

PENGARUH PENAMBAHAN EKSTRAK JAHE (*Zingiber officinale Roscoe*) TERHADAP KARAKTERISTIK FISIK, SENSORIS, DAN MIKROBIOLOGI CHICKEN NUGGET

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan ekstrak jahe (*Zingiber officinale Roscoe*) terhadap kualitas fisik, sensoris, dan kandungan mikrobial *chicken nugget* dalam penyimpanan suhu *refrigerator*. Bahan yang digunakan yaitu daging ayam, tepung terigu, tepung kanji, bawang putih, garam, merica bubuk, pala, air dan ekstrak jahe. Level ekstrak jahe yang digunakan adalah 0, 2, 4, dan 6%. Parameter yang diamati meliputi kualitas fisik (pH, daya ikat air dan keempukan), kualitas sensoris (warna, *flavor*, tekstur, kekenyalan dan daya terima) dan total mikrobial yang diukur dengan menggunakan metode TPC dengan faktor lama penyimpanan selama 0, 7, 14, 21 hari dalam suhu *refrigerator*. Data karakteristik fisik dianalisis variansi pola searah (ANOVA) dan jika data yang diperoleh memiliki perbedaan rerata yang signifikan dilanjutkan dengan uji *Duncan's Multiple Range Test* (DMRT). Data karakteristik sensoris (warna, *flavor*, tekstur, kekenyalan dan daya terima) dianalisis secara statistik menggunakan *Kruskal-Wallis* (uji Hedonik). Data mikrobiologi dianalisis menggunakan Rancangan Acak Lengkap (RAL). Penambahan ekstrak jahe berpengaruh sangat nyata pada pH, keempukan dan daya ikat air ($P < 0,05$). Penambahan ekstrak jahe berpengaruh nyata pada warna, *flavor* dan daya terima ($P < 0,05$), tetapi tidak berpengaruh terhadap tekstur dan kekenyalan. *Chicken nugget* dengan penambahan ekstrak jahe 2, 4, dan 6% pada penyimpanan suhu *refrigerator* sampai hari ke-7 memiliki mikrobial yang masih sesuai dengan SNI Nugget No.01-6683-2014. Hasil uji sensoris menunjukkan formulasi yang lebih disukai adalah dengan penambahan ekstrak jahe 2%. Penambahan ekstrak jahe 2% pada *chicken nugget* meningkatkan daya ikat air, nilai keempukan, daya terima, serta daya simpan *chicken nugget*.

Kata kunci : *Chicken nugget*, Ekstrak jahe, Karakteristik fisik, Karakteristik sensoris, Mikrobiologi

EFFECT OF ADDITIONAL GINGER EXTRACT (*Zingiber officinale* Roscoe) ON THE PHYSICAL, SENSORY CHARACTERISTICS, AND MICROBIOLOGY OF CHICKEN NUGGET

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ABSTRACT

This research was conducted to determine the effect of ginger extract (*Zingiber officinale* Roscoe) addition on the physical, sensory, and microbiology of chicken nuggets in the refrigerator storage. The materials used were chicken meat, flour, starch, garlic, salt, pepper powder, nutmeg, water and ginger extract. Ginger extract levels used were 0, 2, 4, and 6%. Parameters measured include physical quality (pH, water holding capacity and tenderness), sensory quality (color, *flavor*, texture, elasticity and acceptance), microbiology measured using TPC method with long storage factor for 0, 7, 14, 21 days in refrigerator storage. The data of physical characteristic were analyzed by using one-way analysis of variance (ANOVA) and if the data obtained had significant mean difference then were analyzed by Duncan's Multiple Range Test (DMRT). The data of sensory characteristic (color, *flavor*, texture, elasticity and acceptance) were analyzed statistically by using Kruskal-Wallis (Hedonic test). The data of microbiology was analyzed using Completely Randomized Design (RAL). The addition of ginger extract had a very significant effect on pH, tenderness and water holding capacity ($P < 0.05$). The addition of ginger extract had a significant effect on color, *flavor* and acceptance ($P < 0.05$), but had no effect on texture and elasticity. Chicken nugget with the addition of ginger extract 2, 4, and 6% at refrigerator storage until 7 days has microbes that still fit with SNI Nugget No.01-6683-2014. The result of sensory test showed the most preferred nugget is with addition ginger extract 2%. The addition of ginger extract 2% on chicken nugget increased water holding capacity, the value of tenderness, acceptance, and the shelf-life of chicken nugget.

Keywords: *Chicken nuggets*, Ginger extract, Physical characteristic, Sensory characteristic, Microbiologist