Introduction

The widespread of extended-spectrum beta-lactamase bacteria in food chain has become a global food safety issue. The infections caused by ESBL producing E. coli included intra-abdominal abscesses, peritonitis, urinary tract infection (UTI) and more severe may lead to blood poisoning. Nowadays, vegetables served as convenient meals and has become a trend to take over the centre-stage of main dishes. However, raw vegetables were identified as the commodity group of the greatest concern from a microbiology safety perspective [1].

The current study was aimed to determine the prevalence rate of ESBL producing E. coli in raw vegetables and the antibiotic of the ESBL producing E. coli isolates.

Methods and Materials

1. Most Probable Number- Polymerase Chain Reaction (MPN- PCR)

The isolated ESBL producing E. coli were tested against the following antibiotics disc:
- Piperacillin/Tazobactam (110 µg)
- Meropenem (10 µg)
- Aztreonam (30 µg)
- Ciprofloxacin (5 µg)
- Cefotaxime (30 µg)
- Ceftriaxone (30 µg)
- Cefepime (30 µg)
- Ampicillin (10 µg)
- Amoxicillin/Clavulanic acid (30 µg)

Conclusions

- The high prevalence rate of ESBL producing E. coli in raw vegetables indicated that raw vegetables may act as a potential vehicle to transmit ESBL producing E. coli and ESBL genes to humans.
- The antibiotic resistance pattern of isolated ESBL producing E. coli showed 60% of the ESBL producing E. coli are multidrug resistant.

References