ABSTRACT

ANALYSIS OF PROTEIN CONTENT, FIBER CONTENT AND ORGANOLEPTIC TEST ON SUBSTITUTION BISCUITS TEMPEH FLOUR AND GEMBILI FLOUR

(As a Healthy Snack For Elementary School Children)

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Unhealthy eating habits are one of the problems of elementary school children. Foods commonly consumed by school-age children are low in protein and fiber. Lack of protein and fiber intake can lead to stunted growth and nutritional problems in children. Tempeh and gembili tubers are good and readily available sources of protein and fiber. This study aimed to determine the effect of adding tempeh flour and gembili flour on protein and fiber content and organoleptic evaluation of cookies. The method used was a completely randomized design (CRD) with three treatments and one control, the ratio of tempeh flour: to gembili flour was 70:30 (F1), 60:40 (F2), and 50:50 (F3). Analysis of protein content using the Kjeldahl method, and fiber content using the gravimetric method. The results of the data analysis of protein and fiber content were tested using one-way ANOVA with post hoc further Duncan. Organoleptic test using semi-trained panelists and children panel. Organoleptic data analysis using Kruskal-Wallis. The results showed significant differences in the protein and fiber content of biscuits. The highest protein content value in F1 was 10.35%, while the highest fiber content value in F3 was 9.27%. Meanwhile, the organoleptic test results showed that the best treatment was F3, with the highest value in the aroma parameter of 83% and taste of 60%. The research concludes that each formulation has a significant difference in protein and fiber content. The best formulation was F3, which had the highest level of panelists' liking for aroma and taste, but it was not acceptable to children panel.

Key Words: Fiber Content, Gembili Flour, Protein Content, Tempeh Flour,

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