

PENGARUH JENIS KEMASAN TERHADAP KUALITAS FISIK, TOTAL MIKROBIA, DAN SENSORIS BAKSO GORENG DAGING SAPI PADA PENYIMPANAN SUHU RUANG

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh beberapa jenis kemasan dan lama penyimpanan terhadap kualitas fisik, total bakteri, dan sensoris Basreng (bakso goreng) daging sapi yang disimpan pada suhu ruang. Perlakuan metode pengemasan meliputi P0 (*polyethylene non vakum*), P1 (*polyethylene vakum*), P2 (*aluminium foil vakum*), dan P3 (*composite can*). Perlakuan lama penyimpanan yaitu selama 8 minggu pada suhu ruang ($27 \pm 2^\circ\text{C}$) dengan pengujian pada minggu ke 0,2,4,6, dan 8. Parameter kualitas fisik yang diamati yaitu meliputi pH, higrokopositas, dan TPA (*Texture Profile Analysis*). Parameter mikrobiologi dianalisis menggunakan *Total Plate Count* (TPC). Parameter sensoris yang diamati yaitu warna, rasa, aroma, tekstur, dan daya terima. Data kualitas fisik dan mikrobiologi dianalisis dengan analisis Rancangan Acak Lengkap pola faktorial 4x5. Perbedaan rerata diuji dengan uji *Duncan's New Multiple Range Test*. Data kualitas sensoris dianalisis dengan analisis *non-parametrik Friedman*. Berdasarkan hasil analisis data penelitian diketahui bahwa perlakuan kemasan memberikan pengaruh yang nyata ($P < 0,05$) terhadap kualitas fisik yaitu pH dan *crispiness*, sensoris dan total bakteri basreng daging sapi. Perlakuan lama penyimpanan pada suhu ruang memberikan pengaruh yang nyata ($P < 0,05$) terhadap kualitas fisik yaitu pH, higrokopositas dan *crispiness*, sensoris dan total bakteri basreng daging sapi. Terdapat interaksi antara pengemasan dan lama penyimpanan pada kualitas fisik yaitu pH, higrokopositas dan *crispiness*, sensoris dan total bakteri basreng daging sapi ($P < 0,05$). Kemasan yang tepat dengan masa simpan lebih lama pada suhu ruang untuk produk basreng adalah kemasan *Composite can*. Kemasan *Composite Can* paling banyak memiliki keunggulan ditinjau dari hasil pengujian nilai pH, *Texture Profile Analysis* (TPA) yaitu *Crispiness*, *Total Plate Count* (TPC), dan sensoris. Berdasarkan nilai total bakteri, produk basreng daging sapi dengan kemasan *composite can* layak dikonsumsi hingga minggu ke-8 dengan total bakteri 4,95 log cfu/g sesuai dengan batasan maksimal cemaran bakteri dalam BSN (1995).

Kata Kunci : Basreng Daging Sapi, Jenis Kemasan, Lama Penyimpanan, Kualitas Fisik, Total Bakteri, Kualitas Sensoris

EFFECT OF PACKAGING TYPES ON QUALITY PHYSICAL, TOTAL MICROBES, AND SENSORY BEEF FRIED MEATBALLS DURING STORAGE AT AMBIENT TEMPERATURE

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ABSTRACT

This study aimed to determine the effect of several types of packaging on total bacteria, physical, and sensory qualities of beef fried meatball storage at ambient temperature. The treatment of packaging methods were P0 (non vacuum polyethylene), P1 (vacuum polyethylene), P2 (vacuum aluminum foil), and P3 (composite can). The samples stored for 8 weeks at room temperature ($27\pm 2^{\circ}\text{C}$) was conducted at 0, 2, 4, 6, and 8 weeks. Physical quality (pH, hypocosity, and Texture Profile Analysis). Microbiological parameters were analysis using Total Plate Count (TPC). Sensory quality (color, taste, aroma, texture, and acceptability). Physical and microbiological quality data are analysis with a Complete Randomized Design analysis of 4x5 factorial patterns. Mean differences were tested with Duncan's New Multiple Range Test. Sensory quality data was analysis with Friedman's non-parametric analysis. Based on the results of the study, it can be seen that the packaging treatment had a significant effect ($P<0,05$) on the physical quality that is pH and crispiness, sensory and total bacteria beef fried meatballs. The long-storage treatment at room temperature had a significant effect ($P<0,05$) on the physical quality that is pH, hygroscopy and *crispiness*, sensory and total bacteria of beef fried meatballs. There was an interaction between packaging and storage time on physical quality that is pH, hygroscopy and *crispiness*, sensory and total bacteria of beef fried meatballs ($P<0,05$). The most appropriate packaging with a longer shelf life at room temperature for beef fried meatball products was Composite can packaging. Composite Can packaging had the most advantages reviewed from the test results of pH values, Texture Profile Analysis (TPA) that is Crispiness, Total Plate Count (TPC), and sensory. Based on the total value of bacteria, beef fried meatball products with composite can packaging was able to consume until 8 weeks with the total bacteria 4.95 log cfu/g based on the maximum limit of bacterial contamination in BSN (1995).

Keywords : Beef Fried Meatball, Packaging Type, Storage Length, Physical Quality, Total Bacteria, Sensory Quality.