

**ANALISIS KUALITAS DAN IDENTIFIKASI CEMARAN BAKTERI
Escherichia coli PADA DAGING AYAM DI PASAR KOLOMBO,
KECAMATAN DEPOK, KABUPATEN SLEMAN**

Oleh:

TSALISA PRABA KUSUMA
21/472941/SV/18785

INTISARI

Daging ayam merupakan salah satu sumber protein hewani yang tinggi kandungan air, vitamin, dan mineral sehingga mudah mengalami kerusakan akibat mikroba. Cemaran mikroba pada daging ayam dapat menyebabkan keracunan makanan yang dapat diakibatkan oleh bakteri *Escherichia coli* (*E. coli*). Penyusunan Tugas Akhir ini bertujuan untuk menganalisis kualitas, total mikroba, dan cemaran bakteri *E. coli* pada daging ayam sehingga dapat diketahui kualitas serta kelayakan konsumsi daging ayam. Metode pengambilan sampel dilakukan secara *purposive sampling* dengan total 20 sampel daging ayam dari tiga area pasar (luar, dalam, dan los daging) di Pasar Kolombo, Kecamatan Depok, Kabupaten Sleman. Pengujian dilakukan dengan metode uji organoleptik, uji *Total Plate Count* (TPC) yang mengacu pada SNI 2897:2008, dan identifikasi bakteri *E. coli* pada media *Eosin Methylene Blue Agar* (EMBA) serta pewarnaan Gram. Hasil pengujian organoleptik dan identifikasi bakteri *E. coli* dianalisis secara kualitatif sedangkan hasil uji TPC dianalisis secara kuantitatif, kemudian diolah secara deskriptif dan dibandingkan dengan SNI 3924:2009. Hasil uji organoleptik pada ketiga area pasar menunjukkan rata-rata nilai yang sama terhadap seluruh parameter, yaitu aroma khas daging dengan aroma menyimpang (skor 3), warna merah pucat (skor 4), tekstur daging berserat halus (skor 4), serta keempukan daging empuk (skor 4). Hasil uji TPC menunjukkan bahwa 19 dari 20 sampel daging ayam (95%) tidak memenuhi BMCM menurut SNI 3924:2009 dengan nilai cemaran tertinggi yaitu $31,3 \times 10^6$ CFU/g sedangkan 1 dari 20 sampel (5%) memenuhi BMCM dengan nilai $0,4 \times 10^6$ CFU/g. Identifikasi cemaran bakteri *E. coli* menunjukkan bahwa 12 dari 20 (60%) sampel terkontaminasi bakteri *E. coli* sedangkan 8 dari 20 (40%) sampel tidak tercemar bakteri *E. coli*. Higiene dan sanitasi pada pedagang daging ayam perlu diperhatikan untuk mencegah timbulnya kontaminasi bakteri.

Kata kunci: daging ayam, *Escherichia coli*, kualitas, pasar tradisional, Sleman

**QUALITY ANALYSIS AND IDENTIFICATION OF *Escherichia coli*
BACTERIA IN CHICKEN MEAT AT KOLOMBO MARKET, DEPOK
DISTRICT, SLEMAN REGENCY**

By:

TSALISA PRABA KUSUMA
21/472941/SV/18785

ABSTRACT

Chicken meat is a source of animal protein that is high in water content, vitamins, and minerals so microbe easily damaged it. Microbial contamination in chicken meat can cause food poisoning which caused by *Escherichia coli* (*E. coli*). The aims of this Final Project were to analyze the quality, total microbes, and *E. coli* contamination in chicken meat so that the quality and feasibility of chicken meat consumption can be known. The sampling method was purposive sampling with a total of 20 chicken meat samples from three market areas (outside, inside, and inside the stall) in Colombo Market, Depok District, Sleman Regency. Tests were conducted using organoleptic test, Total Plate Count (TPC) test referring to SNI 2897:2008, and identification of *E. coli* on Eosin Methylene Blue Agar (EMBA) media and Gram staining. The results of organoleptic testing and identification of *E. coli* were analyzed qualitatively while the TPC test results were analyzed quantitatively, then processed descriptively with discussion and conclusions compared with SNI 3924:2009. The results of the organoleptic in the three market areas showed the same average score for all parameters, namely the aroma of typical meat with deviant aroma (score 3), pale red color (score 4), fine fibrous meat texture (score 4), and tender meat (score 4). TPC test results showed that 19 out of 20 (95%) chicken meat samples did not meet the BMCM with the highest contamination value of 31.3×10^6 CFU/g, while 1 out of 20 (5%) samples meets the BMCM with a value of 0.4×10^6 CFU/g. Identification of *E. coli* showed that 12 out of 20 (60%) samples were contaminated with *E. coli*, while 8 out of 20 (40%) samples were not contaminated with *E. coli*. Hygiene and sanitation in chicken meat traders need to be considered to prevent bacterial contamination.

Keywords: chicken meat, *Escherichia coli*, quality, traditional market, Sleman