Chemical quality of fruit flavoured yoghurt by using litchi fruit (*Litchie chiensis* L.)

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Chemical quality of fruit flavoured yoghurt by using litchi fruit were evaluated. Raw buffalo milk was standardized to 6 per cent fat. Fruit juice of fully ripened litchi fruit were used for preparation of yoghurt. Yoghurt was prepared from buffalo milk with incorporation of litchi fruit at different level which were 0 per cent litchi fruit juice (T₀), 2 per cent litchi fruit juice (T₁), 4 per cent litchi fruit juice (T₂) and 6 per cent litchi fruit juice (T₃). It was observed from the result that highest fat content and acidity was observed in control (T₀) i.e. 2.89 and 0.80, per cent, respectively than rest of all treatments. Total solid content was highest in treatment T₃ (addition of 6 per cent litchi juice) i.e. 22.07 per cent. The acidity of yoghurt showed a declining trend with an increase in the level of litchi juice. It may be concluded that good quality fruit flavoured yoghurt can be prepared by fortifying it with up to 4 per cent litchi juice.

**Key Words**: Yoghurt, Litchi fruit juice, Buffalo milk, Fat, Acidity, Total solid


**METHODOLOGY**

Standard buffalo milk with 6 per cent fat required for the study was obtained from local market of sawarda. Plane yoghurt with low fat and high protein was purchased from the Parsi Dairy (Mumbai). Fully ripened litchi fruits were used for

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\text{Milk} \downarrow \\
\text{Standardization (6 % fat)} \downarrow \\
\text{Stirring} \downarrow \\
\text{Homogenization} \downarrow \\
\text{Heat treatment (Steaming for 30 min)} \downarrow \\
\text{Stirring} \downarrow \\
\text{Inoculation with yoghurt starter (3 %)} \downarrow \\
\text{Stirring} \downarrow \\
\text{Adding sugar (10%)} \downarrow \\
\text{Adding fruit juice (2 to 6%)} \downarrow \\
\text{Stirring} \downarrow \\
\text{Incubation (37°C for over night)} \downarrow \\
\text{Storage (5°C)}
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Yoghurt is produced by adding a ‘starter’ of active yoghurt containing a mixed culture of *Lactobacillus bulgaricus* L. and *Streptococcus thermophilus*. Yoghurt is valued for controlling the growth of harmful bacteria and in curing intestinal diseases like constipation, diarrhea, dysentery. Baked good will rise when yoghurt is used.

Recently, there has been an increasing trend to fortify the product with fruit juice/pulp. Fruits are considered good source of minerals and vitamins and hence, supplementation of yoghurt with fruit will not only improve its flavour but also its overall nutritional quality. Traditionally fruits like strawberry, raspberry, apricot and blackcurrant are used.

Litchi (*Litchie chiensis* L.) belongs to family Sapindaceae and one of the most delicious, refreshing and perishable subtropical food of India. Its juice is cooling, nutritive and good source of minerals.

**INTRODUCTION**

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