

# **PENGARUH PENAMBAHAN NITRIT, BAKTERI ASAM LAKTAT, DAN KOMBINASI KEDUANYA TERHADAP KARAKTERISTIK KIMIA DAN SENSORIS SOSIS FERMENTASI DAGING AYAM BROILER**

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## **INTISARI**

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan nitrit, bakteri asam laktat, dan kombinasi keduanya terhadap karakteristik kimia dan sensoris sosis ayam fermentasi. Sosis fermentasi menggunakan bahan baku daging ayam. Perlakuan pada penelitian ini adalah penambahan bakteri asam laktat, nitrit, serta kombinasi nitrit dengan bakteri asam laktat,. Bakteri yang digunakan dalam fermentasi sosis adalah bakteri yang diisolasi dari daging ayam sendiri. Senyawa nitrit berguna sebagai penghambat pertumbuhan mikroorganisme patogen yang dapat merusak kualitas sosis dan mengganggu proses fermentasi sosis. Variabel yang diuji yaitu karakteristik kimia (kadar air, protein kasar, serat kasar, dan lemak kasar, dan abu,) dan karakteristik sensoris (warna, rasa, aroma, tekstur, keempukan, dan daya terima). Data karakteristik kimia dianalisis dengan menggunakan analisis variansi dengan Rancangan Acak Lengkap pola searah. Perbedaan rerata diuji dengan *Duncan's New Multiple Ranges Test*. Data karakteristik sensoris diujidengan analisis statistik non parametrik dengan uji hedonik Kruskal Wallis. Hasil analisis statistikmenunjukkan bahwa penambahan bakteri asam laktat, nitrit,dan penambahan kombinasi keduanya mempengaruhi kadar air dan kadar abu sosis fermentasi daging ayam broiler ( $P < 0,05$ ) dan tidak mempengaruhi kadar protein serta lemaknya, sedangkan karakteristik sensoris warna, rasa, dan aroma sosis menunjukkan pengaruh yang nyata pada ketiga perlakuan. Penambahan nitrit memperoleh skor sensoris tertinggi untuk setiap parameter.

(Kata kunci:Sosis fermentasi, Bakteri asam laktat, Nitrit, Karakteristik kimia, Karakteristik sensoris)

# **EFFECT OF ADDITION OF NITRITE, LACTIC ACID BACTERIA, AND COMBINATION OF BOTH ON CHEMICAL AND SENSORY CHARACTERISTICS OF FERMENTED BROILER CHICKEN SAUSAGE**

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## **ABSTRACT**

This study aims to determine the effect of addition of nitrite, lactic acid bacteria, and the combination of both on chemical and sensory characteristics of fermented chicken sausage. Fermented sausage used chicken as raw materials. This study was divided into three treatments, those were addition of nitrite, addition of lactic acid bacteria and addition both. The bacteria used in the sausage fermentation wasan isolated bacteria from the chicken meat. Nitrite was used as an inhibitors of the growth of pathogenic microorganisms that caused of damage of sausage quality and disrupted the fermentation process. The variables tested were chemical characteristics (moisture, protein, fat, and ash content) and sensory characteristics (color, flavor, aroma, texture, elasticity, and acceptability). The data of chemical characteristics were analyzed by using a one-way classification of completely randomized design. Mean differences were tested by Duncan's New Multiple Ranges Test. The data of sensory characteristics were tested by non-parametric analysis with Kruskal-Wallis Hedonic Test. The results of statistic analysis showed that the addition of lactic acid bacteria, nitrite or the addition of combination both affectedsignificantly ( $P < 0,05$ ) on water content and ash content of fermented sausage and did not affect significantly on protein and fat content. The sensory characteristics of color, flavor, and aroma of sausage showed significant effect ( $P < 0,05$ ) at the treatments and the addition of nitrite obtained the highest sensory score for each parameter.

(Keywords: Fermented sausage, Lactic acid bacteria, Nitrite, Chemical characteristic, Sensory characteristic)