

**PRODUCTION OF NUTRITIOUS ICE  
CREAM FORMULATED WITH  
VIRGIN COCONUT OIL**

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## ABSTRACT

Nowadays, non dairy fat are used extensively as fat sources in ice cream to produce ice cream containing high nutrition benefits. The aim of this study was to develop nutritious ice cream by substituting dairy whipped cream by virgin coconut oil (VCO) to increase nutrition and dietary value of the ice cream. Three formulated ice cream were developed, V1 contained 4% of VCO and 8% of dairy milk fat, V2 contained 8% of VCO and 4% of dairy milk, V3 contained only 12% of VCO. Physicochemical properties of the ice cream were analyzed through pH value, total solids content, melting rate, titratable acidity, overrun, protein contents and fat contents. While Qualitative Descriptive Analysis (QDA) was performed by 15 trained panelists to determine the sensory attributes of the products. Finally, acceptability and preference on best formulation was investigated through 100 untrained panelists. The substitution of VCO in the ice cream formulation significantly ( $P < 0.05$ ) increased the pH, total solids content, overrun and protein content of the ice-cream but there was no significance ( $P > 0.05$ ) effect on melting rate, titratable acidity and fat content of the products. The result of QDA showed that formulation V1, V2 and V3 were significantly ( $P < 0.05$ ) different in attributes of colour appearance, firmness and smoothness as compared to the control ice cream. In consumer affective test, formulation V3 which was highly acceptable and showed a significant difference ( $P < 0.05$ ) towards the commercial ice cream sample on acceptance level of texture and flavour. VCO formulated ice creams are well accepted and are expected to have a high market demand in the future.