

**KARAKTERISTIK FISIK, ORGANOLEPTIK,
DAN POTENSI ANTIHIPERTENSI
SOSIS DAGING AYAM *BROILER*
DENGAN SUBSTITUSI TEMPE**

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INTISARI

Penelitian ini bertujuan untuk mengetahui karakteristik fisik, organoleptik, dan potensi antihipertensi sosis daging ayam *broiler* dengan substitusi tempe. Penelitian dilakukan dengan menggunakan lima level substitusi tempe (0, 5, 10, 15, dan 20%). Data yang diambil adalah karakteristik fisik (keempukan, daya ikat air, pH), karakteristik organoleptik (warna, rasa, tekstur, kekenyalan, daya terima), dan potensi antihipertensi. Data karakteristik fisik dianalisis dengan analisis variansi pola searah dan data karakteristik organoleptik dianalisis dengan analisis non-parametrik dengan uji *Hedonik Kruskal Wallis*. Perbedaan rerata diuji dengan *Duncan's New Multiple Range Test*. Data potensi antihipertensi dianalisis dengan analisis deskriptif kualitatif. Hasil penelitian menunjukkan substitusi tempe menurunkan nilai pH ($P < 0,05$), tetapi tidak mempengaruhi nilai keempukan dan DIA. Substitusi tempe menurunkan skor rasa, tekstur, kekenyalan, dan daya terima ($P < 0,01$), tetapi tidak mempengaruhi skor warna. Substitusi tempe meningkatkan konsentrasi protein yang dibutuhkan untuk menghambat 50% aktivitas *angiotensin I converting enzyme* secara *in vitro*. Substitusi tempe tidak mengubah karakteristik fisik, tetapi menurunkan karakteristik organoleptik. Sosis daging ayam *broiler* yang disubstitusi tempe mempunyai potensi sebagai agensia antihipertensi.

(Kata kunci : Sosis ayam, Tempe, Karakteristik fisik, Organoleptik, Potensi antihipertensi)

**PHYSICAL AND ORGANOLEPTICAL CHARACTERISTICS
AND ANTIHYPERTENSIVE POTENTIAL
OF CHICKEN SAUSAGE
WITH *TEMPE* SUBSTITUTION**

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ABSTRACT

The experiment was conducted to investigate the physical and organoleptical characteristics and antihypertensive potential of chicken sausage with *tempe* substitution. The experiment used five levels of *tempe* substitution (0%, 5%, 10%, 15%, and 20%). The data measured were physical characteristics (tenderness, water-holding capacity, pH), organoleptical characteristics (color, flavor, texture, toughness, acceptability), and antihypertensive potential. The data of physical characteristics were analyzed statistically by analysis of variance and the data of organoleptical characteristics were analyzed statistically by nonparametric analysis with Hedonik Kruskal Wallis Test. Duncan's New Multiple Range Test was used to determine the statistical significance among the means. The data antihypertensive potential was analyzed qualitatively and descriptively. The results showed *tempe* substitution decreased significantly pH value ($P < 0.05$), but it did not affect tenderness and WHC. *Tempe* substitution decreased significantly flavor, texture, toughness, and acceptability scores ($P < 0.01$), but it did not affect color score. *Tempe* substitution increased protein concentration needed to inhibit 50% angiotensin I converting enzyme activity by in vitro assay. *Tempe* substitution did not affect physical characteristics, but decreased organoleptical characteristics of chicken sausage. Chicken sausage which was substituted *tempe* had a potential as antihypertensive agent.

(Keywords : Chicken sausage, *Tempe*, Physical, Organoleptical characteristics, Antihypertensive potential)