



Research Article

SENSORIAL ACCEPTABILITY OF GLUTEN FREE MALAYSIAN TRADITIONAL KUIH FROM LEFTOVER COCONUT PULP FLOUR

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ABSTRACT

Gluten is a protein found in cereals, giving foods a pleasant elasticity and body structure. Cereal products, containing gluten are rich in dietary fibre. Although gluten plays a vital role in food production, it is harmful to gluten intolerant people (GIP). Hence, GIP is forced to follow a lifelong gluten-free diet, affecting their dietary fibre intake, essential against diarrhoea, constipation and colon cancer. Coconut (*Cocos Nucifera*) is the largest local commodity after rice in Malaysia. Coconut meat is usually processed for coconut water, coconut milk and coconut oil, while the leftover coconut pulp (LOCP) is disposed or used for livestock feeding. However, this LOCP is rich in dietary fibre and gluten-free, making it the best alternative for making gluten-free Malaysian Traditional Kuih (MTK), suitable for GIP. Apam Balik Kuih (ABK) is a highly popular MTK. Therefore, this study focused on providing gluten-free MTK from leftover coconut pulp flour (LOCPF), high in dietary fibre and consisting of three formulations; 60% LOCPF and 40% rice flour (F2), 100% LOCPF (F3) and a control sample from 100% wheat flour (F1). Two sensorial evaluations were conducted (semi-trained panel and consumer acceptability). The semi-trained panel showed similar results for appearance, texture, and mouthfeel for all variants of all, F3 was rated as unpleasant tasting. F1 was graded medium brown, while F2 and F3 were graded brown in colour. F2 was rated as the best for overall acceptability. For consumer acceptability, F1 rated “slightly like” in all criteria. F2 rated “neutral” for colour, texture, mouthfeel and “slightly like” for appearance, taste and overall acceptability. F3 rated “neutral” in all criteria. Among all, F2 showcased the best formulation as depicted by higher mean score rated. Based on these results, LOCPF proved a good gluten-free alternative flour with high fibre content, beneficial for pharmaceutical and food industry application.

Keywords: Gluten-Free, Semi-Trained Panel, Consumer Acceptability, Leftover Coconut Pulp Flour, Malaysian Traditional Kuih