

Sensory Evaluation of Biscuits Prepared from Wheat Flour and Locally Available Cassava Flour

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The products derived from cassava (*Manihot esculenta*) are high energy foods. Cassava is a cheaper and locally available starchy food in Sri Lanka which is used only for traditional food preparations. Biscuits are ready-to-eat and convenient food products. This study was carried out to develop biscuit using suitable formulation of cassava flour and wheat flour and to study the sensory attributes and overall acceptability of the formulated biscuits. Cassava flour was prepared using several unit operations. Five samples of biscuits containing 10, 20, 30, and 40% cassava flour with wheat flour and a control sample containing no cassava flour were processed. Samples were analysed using 5-point hedonic scale by 25 trained panellists and results were evaluated by analysis of variance and Duncan's New Multiple Range Test (DMRT) using SPSS. Biscuit added with 30% cassava flour was significantly higher in colour, taste, crispiness and overall acceptability when compared to other formulations. No significant differences were reported between 30% cassava flour added biscuit and control biscuit in appearance, colour, taste, and overall acceptability. Crispiness of 30% cassava flour added biscuit was significantly higher than control biscuit. There were no significant differences in appearance of biscuit samples containing 10 to 30% cassava flour. Biscuit added with 40% cassava flour showed the lowest overall acceptability. It is recommended that good quality cassava flour added biscuits may be processed in industrial scale substituting the wheat flour by cassava flour at 30% level.

Keywords: Biscuit, Cassava flour, Overall acceptability, Wheat flour