



Cairo University
Faculty of Veterinary Medicine
Department of Microbiology



Detection and Characterization of *Escherichia coli* from Different Meat Sources

A Thesis Presented
By
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**For The Degree of
Master in Veterinary Medical Science
(Bacteriology, Immunology and Mycology)**

Under The Supervision Of

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

﴿ قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا

﴿ إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ

صَدَقَ اللَّهُ الْعَظِيمُ
الْآيَةُ (32) سُورَةُ الْبَقَرَةِ

Abstract

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In the present study 160 retail meats are examined for isolation of *E.coli* and the result confirmed biochemically and by using 16srRNA PCR which revealed that there were 55 *E.coli* isolates recovered from retail meat in percent 34.4% (55\160) with high occurrence in local meat 38.9 % (44\113) followed by Sudanese meat 29.6% (8\27) and low rate recovered from imported meat 15 % (3\20). Serotyping of recovered isolates revealed that there were high rate for *E.coli* O121: K64, O86: K61 , in percentage 18 % (10\55), 14.5 % (8\55) respectively . and low incidence of O119:K69 in percentage 3.6(2\55).molecular study of antibiotic genes by using PCR with specific primers revealed that there were 74.5 % (41\55) resistant to *teta* gene (tetracycline) while resistant to *erea* gene (erythromycin) were 67% (37\55) and the resistant to *dhfrV* gene (trimethoprim) were 9%(5\55) while resistant to *SulI* gene (sulphatrimethoxaole) were 21.8%(12\51)

Key words :(*E.coli*, meat ,antibiotic resistance)

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