

Formulation and Quality Evaluation of a Healthy Cereal Bar with Traditional Rice (*Oryza sativa*) *Suwandel* and *Pachchaperumal*

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The demand for ready-to-eat foods, such as cereal bars is increasing rapidly among consumers due to their availability, affordability and convenience. This study focused on development of a nutritious Cereal bar using *Suwandel* rice flour and *Pachchaperumal* rice popcorn as alternative to high sugar snacks. The novel recipe was developed from a compressed mixture of rice, coconut and honey, varying proportions of *Suwandel* rice and *Pachchaperumal* rice popcorn were combined with other ingredients and subjected to sensory evaluation and statistical analysis. The combination of 90% (w/w) *Suwandel* rice flour and 10% *Pachchaperumal* rice popcorn (T3) obtained the highest overall acceptability compared with other samples and T3 was selected as the best formulation. Physico-chemical properties, proximate analysis and shelf life evaluation were conducted for T3 and compared against the control sample. Crude protein, crude ash and crude fibre level of the new product were higher (14.75%, 2.54% and 6.79%) compared to those of the control (12.46%, 1.71% and 5.81%) respectively. New product had 4.15% crude fat and 64.65% carbohydrate content which were significantly lower than the control sample with 4.24% crude fat and 67.83% carbohydrate. After 5 days of storage period, moisture content has increased to 7.12% in new sample and 7.95% in control sample which indicates that new product has comparatively longer shelf life. According to the results, new cereal bar with traditional rice has gained better attributes. Hence it can be promoted as a value added healthy food product while enhancing the utilization of traditional rice varieties.

Keywords: Cereal bar, Nutrition, Snack foods, Traditional rice, Value added