

**Pengaruh Penambahan Tepung Oat Terhadap Karakteristik Fisik, Kimia,
Dan Sensoris Bakpao Tepung Kentang**

*(Effect of Oat Flour Addition on the Physical, Chemical, and Sensory
Characteristics of Potato Flour Bunions)*

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ABSTRACT

Steamed buns are generally made from wheat flour containing gluten, making them unsuitable for individuals with gluten intolerance or celiac disease. This study aimed to evaluate the effect of oat flour addition and determine the best formulation of gluten-free steamed buns based on potato flour. This study aims to evaluate the effect of the addition of oat flour and determine the best formulation of gluten-free buns based on potato flour. A non-factorial Randomized Block Design with eight treatments and three replicates was applied. The treatment consists of a ratio of potato flour and oat flour of 100%:0%, 90%:10%, 80%:20%, 70%:30%, 60%:40%, 50%:50%, 40%:60% and 100% wheat flour control. Physical, chemical, and sensory properties were analyzed using ANOVA followed by Duncan Follow-up Test (DMRT) at a 95% confidence level. The results showed that the addition of oat flour had a significant effect ($P < 0.05$) on the physical, chemical, and most sensory characteristics of gluten-free buns. The best treatment was obtained in the formulation of 50% potato flour: 50% oat flour which produced a bread spread ratio of 1.92, a specific volume of 1.65 cm³/g, a texture of 4.47 N, a moisture content of 62.43%, a starch content of 7.79%, and a protein content of 10.11%. Overall, the formulation produces the best quality gluten-free buns.

Keywords: gluten-free steamed buns, oat flour, potato flour, β -glucan, steamed bun quality