

**DEVELOPMENT OF LOW GLYCEMIC INDEX BREAD
USING A COMPOSITE FLOUR MIXTURE**

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ABSTRACT

Composite flour technology is the process of mixing wheat flour with cereals and legumes to make composite flour mixture to produce high nutritional food. In developing countries there is a demand to increase quality of food. Thus, there is a growing interest in utilization of composite flour mixture as an ingredient in bakery product development. Therefore, present study was conducted to develop a bread using composite flour mixture. Now a day people seek to avoid diseases and high nutritional food. A bread prepared using composite technology provides a better solution. Trials were used to develop basic recipes/treatments. Sensory evaluation results showed that there were no significant differences ($p>0.05$) among treatments. Twelve percent finger millet flour incorporated bread was selected as the best bread sample from sensory evaluation. Proximate composition of the bread was analysed and it contained, moisture 31.2%, ash 3.5%, crude protein 20.3 %, fat 8.6 %, crude fiber 2.9%, calcium 2.7 g/kg and total carbohydrate 33.5%. The specific volumes of bread dough and bread were decline with the concentration of the finger millet flour. Texture was changed with the time. pH in prepared bread was shown in between Sri Lanka Standards Institution standard for wheat bread. The microbiological result of the prepared bread was not exceeded 10^5 cfu/ml. The bread has 2days of self-life after packed in low density polythene bags. Glycemic Index (GI) of prepared bread is 57 and it can be moderate GI bread.

Key words: Composite flour technology, Finger millet, Glycemic Index, Soy flour,