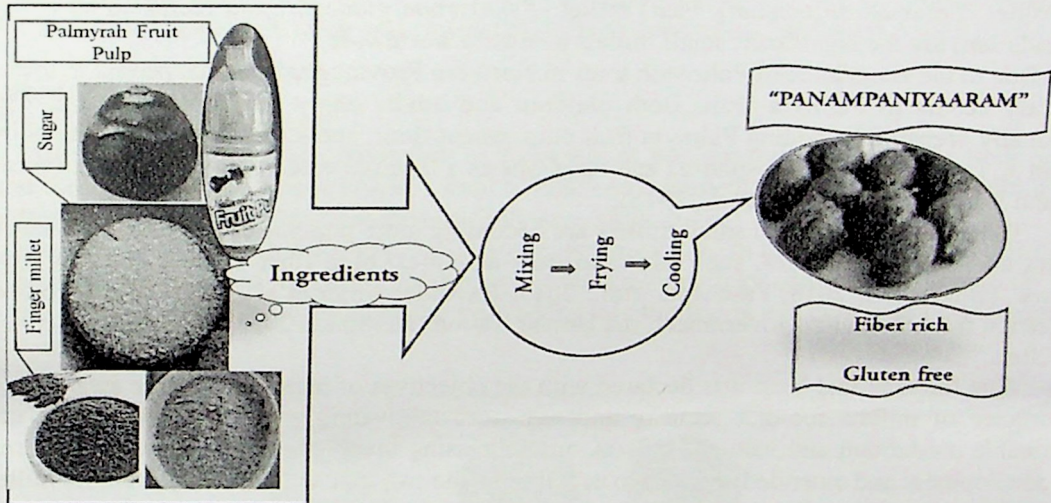


“Panampaniyaaram”: A Traditional Food Product Made with Small-Millet for Revitalization towards Sustainable Nutrition

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Abstract

The purpose of this research work was to increase the utilization of palmyrah fruit pulp and to obtain a nutritious diet that includes both palmyrah fruit pulp with small-millets by processing it into a value-added natural and traditional food product, “*panampaniyaaram*”. Five series of sensory evaluations performed by panelists using a 9-point hedonic scale were used to assess nineteen treatments on different mixtures by altering the flour types and their percentages in four levels, with palmyrah pulp and small-millet flours, including finger millet, little millet, and Foxtail millet. The sample prepared from 100% finger millet flour was chosen as the most preferred sample, based on the results obtained from the sensory evaluations. Physicochemical analysis of the selected treatment revealed that pH was 5.86 ± 0.01 and the total ash content 1.38 ± 0.18 g/100 g was significantly ($p < 0.05$) higher, and crude fat content 9.04 ± 0.02 g/100 g, total salt content 0.201 ± 0.026 g/100 g, and total sugar content 16.38 g/100 g, was significantly ($p < 0.05$) less than that of the control sample which contained wheat flour. The selected treatment of the mineral content was significantly ($p < 0.05$) higher than that of the control treatment and contained Calcium, Magnesium, Sodium, and Potassium were 150, 60, 32.7 and 76.8 mg/100 g, respectively. In summary, palmyrah fruit pulp and finger millet can be used to create healthy, nutritional and affordable natural snacks “*panampaniyaaram*”, which will satisfy consumer preferences. Further studies are required to understand the developed product's organoleptic properties, antioxidant, vitamins, and anti-microbial activities as well as ways to extend its shelf-life.

Keywords: Panampaniyaaram, palmyrah pulp, small-millets, finger millet, value-addition

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