Making Tempe with Proportions of Cowpea and Peanuts as High Protein Foods

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ABSTRACT

Malnutrition in Indonesia is very worrying, this is because the number of patients is still relatively high from 2007 to 2018, so the need for high-protein food products that can prevent the disease. This study aims to determine the nutritional content of cowpea tempeh with the proportion of peanuts as a high-protein food. The design used was Randomized Block Design (RCBD) with 6 treatments namely 100% cowpea: 0% peanut, 80% cowpea: 20% peanut, 60% cowpea: 40% peanut, 40% cowpea: 60%, 20% cowpea: 80% peanut, 0% cowpea: 100% peanut and repeated 4 times. The results showed that the higher the proportion of peanuts, the higher the protein content in tempeh. P5 treatment with formula 20% cowpea: 80% peanut is the best treatment with organoleptic test results white intensity before deep fried, typical aroma of tempe before deep frying, sour aroma before being neutral, compactness before deep frying, savory taste after deep frying, the taste of peanuts after being fried is strong, the intensity of the golden golden color is strong, the characteristic aroma of tempe after being fried is strong, the aroma of acid after being fried is weak, and the compactness after being fried is strong. Tempe chemical test results with the best treatment had 21.24% protein content, 20.91% fat, 5.36% carbohydrate, 294.59 kcal energy, 1.13% ash content and 51.36% water content. Within a day it is recommended to consume as much as 6 pieces of tempe weighing 150 grams, the nutritional value of tempeh in each serving is energy 441.88 kcal, protein 31.86 grams, fat 31.36 grams, and carbohydrates 8.04 grams.

Keywords: Protein, Tempe, Cowpea, Peanuts