

***EFFECT OF CONCENTRATION OF PUMPKIN FLOUR AND EDAMAME
FLOUR ON CHEMICAL, PHYSICAL, AND SENSORY PROPERTIES
OF FLAKES***

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ABSTRACT

Currently, instant breakfast is one of the trends chosen as an alternative to breakfast, one type of instant breakfast is flakes. Examples of materials that can be processed into flakes are pumpkin and edamame. The purpose of this study was to determine the effect of substitution and the best precise concentration of pumpkin and edamame in flakes on physical, chemical, and sensory properties. This study used a completely randomized design (CRD) method with 1 factor, 7 treatments, and 3 repetitions with an ANOVA analysis of variance and continued with the BNT test (Least Significant Difference). The treatments in this study were: A0 (100% pumpkin flour), A1 (added 2.5% edamame flour), A2 (added 5.0% edamame flour), A3 (added 7.5% edamame flour), A4 (added 10% edamame flour), A5 (added 12.5% edamame flour,) and A6 (added 15% edamame flour). The results showed that sensory assessment, physical properties (moisture content, ash content, color, and solubility), and chemical properties (protein content) significantly affected the quality of the flakes produced. The best treatment was obtained, namely treatment A2 had chemical, physical, and organoleptic characteristics including water content (4.24%), ash content (1.48%), protein content (18.93%), color ($L = 33.09$; $a = 4.56$; $b = 29.87$), solubility (01.45 seconds), hedonic (color 3.60; aroma 3.50; taste 2.80; texture 2.87), hedonic quality (yellowish brown color; distinctive aroma of milk; slightly sweet taste; slightly crunchy texture) and the number of calories is 40.69 cal/100 grams.

Key Words: *Edamame, Flakes, Pumpkin*