcoccus lactis* was mostly preferred.

Extractions of volatile flavour compounds were analysed using gas-liquid-chromatography and Thin-layer-chromatography. Among the many carbonyl compounds produced by streptococci and lactobacilli Ethanal, Propanone and Butanal were identified. The two types of bacteria are different in the spectrum of volatile compounds they produce.

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