

## PENGARUH SUBSTITUSI TEPUNG HANJELI (*Coix lacryma* – *jobi* L.) TERHADAP KUALITAS KIMIA DAN SENSORIS NUGGET AYAM KAMPUNG

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### INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh substitusi tepung hanjeli (*coix lacryma* – *jobi*) dengan tepung tapioka pada kualitas kimia dan sensoris *nugget* ayam kampung. Bahan yang digunakan dalam penelitian adalah daging ayam kampung, tepung hanjeli, tepung tapioka, tepung sagu, telur, garam, merica, tepung panir, air es dan minyak goreng. Substitusi tepung hanjeli terdiri atas 0, 25, 50, 75, dan 100% dengan setiap perlakuan terdiri atas empat pengulangan. Variable yang diuji adalah komposisi kimia meliputi kadar air, kadar abu, kadar protein, kadar lemak, karbohidrat, dan kualitas sensoris. Data hasil uji komposisi kimia dianalisis menggunakan ANOVA pola satu arah dan diuji lanjut dengan *Duncan's New Multiple Ranges Test* (DMRT). Hasil penelitian menunjukkan bahwa substitusi tepung hanjeli tidak memberikan pengaruh signifikan terhadap kadar air dan kadar abu pada *nugget* ayam kampung, dengan nilai  $p > 0,05$ . Namun, terdapat pengaruh signifikan terhadap kadar protein, lemak, dan karbohidrat, dengan nilai  $p < 0,05$ . Hal ini menunjukkan bahwa substitusi tepung hanjeli mampu memengaruhi kandungan protein dan lemak secara signifikan, sedangkan kadar karbohidrat juga menunjukkan perbedaan nyata di antara perlakuan substitusi yang dilakukan. Hasil analisis statistik kadar air sebesar 57,62%-58,49%. Hasil statistik kadar abu sebesar 2,27%-2,74%. Hasil analisis statistik protein sebesar 9,86%-13,96%. Hasil statistik kadar lemak sebesar 1,37%-2,63%. Hasil analisis statistik karbohidrat sebesar 26,04%-28,73%. Hasil penelitian dapat disimpulkan bahwa penggunaan tepung 50% merupakan hasil yang terbaik memberikan kadar protein tertinggi dan kadar lemak lebih tinggi dari substitusi 0% dan 25%. Substitusi tepung hanjeli dapat meningkatkan pengaruh nyata pada kadar protein, lemak dan karbohidrat, tetapi tidak merubah kualitas sensoris, sehingga menghasilkan *nugget* ayam kampung yang sehat dan kaya mineral.

**Kata kunci:** Nugget Ayam Kampung, Tepung Hanjeli, Kualitas Kimia, kualitas Sensoris.

## THE EFFECT OF SUBSTITUTION OF HANJELI FLOUR (*coix lacryma-jobi* L.) ON THE CHEMICAL AND SENSORY QUALITIES OF NATIVE CHICKEN NUGGET

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### ABSTRACT

This study aims to determine the effect of substitution of hanjeli flour (*coix lacryma* - jobi) with tapioca flour on the chemical and sensory quality of free-range chicken nuggets. The materials used in the study were free-range chicken meat, hanjeli flour, tapioca flour, sago flour, eggs, salt, pepper, breadcrumbs, ice water and cooking oil. The substitution of hanjeli flour consisted of 0, 25, 50, 75, and 100% with each treatment consisting of four repetitions. The variables tested were chemical composition including water content, ash content, protein content, fat content, carbohydrates, and sensory quality. The data from the chemical composition test were analyzed using one-way ANOVA and further tested with Duncan's New Multiple Ranges Test (DMRT). The results showed that hanjeli flour substitution did not have a significant effect on water content and ash content in free-range chicken nuggets, with a value of  $p > 0.05$ . However, there was a significant effect on protein, fat, and carbohydrate content, with a value of  $p < 0.05$ . This shows that the substitution of millet flour can significantly affect the protein and fat content, while the carbohydrate content also shows significant differences between the substitution treatments carried out. The results of statistical analysis of water content were 57.62% -58.49%. The statistical results of the ash content were 2.27% - 2.74%. The results of statistical analysis of protein were 9.86%-13.96%. The statistical results of the fat content are 1.37%-2.63%. The results of statistical analysis of carbohydrates were 26.04% -28.73%. The results of the research can be concluded that the use of 50% flour is the best result providing the highest protein content and higher fat content than 0% and 25% substitutions. Substitution of hanjeli flour can increase the real effect on protein, fat and carbohydrate levels, but does not change the sensory quality, thus producing free-range chicken nuggets that are healthy and rich in minerals.

**Keywords:** Native of Chicken Nugget, Hanjeli Flour, Chemical Qualities, Sensory Qualities.