

ABSTRACT

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2024**

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MODIFICATION OF STEAMED SPONGE CAKE WITH BREADFRUIT FLOUR SUBSTITUTION AND BUTTERFLY PEA FLOWER COLORING AS A HEART-HEALTHY SNACK

Current dietary trends that are high in fat, salt, and low in fiber can cause coronary heart disease. One way to prevent coronary heart disease is by providing healthy snacks. Steamed sponge cake is a snack that is favored by all circles of society. Breadfruit flour can be used as a substitute for wheat flour, while butterfly pea flower can be used as a natural food colorant and antioxidant. Breadfruit flour contains higher fiber than wheat flour and is low in fat. This study aims to analyze differences in acceptability, crude fiber, and antioxidant activity of steamed sponge cake. This type of research is experimental laboratories with a completely randomized design (CRD). The design used four treatments with the ratio of wheat flour: breadfruit flour: telang flower extract, namely F0 (100:0:0), F1 (95:5:20), F2 (85:15:20), F3 (75:25:20). Acceptability analysis using organoleptic test was conducted by 30 untrained panelists including indicators of color, aroma, taste, and texture. Crude fiber analysis using (gravimetric) method and antioxidant activity using (DPPH) method. The results of organoleptic test analysis on color, aroma, and texture parameters showed a difference ($p < 0,05$). F2 is the selected formula with the highest average value of acceptability. F2 has a crude fiber content of 0.45% and antioxidant activity of 73.40%. Steamed sponge cake with breadfruit flour substitution with telang flower coloring can be an alternative healthy snack for the heart for 19-29 years old. Giving steamed sponge cake to F2 in meeting the fiber needs of 10% snacks requires ± 10 steamed sponge cake. Further research needs to be done on the acceptability of breadfruit flour, it is necessary to use trained panelists, pay attention to the serving temperature, and it is necessary to conduct a proximate test on steamed sponge cake products.

Key words: *Antioxidant, Breadfruit Flour, Butterfly Pea Flower, Crude Fiber, Steamed Sponge Cake*