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**Analisis Organoleptik dan Identifikasi Cemaran Bakteri Escherichia coli pada Sosis Ayam di Beberapa
Pasar di Kota Yogyakarta**
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ANALISIS ORGANOLEPTIK DAN IDENTIFIKASI CEMARAN BAKTERI *Escherichia coli* PADA SOSIS AYAM DI BEBERAPA PASAR DI KOTA YOGYAKARTA

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INTISARI

Salah satu produk olahan pangan asal hewan yang banyak dikonsumsi oleh masyarakat adalah sosis ayam. Kualitas sosis dipengaruhi oleh bahan baku, proses pengolahan, penanganan, cara penyimpanan, dan distribusi, yang apabila tidak dilakukan secara higienis, maka dapat berisiko terjadinya kontaminasi dan membahayakan kesehatan konsumen. Kontaminasi dalam pangan dapat disebabkan oleh cemaran mikroba diantaranya bakteri *Escherichia coli* (*E. coli*). Tujuan dari penulisan Tugas Akhir ini untuk menganalisis kualitas dan mengidentifikasi tingkat cemaran bakteri *E. coli* pada produk sosis ayam yang diperjualbelikan di beberapa pasar di Kota Yogyakarta. Metode pengambilan sampel dilakukan secara *purposive sampling* dari dua pasar tradisional dan tujuh pasar revitalisasi di wilayah Kota Yogyakarta dengan total 18 sampel sosis ayam. Metode pengujian yang dilakukan yaitu uji organoleptik, isolasi dan identifikasi *E. coli*, serta penilaian penerapan higiene sanitasi (lokasi, personal, dan sampel) terhadap cemaran *E. coli* menggunakan uji statistik *Chi-Square* dan *Fisher's Exact Test*. Hasil uji organoleptik menunjukkan rata-rata parameter warna sosis kurang cemerlang/putih keabu-abuan, tetapi cukup menarik (3,3±1,0); aroma sosis cukup sedap khas sosis (3,1±0,7); tekstur sosis cukup padat dan kompak (3,3±0,9); rasa sosis cukup enak/cukup gurih khas sosis ayam (3,1±0,9); dan penerimaan keseluruhan cukup suka (3,2±0,8). Hasil isolasi dan identifikasi menunjukkan 12 dari 18 sampel (67%) terduga terkontaminasi bakteri *E. coli* dengan pertumbuhan koloni berwarna hitam atau gelap pada bagian pusat koloni, dengan atau tanpa koloni berwarna hijau metalik pada media EMBA. Hasil analisis penerapan higiene sanitasi terhadap cemaran *E. coli* menunjukkan hasil tidak ditemukan hubungan yang signifikan antara higiene lokasi (p=0,615); higiene personal (p=0,344); dan higiene sampel (p=0,344) terhadap cemaran *E.* coli. Penerapan higiene sanitasi dan proses penanganan sosis ayam yang diperjualbelikan perlu ditingkatkan secara optimal guna memastikan keamanan produk dan menurunkan tingkat kontaminasi bakteri.

Kata kunci: *Escherichia coli*, higiene sanitasi, kontaminasi, kualitas, sosis ayam

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ORGANOLEPTIC ANALYSIS AND IDENTIFICATION OF *Escherichia coli* BACTERIAL CONTAMINATION IN CHICKEN SAUSAGES FROM SEVERAL MARKETS IN YOGYAKARTA CITY

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ABSTRACT

One of the animal derived food products widely consumed by the public is chicken sausage. The quality of chicken sausage is influenced by raw materials, processing methods, handling practices, storage conditions, and distribution systems. If these factors are not managed higienically, they may increase the risk of contamination and endanger consumer health. Food contamination can be caused by various microbial contaminants, including the bacterium *Escherichia coli* (*E. coli*). The puspose of this final project was to analyze the quality and identify the level of *E. coli* bacterial contamination in chicken sausages products sold in several markets in Yogyakarta City. The sampling method used was purposive sampling from two traditional markets and seven revitalized markets in the Yogyakarta City area, with a total of 18 chicken sausage samples. The testing methods conducted included organoleptic testing, isolation and identification of *E.coli*, as well as the assessment of hygiene and sanitation practices (location hygiene, personal hygiene, and sample hygiene) in relation to *E. coli* contamination using statistical analysis Chi-Square and Fisher's Exact test. The results of the organoleptic test showed that the average score for sausage color was less bright/grayish white but still fairly attractive (3.3±1.0); the smell was fairly pleasant and typical of sausage (3.1±0.7); the texture was fairly firm and compact (3.3±0.9); the taste was fairly good and savory, typical of chicken sausage (3.1±0.9); and the overall acceptance was moderately liked (3.2±0.8). The results of isolation and identification showed that 12 out of 18 samples (66.7%) were suspected to be contaminated with *E. coli*, characterized by colony growth showing black or dark coloration in the center of the colony, with or without metallic green colonies on EMBA medium. The result of the analysis of hygiene and sanitation practice in relation to *E. coli* contamination showed that there were no significant association between location hygiene ($p = 0.615$); personal hygiene ($p = 0.344$); and sample hygiene ($p = 0.344$) occurrence of *E. coli* contamination. Therefore, the implementation of hygiene and sanitation practices as well as the handling process of chicken sausages sold in markets needs to be improved optimally to ensure product safety and reduce the level of bacterial contamination.

Keywords: *Escherichia coli*, hygiene sanitation, contamination, quality, chicken sausage