

Development of Tortilla Chips from Mung Bean Sprout Flour with Addition of *Tempe* Flour as a High-Protein Snack For Children Aged 6-12 YearsOld

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ABSTRACT

Snacks are foods consumed by most people, especially children who are usually consumed while at school. However, snacks on the market mostly contain hazardous chemicals and their protein content is relatively low. Tortilla Chips are processed products made from corn, in this study modified using mung bean sprout flour and *tempe* flour as ingredients. This study aims to determine the characteristics of Tortilla Chips from mung bean sprout flour with the addition of *tempe* flour as a high-protein snack for children aged 6-12 years old. The experimental design used was a Randomized Group Design. Determination of the formulation in this study was carried out a comparison of mung bean sprout flour and *tempe* flour which were 85%: 15%, 80%: 20%, 75%: 25%, 70%: 30%, 65%: 35%, 60%: 40% and each treatment was repeated 4 times. Analysis carried out on Tortilla Chips products are biochemical (protein), physical (crispness), organoleptic and protein quality. The results showed that Tortilla Chips mung bean sprout flour with the addition of *tempe* flour had a significant effect ($P < 0.05$) on protein content, hedonic quality test on color, aroma, texture, and hedonic test on color and texture. However, there was no significant effect ($P > 0.05$) on crispness, hedonic quality test on taste, and hedonic test on taste and aroma. The best treatment is Tortilla Chips from 60% mung bean sprout flour and 40% *tempe* flour. Children aged 6-12 years need to be consumed 40 g of Tortilla Chips, green bean sprouts flour and tempeh flour to meet their daily needs.

Keywords: Snacks, Tempe Flour, High Protein, Tortilla Chips.