

## ABSTRACT

**Background :** Contaminated food is food that is contaminated by substances or agents that are harmful to human health. Food contamination occurs during the production, processing, storage, and serving of food. Canteens that are not managed hygienically are at high risk of becoming a breeding ground for microbes or germs, many found in foods that contain high levels of water and protein such as meat, fish, and eggs. Contaminated in food allows pathogens such as *Enterobacter*, *Shigella*, *Proteus*, *Salmonella*, and *Escherichia*. This study aims to identify the presence of *Salmonella sp* and *Shigella sp* contaminated in food sold in school canteens in Telanaipura District, Jambi City.

**Method :** This study was conducted descriptively with a qualitative laboratory approach. Sampling using the Cluster Random Sampling method was taken from several school canteens in Telanaipura District, Jambi City, which were tested for Total Plate Count (TPC) using Plate Count Agar (PCA) media and identification tests for *Salmonella sp* and *Shigella sp* using *Salmonella Shigella Agar (SSA)* media.

**Results :** Of the 22 Total Plate Count (TPC) test samples that have been studied, bacterial contamination was found in 6 food samples, and 3 samples were found to be positive for *Shigella sp* bacteria, while *Salmonella sp* bacteria were not found in all food samples studied.

**Conclusion :** Contaminated food is still found in several school canteens, from uncontaminated food *Shigella sp* bacteria can be obtained and in this study no *Salmonella sp* bacteria were found.

**Keywords :** food-borne disease, Plate Count Agar (PCA), *Salmonella Shigella Agar (SSA)*, *Salmonella sp*, *Shigella sp*.

## ABSTRAK

**Latar Belakang :** Makanan tercemar merupakan makanan yang terkontaminasi oleh zat atau agen yang berbahaya bagi kesehatan manusia. Pencemaran makanan terjadi selama proses produksi, pengolahan, penyimpanan, dan penyajian makanan. Kantin yang tidak dikelola secara higienis sangat beresiko menjadi tempat berkembang biak mikroba atau kuman, banyak ditemukan pada makanan yang mengandung kadar air dan protein yang tinggi seperti pada daging, ikan, dan telur. Kontaminasi pada makanan memungkinkan patogen seperti *Enterobacter*, *Shigella*, *Proteus*, *Salmonella*, dan *Escherichia*. Penelitian ini bertujuan untuk mengidentifikasi adanya cemaran *Salmonella sp* dan *Shigella sp* pada makanan yang dijual di kantin sekolah kecamatan Telanaipura Kota Jambi.

**Metode :** Penelitian ini dilakukan secara deskriptif dengan pendekatan laboratorium kualitatif. Pengambilan sampel menggunakan metode *Cluster Random Sampling* yang diambil dari beberapa kantin sekolahan yang berada di kecamatan Telanaipura Kota Jambi, yang dilakukan uji *Total Plate Count* (TPC) menggunakan media *Plate Count Agar* (PCA) dan uji identifikasi *Salmonella sp* dan *Shigella sp* menggunakan media *Salmonella Shigella Agar* (SSA).

**Hasil :** Dari 22 sampel uji *Total Plate Count* (TPC) yang sudah diteliti, ditemukan adanya cemaran bakteri pada 6 sampel makanan, dan ditemukan 3 sampel positif bakteri *Shigella sp*, sedangkan bakteri *Salmonella sp* tidak ditemukan pada seluruh sampel makanan yang diteliti.

**Kesimpulan :** Masih ditemukan makanan yang tercemar di beberapa kantin sekolah, dari makanan yang tidak tercemar bisa didapatkan bakteri *Shigella sp* dan pada penelitian ini tidak ditemukan bakteri *Salmonella sp*.

**Kata Kunci :** *food borne disease*, *Plate Count Agar* (PCA), *Salmonella Shigella Agar* (SSA), *Salmonella sp*, *Shigella sp*.