

PENGARUH SUBSTITUSI DAGING AYAM PETELUR AFKIR DAN DAGING AYAM BROILER TERHADAP KUALITAS KIMIA DAN SENSORIS BAKSO DAGING SAPI

**Muhamad Rosikh Nur Ihsan
21/472985/PT/08796**

INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh substitusi daging ayam petelur afkir dan daging ayam broiler terhadap kualitas kimia dan sensoris bakso daging ayam sapi. Bahan-bahan yang digunakan dalam pembuatan bakso adalah daging sapi, daging ayam petelur afkir, daging ayam broiler, garam, bawang putih, merica, STTP, tepung tapioka, dan es batu. Parameter yang diamati pada penelitian ini yaitu uji kualitas kimia (kadar air, kadar protein, kadar lemak, dan kadar kolagen) dan sensoris (warna, aroma, rasa, tekstur, dan daya terima). Parameter yang diamati mencakup kualitas kimia (kadar air, protein, lemak, dan kolagen) dan kualitas sensoris (warna, aroma, rasa, tekstur, dan daya terima). Data kualitas kimia dianalisis dengan variansi (ANOVA) rancangan acak lengkap pola faktorial (2 jenis daging x 4 level substitusi daging 0%, 25%, 50%, dan 75%), sedangkan data kualitas sensoris dianalisis secara non-parametrik dengan uji Friedman. Perbedaan signifikan dilanjutkan uji *Duncan's New Multiple Range Test*. Hasil penelitian menunjukkan bahwa jenis substitusi daging ayam (petelur afkir dan broiler) berpengaruh nyata ($P < 0,05$) terhadap kadar protein dan lemak, namun tidak berpengaruh nyata ($P > 0,05$) terhadap kadar air dan kolagen. Level substitusi daging ayam secara signifikan mempengaruhi ($P < 0,05$) terhadap kadar kolagen, lemak, air, dan protein. Hasil uji sensoris menunjukkan bahwa jenis daging ayam berpengaruh nyata ($P < 0,05$) terhadap tekstur bakso ayam sapi, namun tidak berpengaruh nyata ($P > 0,05$) terhadap warna, aroma, rasa, dan daya terima bakso ayam sapi. Level substitusi daging ayam berpengaruh nyata ($P < 0,05$) terhadap warna, rasa, dan tekstur bakso ayam sapi, namun tidak berpengaruh nyata ($P > 0,05$) terhadap aroma dan daya terima. Interaksi antara jenis daging dan level substitusi terdeteksi pada uji sensoris warna dan tekstur. Hasil penelitian dapat disimpulkan bahwa bakso kombinasi terbaik yaitu terdapat pada level substitusi 25% daging ayam dan 75% daging sapi pada kualitas kimia (daging ayam petelur afkir) dan sensoris (daging ayam broiler).

Kata kunci: Bakso, Daging sapi, Daging ayam petelur afkir, Daging ayam broiler, Kualitas kimia dan sensoris

THE EFFECT OF SUBSTITUTION OF AFKIR LAYING HEN AND BROILER CHICKEN MEAT ON THE CHEMICAL AND SENSORY QUALITIES OF BEEF MEATBALLS

Muhamad Rosikh Nur Ihsan
21/472985/PT/08796

ABSTRACT

This study aimed to determine the effect of substituting spent laying hen meat and broiler chicken meat on the chemical and sensory qualities of beef meatballs. The ingredients used in meatball production were beef, spent laying hen meat, broiler chicken meat, salt, garlic, pepper, STTP, tapioca flour, and ice. The parameters observed in this study included chemical quality tests (moisture content, protein content, fat content, and collagen content) and sensory tests (color, aroma, taste, texture, and acceptability). Chemical quality data were analyzed using Analysis of Variance (ANOVA) with a completely randomized factorial design (2 types of meat x 4 substitution levels: 0%, 25%, 50%, and 75%), while sensory quality data were analyzed non-parametrically with the Friedman test. Significant differences were further analyzed using Duncan's New Multiple Range Test. The results showed that the type of chicken meat substitution (spent laying hen and broiler) significantly ($P < 0.05$) affected protein and fat content, but had no significant effect ($P > 0.05$) on moisture and collagen content. The level of chicken meat substitution significantly ($P < 0.05$) influenced collagen, fat, moisture, and protein content. Sensory test results indicated that the type of chicken meat significantly ($P < 0.05$) affected meatball texture, but had no significant effect ($P > 0.05$) on meatball color, aroma, taste, and acceptability. The level of chicken meat substitution significantly ($P < 0.05$) affected meatball color, taste, and texture, but had no significant effect ($P > 0.05$) on aroma and acceptability. An interaction between meat type and substitution level was detected for sensory color and texture. The study concluded that the best combination meatballs were found at a 25% chicken meat and 75% beef substitution level, with the best chemical quality derived from spent laying hen meat and the best sensory quality derived from broiler chicken meat

Keywords: Meatballs, Beef, Retired laying hen meat, Broiler chicken meat, Chemical and sensory quality