

PENGARUH PENAMBAHAN TEPUNG DAUN SIRSAK (*Annona muricata* L.) TERHADAP AKTIVITAS ANTIOKSIDAN, KUALITAS FISIK, DAN SENSORIS *CHICKEN NUGGET*

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INTISARI

Penambahan tepung daun sirsak sebagai sumber antioksidan dapat menjadi alternatif dalam meningkatkan aktivitas antioksidan serta mutu fungsional produk olahan daging seperti *chicken nugget*. Penelitian ini bertujuan untuk mengetahui pengaruh penambahan tepung daun sirsak terhadap aktivitas antioksidan, kualitas fisik, dan kualitas sensoris *chicken nugget*. Materi yang digunakan pada penelitian ini adalah *chicken nugget* dan tepung daun sirsak. Metode penelitian ini eksperimental dengan perlakuan penambahan tepung daun sirsak pada *chicken nugget* sebesar 0, 1, 1,5, dan 2%. Variabel yang diamati adalah aktivitas antioksidan, kualitas fisik dan kualitas sensoris dari *chicken nugget*. Analisis statistik aktivitas antioksidan dan kualitas fisik menggunakan uji Anova rancangan acak lengkap pola searah dilanjutkan dengan uji *Duncan Multiple Range Test* (DMRT), sedangkan untuk kualitas sensoris menggunakan uji *Kruskal-Wallis* dilanjutkan dengan uji *Mann-Whitney*. Hasil analisis statistik *chicken nugget* dengan penambahan tepung daun sirsak berpengaruh sangat signifikan ($P < 0,01$) terhadap aktivitas antioksidan. Hasil analisis statistik kualitas fisik *chicken nugget* dengan penambahan tepung daun sirsak berpengaruh signifikan ($P < 0,05$) terhadap daya ikat air dan tidak berpengaruh signifikan ($P > 0,05$) terhadap nilai pH, *hardness*, *cohesiveness*, *springiness*, *chewiness*, dan *gumminess chicken nugget*. Hasil analisis statistik *chicken nugget* dengan penambahan tepung daun sirsak berpengaruh signifikan ($P < 0,05$) terhadap kualitas sensoris. Kesimpulan dari penelitian ini menunjukkan bahwa penambahan 1,5% tepung daun sirsak efektif meningkatkan aktivitas antioksidan dan daya ikat air *chicken nugget*, meskipun masih memiliki kelemahan berupa warna yang kurang menarik, aroma daun yang cukup kuat, dan rasa sedikit pahit.

Kata kunci: *chicken nugget*, tepung daun sirsak, aktivitas antioksidan, kualitas fisik, kualitas sensoris

THE EFFECT OF SOURSOP LEAF FLOUR (*Annona muricata* L.) ADDITION ON ANTIOXIDANT ACTIVITY, PHYSICAL AND SENSORY QUALITY OF CHICKEN NUGGET

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ABSTRACT

The addition of soursop leaf flour as a source of antioxidants can be an alternative in increasing antioxidant activity and the functional quality of processed meat products such as chicken nuggets. This study aims to determine the effect of the addition of soursop leaf flour on antioxidant activity, physical quality, and sensory quality of chicken nuggets. The materials used in this study were chicken nuggets and soursop leaf flour. This research method was experimental with the treatment of adding soursop leaf flour to chicken nuggets of 0, 1, 1.5, and 2%. The variables observed were antioxidant activity, physical quality and sensory quality of chicken nuggets. Statistical analysis of antioxidant activity and physical quality using a completely randomized design Anova test with a one-way pattern followed by the Duncan Multiple Range Test (DMRT), while for sensory quality using the Kruskal-Wallis test followed by the Mann-Whitney test. The results of the statistical analysis of chicken nuggets with the addition of soursop leaf flour had a very significant effect ($P < 0,01$) on antioxidant activity. The results of statistical analysis of the physical quality of chicken nuggets with the addition of soursop leaf flour had a significant effect ($P < 0,05$) on water holding capacity and had no significant effect ($P > 0,05$) on pH, hardness, cohesiveness, springiness, chewiness, and gumminess of chicken nuggets. The results of statistical analysis of chicken nuggets with the addition of soursop leaf flour had a significant effect ($P < 0,05$) on sensory quality. The conclusion of this study shows that the addition of 1.5% soursop leaf flour is effective in increasing the antioxidant activity and water binding capacity of chicken nuggets, although it still has weaknesses in the form of less attractive color, quite strong leaf aroma, and slightly bitter taste.

Keywords: chicken nuggets, soursop leaf flour, antioxidant activity, physical quality, sensory quality