

بسم الله الرحمن الرحيم

 $\infty\infty\infty$

تم رفع هذه الرسالة بواسطة / حسام الدين محمد مغربي

بقسم التوثيق الإلكتروني بمركز الشبكات وتكنولوجيا المعلومات دون أدنى مسئولية عن محتوى هذه الرسالة.

AIN SHAMS UNIVERSITY

Since 1992

Propries 1992

ملاحظات: لا يوجد





Bacteriological Studies on Ready to Eat

Meat

A thesis presented by

Abbas Rezk Abbas Mohammed Mansour

B. V. Sc., Tanta University (2001)

For the degree of Master of Veterinary Medicine (Microbiology)

Under supervision of

Prof. Dr. Saad Ahmed Attia

Professor of Microbiology Faculty of Veterinary Medicine Cairo University

Dr. Hamdy Mohammed Bakry Abdelhady

Assistant Professor of Meat Hygiene Faculty of Veterinary Medicine Cairo University

Approval Sheet

The examining committee approved Mr. Abbas Rezk Abbas Mohammed Mansour for the master degree in Veterinary Medicine (Microbiology) from Cairo University.

Examining and Judgment Committee

Prof. Dr. Khaled Mohamed Hassanein MohamedProfessor of Medical Microbiology and Immunology
Faculty of Medicine

Assiut University

Prof. Dr. Mahmoud El-Sayed Hashad

Professor and Head of the Microbiology Department Faculty of Veterinary Medicine - Cairo University

Prof. Dr. Saad Ahmed Attia

Professor Microbiology Faculty of Veterinary Medicine Cairo University M. Hushold

14/8/2022G





SUPERVISION SHEET

Bacteriological Studies on Ready to Eat

Meat

A thesis presented by

Abbas Rezk Abbas Mohammed Mansour

For the degree of Master of Veterinary Medicine (Bacteriology, Immunology & Mycology)

Under supervision of

Prof. Dr. Saad Ahmed Attia

Professor of Microbiology Faculty of Veterinary Medicine Cairo University

Dr. Hamdy Mohammed Bakry Abdelhady

Assistant Professor of Meat Hygiene Faculty of Veterinary Medicine Cairo University





Name: Abbas Rezk Abbas Mohammed Mansour

Nationality: Egyptian

Degree: Master of Veterinary Medicine

Specialization: Microbiology (Bacteriology, Immunology & Mycology)

Title of thesis "Bacteriological Studies on Ready to Eat Meat"

Under Supervision of:

Prof. Dr. Saad Ahmed Attia

Professor of Microbiology, Faculty of Veterinary Medicine, Cairo

University

Dr. Hamdy Mohammed Bakry Abdelhady

Assistant Professor of Meat Hygiene, Faculty of Veterinary Medicine

Cairo University

ABSTRACT

In this study, 350 random samples of retailed meat products representing ready to eat (RTE) meat products were tested bacteriologically for *S. aureus*, *E. coli* and *Salmonella* spp.. The examined samples included 50 of each of the following RTE meat: beef kofta, meat shawerma, chicken shawerma, pasterma, beef luncheon, sausage and chicken luncheon, collected from different supermarkets at Giza, Egypt.

High levels of bacterial contamination were detected of *S. aureus*, *E. coli* and *Salmonella* spp. with incidence rates of 58%, 20 % and 8 %, respectively. Pasterma samples were amaizingly contaminated with incidence rates of the three species of bacteria being 64%, 24% and 24%, respectively.

In contrast, *E. coli* was detected in 12% of the beef luncheon samples while *S. aureus* and salmonellae were not isolated. The same finding was almost met with chicken luncheon where *E. coli* was the only detected bacteria in 14% of the samples.

Kofta showed the highest level of salmonella incidence (8%).

Key Words: *S. aureus, E. coli, Salmonella* spp., kofta, shawerma, pasterma, beef luncheon, ready to eat meat.

Acknowledgment

First, I thank my lord, **Allah** for giving me all the power and patience to finish this work.

I appreciate **Prof. Or. Saad Ahmed Attia** for his fruitful supervision and continuous support and encouragement.

In addition, my sincere gratitude is offered to **Dr. Hamdy Mohammed Bakry**, for his guidance and help to achieve this work.

I would like to thank **Prof. Dr. Mahmoud Hashad** for his endless support to get this thesis defended.

The support offered by **Prof. Dr. Hussein Ali Hussein** is highly respected and I will always remember his wise approach as a vice dean.

I am really indented for all members of the Microbiology Department with whom I felt like a family.

Dedication

To:

My great mother

My lovely wife

My daughters, Yara and Rana

My son, Youssef

My late father



Thank you

LIST OF CONTENTS

Title	Page No.
Chapter (1): INTRODUCTION	1
Chapter (2): REVIEW OF LITERATURE	5
Chapter (3): PUBLISHED PAPER	23
3.1. Bacteriological Studies on Ready-to Eat Meat Products Vended in Different Shops at Giza Governorate	23
Chapter (4): DISCUSSION	42
Chapter (5): CONCLUSION	48
Chapter (6): SUMMARY	49
Chapter (7): REFERENCES	51
Chapter (8): ARABIC SUMMARY	1