Pretzel Bread Substituted With Sorghum Flour As A Functional Food Containing Fiber

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ABSTRACT

Indonesia is currently experiencing an epidemiological transition that causes a shift in disease patterns, namely an increase in degenerative diseases. To prevent the increase in degenerative diseases in Indonesia, one alternative way is to consume fiber-rich foods. One of the foodstuffs that contain fiber is sorghum seeds. The fiber content of sorghum flour ranges from 25.37% for insoluble fiber and 0.97% for soluble fiber. This study aims to examine Pretzel bread substituted with sorghum flour as a functional food source of fiber. The experimental design used was a Randomized Block Design (RAK) with 5 treatments, namely (70% wheat flour: 30% sorghum flour), (60% wheat flour, 40% sorghum flour), (50% sorghum flour, 50% sorghum flour), (40% wheat flour, 60% sorghum flour), (30% wheat flour, 70% sorghum flour) and was repeated five times. The analysis carried out on Pretzel products is chemical analysis (fiber content), physical properties (swellability) and organoleptic (hedonic and hedonic quality). The results showed that the higher the proportion of sorghum flour, the higher the dietary fiber content in Pretzel bread. The results showed that Pretzel bread substituted with sorghum flour had a significant effect (p < 0.05) on fiber content, swellability, hedonic quality test (color, aroma, texture), and hedonic test (color, aroma, taste, texture). Treatment of Pretzel bread substituted with sorghum flour in various formulations had no effect (p < 0.05) on the hedonic taste quality test. The best treatment in this study was P3 treatment with a formulation of 50% wheat flour and 50% sorghum flour. Pretzel bread can be used as 2 snacks with nutritional content per 100 grams of material, namely 215 kcal for energy, 6.61 grams of protein, 7.43 grams of fat, 30.1 grams of carbohydrates, and 1.03 grams of fiber content.

Keywords: Fiber, Pretzel Bread, Sorghum Flour