

**PREVALENCE AND ANTIBIOTIC SUSCEPTIBILITY OF  
*Escherichia coli* IN PROCESSED FOOD AT RETAIL  
LEVEL**

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**Final Year Project Report Submitted in  
Partial Fulfillment of the Requirements for the  
Degree of Bachelor of Science (Hons.) Biology  
in the Faculty of Applied Sciences  
Universiti Teknologi MARA**

**JULY 2017**

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## ABSTRACT

### **PREVALENCE AND ANTIBIOTIC SUSCEPTIBILITY OF *Escherichia coli* IN PROCESSED FOOD AT RETAIL LEVEL**

*Escherichia coli* is a Gram negative rod in family Enterobacteriaceae and most of *Escherichia coli* is harmless. In spite of that, human can be infected with pathogenic *Escherichia coli* strains through consumption of contaminated water and food with faeces or from cross-contamination with another food source. The aim of this study is to isolate and detect *Escherichia coli* from processed food at retail level and to determine the occurrence of antibiotic resistance of *Escherichia coli* by using disc diffusion method. In this study, it showed positive result of *Escherichia coli* from the three out of four samples obtained from supermarket and wet market. Furthermore, the multiple antibiotic resistance (MAR) index for antibiotic susceptibility result showed all positive *Escherichia coli* samples have high score which is greater than 0.2 to indicate that the pathogens were originated from the higher risk sources where antibiotics are often used. Bigger study on a bigger scale are recommended for a better understanding on the prevalence and antibiotic susceptibility of *Escherichia coli* in processed food at retail level.