

Development and Quality Evaluation of Gluten-Free Cookies Using Rice Flour and Coconut Flour Blends

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This study aimed to harness the nutritional benefits of coconut flour and rice flour in creating a product that caters to individuals with gluten intolerance and consumers seeking a healthier diet. The experiments were conducted using different ratios of coconut flour (CF) and rice flour (RF) to create gluten-free cookies. The specified ratios were 0:100, 20:80, 30:70, and 50:50 for CF: RF. The sensory attributes of the four formulations were evaluated using a nine-point Hedonic scale by a semi trained panel. The results revealed, the formulation with 30% CF and 70% RF received the highest scores in overall acceptability. Cookies made with the selected formulation were assessed for proximate analysis following AOAC procedures and found to contain $4.56 \pm 0.21\%$ moisture, $5.11 \pm 0.11\%$ ash, $9.95 \pm 1.07\%$ crude fat, $28.88 \pm 1.73\%$ crude protein, $3.32 \pm 0.02\%$ crude fiber, $52.72 \pm 0.98\%$ total carbohydrates. The results indicate that the combination of coconut flour and rice flour can be successfully used to create gluten-free cookies that are not only nutritious but also sensorially appealing. The developed cookie possesses high potential for further development and commercialization.

Keywords: *Coconut flour; Rice flour; Cookie; Gluten-free; Proximate composition*