

FS017

**Studies on Sensory Acceptability of Yogurt
Enriched with Omega-3 Fatty Acids**

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ABSTRACT

Ideal yogurt was produced after enriched with different concentrations of omega-3 fatty acids from flaxseed, 0.1%, 0.5%, 1.0% and 1.5% (w/v). A combination of optimum amount of sweetener, and without sweetener added into yogurt samples, was also included in this study. The objectives of this study were to evaluate the effects of different levels of flaxseed concentration on sensory attributes, chemical and microbiological properties and to determine whether the presence of sweetener have any effects on sensory acceptability. The chemical and microbiological analyses done on the yogurt were pH measurement, titratable acidity and total plate counts of starters. Other analysis carried out in this study were sensory evaluation for both consumer panels and semi-trained panelists. Enrichment of yogurt with flaxseed at some certain concentrations tested was found to have no significant effect ($P>0.05$) on titratable acidity, total plate count and the pH of the yogurt samples. The yogurt samples enriched with 0.1%, 0.5%, 1.0% and 1.5% together with 0.5% of sweetener were accepted by consumer panels in terms of all its attributes. However, enriched-yogurt without sweetener was rejected in terms of its palatability and overall acceptability. As a conclusion, sweetener plays an important part in increasing the palatability and flavour of the yogurt. The concentrations of flaxseed also have significant effects on the yogurts' flavour, texture, appearance, aroma, palatability and the consumer acceptability.