KUALITAS KIMIA, FISIK DAN SENSORIS BAKSO DAGING SAPI YANG DISUBSTITUSI DENGAN DAGING KEONG SAWAH (*Pila ampullacea*)

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INTISARI

Penelitian ini bertujuan untuk mengetahui kualitas kimia, fisik, dan sensoris bakso daging sapi yang disubstitusi dengan daging keong sawah (Pila ampullacea). Penelitian ini dilakukan dengan empat perlakuan level substitusi daging sapi dengan daging keong sawah yaitu P0 (100%:0%), P1 (85%:15%), P2 (70%:30%), dan P3 (55%:45%). Setiap perlakuan terdiri dari lima kali pengulangan. Variabel yang diamati meliputi kualitas kimia (kadar air, kadar protein, dan kadar lemak), kualitas fisik (nilai pH, daya ikat air, dan keempukan), dan kualitas sensoris (warna, rasa, aroma, tekstur, kekenyalan, dan daya terima). Data hasil pengujian kualitas kimia dan fisik dianalisis menggunakan analisis variansi pola searah (ANOVA), sedangkan data hasil pengujian kualitas sensoris dianalisis menggunakan analisis non-parametrik yaitu uji Hedonik Kruskal-Wallis, apabila terdapat perbedaan yang nyata akan dilanjutkan dengan uji Duncan's New Multiple Ranges Test (DMRT). Hasil analisis statistik menunjukkan bahwa level substitusi daging sapi dengan daging keong sawah tidak berpengaruh nyata terhadap kadar air, tetapi berpengaruh nyata ($P<0,05$) terhadap daya ikat air, dan berpengaruh sangat nyata ($P<0,01$) terhadap kadar protein, kadar lemak, nilai pH, keempukan, warna, rasa, aroma, tekstur, kekenyalan, dan daya terima bakso. Substitusi daging sapi dengan daging keong sawah dapat meningkatkan nilai pH, daya ikat air, dan kekenyalan, tetapi menurunkan kadar protein, kadar lemak, keempukan, warna, rasa, aroma, tekstur, dan daya terima. Kesimpulan dari hasil penelitian adalah bakso daging sapi yang disubstitusi dengan daging keong sawah sebanyak 15% memiliki kadar air, kadar protein, rasa, tekstur, dan daya terima yang sama seperti bakso yang terbuat dari 100% daging sapi.

Kata kunci : Bakso daging sapi, Daging keong sawah, Kualitas kimia, Kualitas fisik, Kualitas sensoris

CHEMICAL, PHYSICAL AND SENSORICAL QUALITY OF BEEF MEATBALL SUBSTITUTED WITH SNAIL MEAT (*Pila ampullacea*)

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ABSTRACT

This research aimed to determine the chemical, physical, and sensory qualities of beef meatballs substituted with snail meat (Pila ampullacea). This research was conducted with four treatments of substitution level of beef with snail meat i.e. P0 (100%:0%), P1 (85%:15%), P2 (70%:30%), and P3 (55%:45%). Each treatment was consisted of five replications. Variables observed were chemical quality (water content, protein content, and fat content), physical quality (pH value, water holding capacity, and tenderness), and sensory quality (color, taste, flavor, texture, firmness, and acceptability). The data from the results of chemical and physical quality were analyzed using one-way analysis (ANOVA), while the results of sensory quality were analyzed using non-parametric analysis, Hedonic Kruskal-Wallis Test, if there were significant differences, it would be continued with Duncan's New Multiple Ranges Test (DMRT). The results of the statistical analysis showed that the substitution level of beef with snail meat had no significant effect on water content, but it had a significant effect ($P<0.05$) on water holding capacity, and had a very significant effect ($P<0.01$) on protein content, fat content, pH value, tenderness, color, taste, flavor, texture, firmness, and acceptability of meatballs. Substitution of beef with snail meat could improved pH value, water holding capacity, and firmness, but could reduced protein content, fat content, tenderness, color, taste, flavor, texture, and acceptability. The conclusion from the research was that beef meatballs substituted with 15% of snail meat have the same water content, protein content, taste, texture, and acceptability as meatballs made of 100% beef.

Keywords : Beef meatball, Snail meat, Chemical quality, Physical quality, Sensory quality