

PENGARUH PENAMBAHAN TEPUNG TERONG UNGU (*Solanum melongena* L.) TERHADAP KUALITAS KIMIA DAN AKTIVITAS ANTIOKSIDAN BAKSO AYAM PETELUR AFKIR

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan tepung terong terhadap kualitas kimia dan aktivitas antioksidan bakso ayam petelur afkir. Bahan yang digunakan pada penelitian ini adalah daging ayam petelur afkir, tepung terong, tepung tapioka, garam, telur, bawang merah, bawang putih, merica, es batu, STPP. Perlakuan penambahan tepung terong pada konsentrasi 0; 2,5; 5; dan 7,5%. Parameter yang akan diuji adalah kualitas kimia dan kualitas aktivitas antioksidan. Variabel yang akan diuji pada kualitas kimia adalah kadar air, protein, lemak, abu, karbohidrat, dan serat pangan. Data yang diperoleh dianalisis statistik menggunakan rancangan acak lengkap (RAL) pola searah. Apabila data signifikan, maka akan dilakukan uji lanjut dengan menggunakan uji *Duncan's New Multiple Ranges Test* (DMRT). Hasil penelitian menunjukkan bahwa penambahan tepung terong ungu pada konsentrasi 0; 2,5; 5, 7,5% berpengaruh nyata ($P < 0,05$) terhadap peningkatan kadar air (62,00%; 62,62%; 63,21%; 63,95%), kadar protein (11,88%; 12,14%; 12,34%; 12,53%), kadar abu (1,08%; 1,19%; 1,21%; 1,28%), kadar karbohidrat (11,18%; 12,77%; 14,71%; 17,26%), serat pangan (3,36%; 3,62%; 3,82%; 3,98%), aktivitas antioksidan (9,39%; 19,22%; 33,66%; 42,85%) serta penurunan pada kadar lemak (9,94%; 9,41%; 8,51%; 6,39%). Kesimpulan dari penelitian ini yaitu tepung terong ungu dapat meningkatkan kadar air, kadar protein, kadar abu, serat pangan, dan aktivitas antioksidan serta menurunkan kadar lemak bakso ayam petelur afkir. Bakso daging ayam petelur afkir dengan penambahan tepung terong ungu 7,5% memberikan kualitas kimia dan aktivitas antioksidan paling baik.

Kata kunci: Bakso, Daging Ayam Petelur Afkir, Tepung Terong Ungu, Kualitas Kimia, Aktivitas Antioksidan

THE EFFECT OF ADDING PURPLE EGGPLANT FLOUR (*Solanum melongena* L.) ON THE CHEMICAL QUALITY AND ANTIOXIDANT ACTIVITY OF AFKIR-LAYING CHICKEN MEATBALLS

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ABSTRACT

This research aims to determine the effect of adding eggplant flour on the chemical quality and antioxidant activity of meatballs from cull laying hens. The ingredients used in this research were cull-laying hen meat, eggplant flour, tapioca flour, salt, eggs, onions, garlic, pepper, flavorings, ice cubes, and STPP. The treatment included the addition of eggplant flour at concentrations of 0; 2.5; 5; and 7.5%. The parameters to be tested are chemical quality and antioxidant activity quality. The variables that will be tested for chemical quality are water, protein, fat, ash, carbohydrate, and dietary fiber content. The data obtained were statistically analyzed using a completely randomized design (CRD) with a unidirectional pattern. If the data is significant, a further test will be carried out using Duncan's New Multiple Ranges Test (DMRT). The research results showed that the addition of purple eggplant flour at a concentration of 0; 2.5; 5, 7.5% had a significant effect ($P < 0,05$) on increasing water content (62,00%; 62,62%; 63,21%; 63,95%), protein levels (11,88%; 12,14%; 12,34%; 12,53%), ash content (1,08%; 1,19%; 1,21%; 1,28%), carbohydrate content (11,18%; 12,77%; 14,71%; 17,26%), dietary fiber (3,36%; 3,62%; 3,82%; 3,98%), antioxidant activity (9,39%; 19,22%; 33,66%; 42,85%) and a decrease in fat content ($9.94 \pm 0.13\%$; $9.41 \pm 0.35\%$; $8.51 \pm 0.23\%$; $6.39 \pm 0.63\%$). The conclusion of this research is that purple eggplant flour can increase water content, protein content, ash content, dietary fiber and antioxidant activity as well as reduce fat content in meatballs of rejected laying hens. The addition of 7.5% purple eggplant flour provided the best chemical quality and antioxidant activity of culled laying chicken meatballs.

Key words: Meatballs, Cull-laying Hen Meat, Purple Eggplant Flour, Chemical Quality, Antioxidant Activity