

# **DEVELOPMENT OF SAVORY NUTRIENT BAR**

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By

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## ABSTRACT

This study was carried out to develop a balanced, savory nutrient bar with readily available commodities in Sri Lankan market in every season. The savory nutrient bar was specifically developed for the local market which is currently saturated solely by sweet nutrient bars. Rice flour, chickpea flour, soy flour, puffed rice, pumpkin powder, moringa leaves powder, dehydrated guava coarse articles, onion powder, garlic powder and a non-sweet binding agent were used as the common ingredients. Three nutrient bars were developed separately by incorporating dehydrated pineapple coarse particles and tomato powder (A), mushroom powder and tomato powder (B) and mushroom powder (C) with the common ingredients. The mixture of dry food ingredients were combined with the binder at 3:1 (w/w). A specific compressing machine and mould were developed to produce the pieces uniformly and consistently. Prepared nutrient bars were packed in the triple laminated pouches and kept under ambient conditions. Sensory acceptability was evaluated using 5-point hedonic scale with the 23 trained panellists and the results were statistically evaluated by Friedman test using Minitab 16.1. Sample B and C were rejected based on the sensory evaluation results. Sample A was selected from the sensory evaluation and analysis of the sample A revealed that it contained  $12.2 \pm 0.60\%$  moisture,  $4.14 \pm 0.05\%$  ash,  $2.12 \pm 0.44\%$  acid insoluble ash,  $12.35 \pm 0.23\%$  crude protein,  $9.78 \pm 0.13\%$  crude fat,  $8.8 \pm 0.12\%$  crude fibre,  $52.8 \pm 0.94\%$  carbohydrate and  $0.7 \pm 0.02\%$  of water activity. The product is microbiologically safe for consumption up to 7 days.

Keywords: Savory nutrient bar, Non- sweet binder, Microbial, Tomato powder, Dehydrated pineapple