

## **What is the consumers' perception of bakery products made with vitamin A rich sweetpotato and wheat?**

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### **Abstract**

Manufacturers who import agricultural commodities like wheat are facing increasing costs due to rising commodity prices. Sweetpotato can replace up to 40% of the wheat in many bakery products. This can lower firm production costs, save a country foreign exchange, and increase rural farmers' incomes. We produced bread, biscuits, queen cakes and doughnuts in a commercial bakery, using different combinations of ingredients as follows: wheat flour only; a mixture of wheat flour and orange-flesh sweetpotato (OFSP) flour; and, a mixture of wheat flour and OFSP puree. The products were then subjected to sensory testing, using 120 consumer panelists drawn from a rural primary school, an urban girls' secondary school, and a university. Each of the testers was given a sample of each product marked with a circle, diamond, or square. We used means t-tests and ordered-logit to analyze the evaluations. The results showed that bread made out of a mix of 30% OFSP puree and 70% wheat flour was preferred to that made of 100% wheat flour. Consumers showed no preference between doughnuts and queen cakes made from 100% wheat flour and those made from a mix of 60% wheat flour and 40% OFSP puree. Biscuits made of 40% OFSP puree mixed with 60% wheat flour were preferred to those made with 100% wheat flour. Therefore, sweetpotato puree can be a good substitute of some percentage of wheat for the analyzed products, helping to bring down production costs and food prices

Key words: Orange flesh sweetpotato, vitamin A, Beta Carotene, Sensory test, Sweetpotato puree.