

ABSTRAK

Latar belakang, daging sapi banyak didistribusikan di pasar tradisional dengan keadaan terbuka yang diletakkan bebas di atas meja tanpa memperhatikan sanitasi dan higiene yang menyebabkan adanya kontaminasi bakteri pada daging. Jenis bakteri yang sering mengkontaminasi daging sapi adalah bakteri *Escherichia coli*, *Salmonella sp.*, dan *Staphylococcus*. Tujuan dari penelitian ini adalah untuk mengetahui hubungan tingkat cemaran bakteri dengan faktor cemaran pada daging sapi yang dijual di Pasar Tradisional Kota Denpasar.

Tingkat cemaran bakteri pada daging sapi ditentukan dengan uji Angka Lempeng Total (ALT), identifikasi bakteri *Escherichia coli* dan *Salmonella sp.*, sedangkan faktor cemaran yang dianalisis terdiri dari faktor lingkungan, peralatan, dan pekerja. Metode penelitian ini adalah penelitian observasional dengan pendekatan *cross-sectional* dengan teknik *purposive sampling*. Total sampel dalam penelitian adalah 31 sampel bagian lula (*tenderloin*) daging sapi. Pemeriksaan sampel dilakukan di Laboratorium Kesehatan Masyarakat Panureksa Utama dan Laboratorium Bakteriologi Jurusan Teknologi Laboratorium Medis Poltekkes Kemenkes Surabaya selama bulan Maret 2022.

Hasil penelitian yang diperoleh yaitu uji Angka Lempeng Total (ALT) didapatkan 21 sampel (67,7%) tidak memenuhi syarat, identifikasi bakteri *Escherichia coli* didapatkan 7 sampel (22,6%) positif tercemar bakteri *Escherichia coli*, identifikasi bakteri *Salmonella sp.* didapatkan 14 sampel (45,2%) positif tercemar bakteri *Salmonella sp.*, serta hasil uji statistik dengan uji *fisher's exact* menunjukkan bahwa terdapat hubungan antara ALT, *Escherichia coli*, dan *Salmonella sp.* dengan faktor lingkungan, peralatan, dan pekerja. Hasil penelitian ini dapat disimpulkan bahwa terdapat hubungan antara tingkat cemaran bakteri dengan faktor cemaran pada daging sapi yang dijual di Pasar Tradisional Kota Denpasar.

Kata kunci: Daging Sapi, Angka Lempeng Total (ALT), *Escherichia coli*, *Salmonella sp.*, Faktor Cemaran

ABSTRACT

Background, beef is widely distributed in traditional markets in an open condition that is placed freely on the table without paying attention to sanitation and hygiene which causes bacterial contamination of the meat. The types of bacteria that often contaminate beef are *Escherichia coli*, *Salmonella sp.*, and *Staphylococcus* bacteria. Purpose, this research aims to the correlation between bacterial contamination levels and contamination factors on beef sold in the Denpasar Traditional Market.

The level of bacterial contamination on beef was determined by the Total Plate Count (TPC) test, identification of *Escherichia coli* and *Salmonella sp.* bacteria, while the contamination factors analyzed were environmental factors, equipment, and workers. Method, the type of this research an observational study with a cross-sectional approach with purposive sampling technique. The total sample in this research were 31 samples of beef tenderloin. Sample test was conducted in Panureksa Utama Public Health Laboratory and Bacteriology Laboratory, Department of Medical Laboratory Technology Polytechnic Health Ministry of Health Surabaya during March 2022.

The results of this research are Total Plate Count (TPC) test was found that 21 samples (67,7%) unqualified, identification of *Escherichia coli* bacteria was found that 7 samples (22,6%) positive for *Escherichia coli*, identification of *Salmonella sp.* bacteria was found that 14 samples (45,2%) positive for *Salmonella sp.*, and the results of statistical tests using fisher's exact test show that there is a correlation between ALT, *Escherichia coli*, and *Salmonella sp.* with environmental factors, equipment, and worker. The results of this research can be concluded that there is a correlation between bacterial contamination and contamination factors in beef sold at the Denpasar Traditional Market.

Keywords: Beef, Total Plate Count (TPC), *Escherichia coli*, *Salmonella sp.*, Contamination Factor