

Baked Donuts With White Sorghum Flour Substitute As A High-Fiber Snack

Gita Amalia Sandi

Clinical Nutrition Study Program

Department of Health

ABSTRACT

Lifestyle changes, especially in big cities, have led to an increase in the number of people with degenerative diseases. The increasing number of sufferers of this degenerative disease needs action to reduce the number of sufferers of degenerative diseases. Changing lifestyle is one of the efforts to reduce the prevalence of people with degenerative diseases by consuming foods high in dietary fiber. This study aims to analyze the quality properties of baked donuts with the substitution of white sorghum flour as a high-fiber snack. The design used was Completely Randomized Design (CRD) with 5 formulations, namely 65%: 35%, 60%: 40%, 55%: 45%, 50%: 50%, and 45%:55% with 5 repetitions. Based on the results of the study, it was shown that the higher the substitution of white sorghum flour, the higher the fiber content of the food. There was a significant difference (sig 0.005) on fiber content, swellability and organoleptic tests including hedonic test and hedonic quality test of baked donuts substituted with white sorghum flour. The best treatment from this research is P3 with the proportion of 55% wheat flour and 45% white sorghum flour which produces the best baked donut product from the organoleptic test results with an average value of color 7.51 (tend to like very much), taste 7.24 (tend to be very like), Aroma 7.13 (tend to like very much), texture 7.41 (tend to like very much), expandability of 151.44%. Chemical test results baked donuts with the best treatment had 10.39% protein content, 9.82% fat, 73.82% carbohydrates, 1.08% ash, 4.91% water and 5.22% fiber. For one time consumption, consumers are recommended to consume one baked donut with 233.75 kcal of energy, 5.7 grams of protein, 5.4 grams of fat, 40.6 grams of carbohydrates and 2.871 grams of dietary fiber.

Keywords: Baked Donuts, Flavored Food, Food Fiber, Serving Size