

STUDIES ON THE PREPARATION OF BISCUITS INCORPORATED WITH POTATO FLOUR

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ABSTRACT

The feasibility of partially replacing wheat flour with potato flour in biscuit making was evaluated in several formulations, aiming to find a formulation for the production of potato flour incorporated biscuits with better nutritional quality and consumer acceptance. Potato flour was incorporated in the traditional recipe to replace wheat flour at levels of 10, 20 and 30 percent in preparation of biscuits with maintaining all other ingredients constant. Results of the sensory (appearance, colour, flavour, texture and taste) evaluation revealed that no significant difference was observed in acceptability of the product with substitution levels of 20percent, with that of control. However, a declining trend in acceptability was observed with increasing level of potato flour for all the sensory characteristics. The nutritional value of the biscuits (protein, fat, carbohydrate and ash) with the highest acceptable level of potato flour (20 %) was similar to the wheat flour biscuit. The physical characteristics of biscuits like bulk density, spread ratio and spread factor were decreased significantly with the increasing level of potato flour replacement. The bacterial count of the 20 percent potato flour incorporated biscuits sample after 60 days was 6.5×10^3 CFU/g and this was well below the acceptable limit and there was no rancidity development observed in the formulated biscuits up to 60 days.

Keywords: Potato flour, Biscuit, Sensory evaluation, Nutritional value