

**THE EFFECT OF CHAMPIGNON MUSHROOM AND SOYBEAN FLOUR
SUBSTITUTION ON PHYSICAL, CHEMICAL AND ORGANOLEPTIC
PROPERTIES IN THE MAKING OF ANALOGUE MEATBALLS**

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ABSTRACT

Meatballs are foods made from processed beef that are round in shape and can be varied with other ingredients as analog meatballs. This study aims to determine the effect of concentration and determine the best treatment of substitution of champignon mushrooms and soybean flour on the physical, chemical and sensory properties of champignon mushroom and soybean flour analogue meatballs. This research method used a completely randomized design (CRD) one factor with a substitution formulation of champignon mushrooms and soybean flour for 5 treatments with 3 replications. The results showed that the substitution effect of champignon mushroom concentration and soybean flour had a significant effect on texture, moisture content, protein content, fat content, WHC and hedonic organoleptic values and hedonic quality. However, the comparison of the concentration of champignon mushrooms and soybean flour had no significant effect on the ash content and folding power of analog meatballs. The best treatment was shown by the R1 treatment with 75% champignon mushroom and 25% soybean flour with the value of texture, folding power and WHC with a value of 4.70 N, respectively; 2.50; and 0.26%, fat content, water content, protein content, and ash content, respectively 4.21%; 73.81%; 10.37% and 2.90% respectively. Organoleptic with hedonic test of color, aroma, taste, elasticity and appearance of 2.67 (Dislike); 3.40 (Rather Like); 3.50 (Rather Like); 3.50 (Rather Like); and 3.10 (Slightly Like). Organoleptic with a hedonic quality test of color, taste, aroma and elasticity with successive values of 4.63 (Grey); 3.87 (Slightly Savory); 3.13 (Slightly Mushroom) and 3.17 (Slightly Chewy).

Keywords: *Analog Meatballs, Champignon Mushrooms, Soybean Flour*