

PRODUCTION OF ICE CREAM USING GORAKA  
(*GARCINIA GABOGIA*) EXTRACT AND EVALUATION  
OF PHYSICAL, CHEMICAL AND SENSORY  
PARAMETERS



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## ABSTRACT

Goraka extract incorporated ice cream can be considered as a low fat healthy food. The flesh of the fruit is mild to distinctly acidic. The Goraka fruits have become the latest novelty to hit the health industry and has become in demand worldwide. Goraka also has been used in food fortification especially in milk foods. Ice cream is the most preferable food for many people like adults and children, so Goraka incorporated to ice cream can get the most health benefits. Goraka fruits are edible, but too acidic to be eaten raw and dried Goraka added to a few curries, so people are not getting maximum utilization of Goraka.

Therefore the cow milk ice cream was prepared using different percentages of Goraka extract. The treatment were as follows, T<sub>0</sub> ice cream formulation without Goraka extract concentration, T<sub>1</sub> ice cream formulation with 1% Goraka extract concentration, T<sub>2</sub> ice cream formulation with 3% Goraka extract concentration. T<sub>3</sub> ice cream formulation ice cream formulation with 5% Goraka extract concentration, T<sub>4</sub> ice cream formulation with 7% Goraka extract concentration and T<sub>0</sub> was used as control from each treatment three replicates were carried out. Physio-chemical analysis was pH, total solid, total soluble solid, fat content, Titrable acidity and ash content was conducted using the standard AOAC method and Sensory evaluation was carried out using a sensory panel consisting of 25 panelists. The colour, taste, yecture, aroma and overall acceptability were evaluated using a seven point hedonic scale to all treatments.

The result of this study revealed that, pH, total soluble solid and fat content were reduced by the Goraka extract and titrable acidity, ash content and total solid were increased by the Goraka

extract. 3% of Goraka extract added ice cream achieved highest overall acceptability scores than without goraka extract ice cream, 1%, 5% and 7% Goraka extract added ice cream. The pH ( $6.63 \pm 0.003\%$ ), Total soluble solid ( $30.35 \pm 0.63\%$ ) and fat content ( $8.88 \pm 0.005\%$ ) were significantly higher in without Goraka extract added ice cream and total solid ( $38.62 \pm 0.02\%$ ), titrable acidity ( $0.43 \pm 0.01\%$ ) and ash content ( $0.626 \pm 0.003\%$ ) were higher in 7% Goraka extract added ice cream. As a result of sensory evaluation revealed that, 3% of Goraka extract added ice cream had the highest mean score of overall quality of all sensorial properties like taste, colour, texture, aroma and overall acceptability. Finally, it can be concluded that cow milk ice cream formulation with 3% Goraka extract is having good potential for the health food.

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