PENGARUH TEPUNG KULIT MANGGIS TERHADAP AKTIVITAS ANTIOKSIDAN DAN KUALITAS FISIK PADA SOSIS DAGING AYAM

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh tepung kulit manggis terhadap aktivitas antioksidan dan kualitas fisik sosis daging ayam. Pembuatan sosis daging ayam dilakukan sesuai formulasi dengan penambahan tepung kulit manggis dengan level 0, 1, 2, dan 3% dari total berat adonan sosis. Setiap perlakuan diulang sebanyak lima kali. Variabel yang diuji meliputi aktivitas antioksidan dan kualitas fisik sosis yang meliputi pH, daya ikat air, dana keempukan. Aktivitas antioksidan diuji menggunakan metode DPPH dengan sampel berupa adonan sosis dan sosis masak. Data hasil uji aktivitas antioksidan dan kualitas fisik dianalisis menggunakan *Analysis of Variance* (ANOVA) dengan Rancangan Acak Lengkap (RAL) pola searah. Apabila terdapat perbedaan nyata, maka dilanjutkan dengan *Duncan's New Multiple Range Test* (DMRT). Hasil penelitian menunjukkan tepung kulit manggis memberikan pengaruh nyata ($P<0,05$) terhadap aktivitas antioksidan pada adonan dan sosis masak yaitu 6,90; 11,21; 17,98; dan 22,81% untuk adonan sosis dan 7,62; 12,51; 18,75; 23,66 % untuk sosis masak. Penambahan tepung kulit manggis tidak memberikan pengaruh nyata ($P>0,05$) terhadap nilai pH dan daya ikat air, namun memberikan pengaruh nyata ($P<0,05$) terhadap nilai keempukan. Kesimpulan dari penelitian ini tepung kulit manggis dapat meningkatkan aktivitas antioksidan menurunkan nilai keempukan, dan tidak berpengaruh pada pH dan daya ikat air sosis daging ayam. Sosis dengan penambahan 1% tepung kulit manggis dari berat adonan memiliki nilai terbaik berdasarkan aktivitas antioksidan dan kualitas fisik yang dihasilkan.

Kata Kunci: Aktivitas antioksidan, Kualitas fisik, Kulit manggis, Sosis daging ayam

THE EFFECT OF THE MANGOSTEEN PEEL FLOUR ON ANTIOXIDANT ACTIVITY AND PHYSICAL QUALITY OF CHICKEN MEAT SAUSAGE

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ABSTRACT

This study aims to determine the effect of mangosteen peel flour on antioxidant activity and the physical quality of chicken sausages. Making chicken meat sausages was carried out according to the formulation with the addition of mangosteen peel flour at levels of 0, 1, 2, and 3% of the total weight of the sausage dough. Each treatment was repeated five times. The variables tested included antioxidant activity and physical quality of sausages which included pH, water holding capacity, and tenderness. Antioxidant activity was tested using the DPPH method with samples in the form of sausage dough and cooked sausages. Data from antioxidant activity test results and physical quality were analyzed using Analysis of Variance (ANOVA) with a completely randomized design (CRD) pattern. If there is a real difference, then proceed with Duncan's New Multiple Range Test (DMRT). The results showed that the mangosteen peel flour had a significant effect ($P<0.05$) on the antioxidant activity of cooked dough and sausages, namely 6.90; 11.21; 17.98; and 22.81% for sausage dough and 7.62; 12.51; 18.75; 23.66 % for cooked sausages. The addition of mangosteen peel flour did not have a significant effect ($P>0.05$) on the pH value and water holding capacity but had a significant effect ($P<0.05$) on the value of tenderness. The conclusion from this study mangosteen peel flour can increase antioxidant activity, reduce tenderness, and has no effect on pH and water holding capacity of chicken sausages. Sausages with the addition of 1% mangosteen peel flour by weight of the dough had the best value based on the antioxidant activity and physical quality produced.

Keywords: Antioxidant activity, Chicken sausage, Mangosteen skin, Physical quality