

**DEVELOPMENT OF A BATTER USING DIFFERENT  
STARCH COMPONENT (CASSAVA, CHICKPEA AND  
SOYA) FOR DEEP FAT FRIED CHICKEN**

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## ABSTRACT

Battered and breaded product constitute the largest segment of the further process poultry market. Batter application prior to the deep fat frying with fat is a widely used method for chicken meat preparation. The main objective of this study was to evaluate the effect of different flour on quality of deep fat fried chicken. Additionally, the keeping quality of batter was studied.

Three different batter formulations from Chickpea, soya and cassava flour for chicken were developed as an alternative for traditional wheat flour-based batter. Sensory qualities such as appearance, colour, texture, crispiness, taste and aroma of the final fried chicken were determined using sensory evaluation with 30 untrained panels.

In contrast, batter only from cassava flour (53.8%) was found to be the most effective starch component on improving quality parameters of deep fat fried chicken. Except colour and appearance, all other criteria such as texture, taste, aroma, crispiness and general acceptability are significantly different from each other at the  $P < 0.05$ . The amounts of cassava flour used in batter preparation were changed and sensory qualities measured in the second experiment. The batter, which contained 35.9% cassava flour and 17.9% of wheat flour found to be the most effective batter combination. However, only the crispiness is significantly different ( $P < 0.05$ ) from each cassava flour concentrations. pH of the final batter was decreased with the time. However, water holding capacity of the final batter was increased with the time. Total colony count of the final batter were increased but in a decreasing rate at the refrigeration condition ( $4^{\circ}\text{C}$ ). Batter from cassava flour is consisted with high nutritional value and cost effective than wheat flour based batter