

Study of Making Biscuits With Catfish Flour Substitution and Soybeans as a Snack in Prevention Lack of Protein Energy (PEM)

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ABSTRACT

Protein Energy Deficiency (PEM) is a state of malnutrition caused by low consumption of energy and protein in the daily diet, resulting in insufficient nutrition. Prevention of PEM can be done through the manufacture of products that contain high protein and provide information about the consumption of food diversity. Biscuit products substitute catfish flour and soybean flour are snacks that are expected to be consumed as snacks in the prevention of PEM. This study aims to examine the characteristics of biscuits with the substitution of catfish flour and soybean flour for the prevention of PEM. The experimental design used a completely randomized design (CRD). This study used the basic ingredients of catfish flour with soybean flour using 5 treatments and 5 replications with the calculation percentage formulation, namely P1=90%:10%, P2=80%:20%, P3=70%:30%, P4=60%:40% dan P5=50%:50%. Based on the results of the study, the highest protein content was found in treatment P5, namely 13.78%, while the highest physical test (texture) was found in treatment P2, namely 10.62%. The best treatment in this study was treatment P4. The results of the hedonic test of the best treatment on biscuits with the largest percentage of color are 44% neutral, aroma 62% neutral, taste 52% like and texture 44% like. The results of the chemical test of biscuits with the best treatment had protein content of 13.32%, fat 18.61% and carbohydrates 13.27%. Based on BPOM regulations, proteins of food in the best treatment can be categorized as a high protein product for children aged 1-3 years.

Kata Kunci : PEM, biscuits, catfish meal, soybean meal.