شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار
في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of 15-25- c and relative humidity 20-40%

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التوثيق الالكتروني والميكروفيلم

بعض الوثائق الاصلية تالفة

بالرسالة صفحات

لم ترد بالاصل

259
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Cairo University
Faculty of Veterinary Medicine
Department of Food Hygiene and Control

Quality Of Duck, Pigeon, Rabbit And Turkey Carcasses

Thesis Presented By

Salwa Ragab Soliman Hegazy

(M.V. Sc., Cairo University, 1999)

For the degree of

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Hygiene and Control of Meat and their Products

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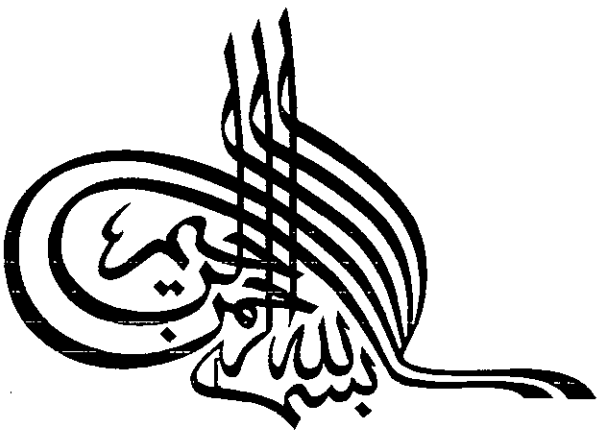
(2003)



وَاتَّقُوا اللَّهَ وَيُعَلِّمُكُمُ اللَّهُ

وَاللَّهُ بِكُلِّ شَيْءٍ عَلِيمٌ

البقرة (٢٨٢)

جامعة القاهرة
كلية الطب البيطري
قسم الرقابة الصحية على الأغذية

بسم الله الرحمن الرحيم

قرار لجنة الحكم و المناقشة

قامت اللجنة بفحص الرسالة ووجدت أنها قيمة إذ اشتملت علي بحوث هادفة و تناولت موضوعات لها أهميتها من الناحية الصحية و التطبيقية.

لذلك

قررت لجنة الحكم و المناقشة ترشيح السيدة ط ب/ **سلوي رجب سليمان حجازي** للحصول علي درجة دكتوراه الفلسفة في العلوم الطبية البيطرية (الرقابة الصحية على اللحوم ومنتجاتها)

أعضاء اللجنة

أ. د / علاء الدين محمد مرشدي
أستاذ الرقابة الصحية على اللحوم ومنتجاتها
و رئيس قسم الرقابة الصحية على الأغذية
كلية الطب البيطري- جامعة الزقازيق

أ. د/ أنور مصطفي درويش
أستاذ الرقابة الصحية على اللحوم
ومنتجاتها بالكلية

أ. د / السيد إبراهيم محمد المسلمي
أستاذ الرقابة الصحية على اللحوم
ومنتجاتها بالكلية
والمشرف علي الرسالة

أ. د / آمال محمد عبد العزيز الشريف
أستاذ الرقابة الصحية على اللحوم
ومنتجاتها بالكلية
والمشرف علي الرسالة

Dedicated to

My

Father, Mother,

Essam, Sameh, Ahmed,

Rawan & Rada

Shahd

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The prayful thanks at first to our **Allah** *who gave me every thing I have.*

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CONTENTS

LIST OF ABBREVIATION

APC	Aerobic plate count
ASF	Aerobic spore formers
C	Control
CFU	Colony forming unit
Entero	Enterobacteriaceae count
g	Gram
L	Lactic acid 1% for 2 min
L+S	Sorbic acid 250 ppm + Lactic acid 1% for 2 min
L1	Lactic acid 2% for 2 min
n	Number of trials
P	Potassium sorbate 5% for 3 min
P1	Potassium sorbate 5% for 5 min
S	Sorbic acid 500 ppm for 30 sec
S1	Sorbic acid 500 ppm for 1 min

INTRODUCTION

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The modern tends towards healthier eating habits with people turning a way from the more traditional red meat to poultry meat.

Poultry can be defined as those species of birds that render economic service to man and reproduce freely under his care. The term poultry usually refers to domestic chickens, turkeys, ducks, gees and other certain birds whether they are alive or dressed **(Kekeocha, 1995).**

Poultry meat constitutes an excellent source of high quality animal protein for feeding infants, young children, adults and convalescents. Because of its high meat yield, low shrinkage during cooking, ease of cooking and serving, and low coast, it fits well into the menu for food service **(Henrickson, 1978).**

In Egypt, poultry meat has a considerable sharing in consumer's diets for its competitive price with that of other meats. It is worth-mentioning that the production of turkey, ducks, rabbits and other poultry has been expanded in recent years **(Jorden &Pattison, 1996 and Connor& Schiek, 1997).**

Duck meat considers being a great source of protein and it is more palatable due to its high fat content **(Brahma *et al.*, 1980)**. Also it has a desirable dark meat color, which is of great nutritional value, as its raw breast muscle contain about 21% protein which increased to be greater than or equal to 33% protein after cooking **(Fedell, 1980).**

Pigeon meat is generally fatty in nature it has a high energy value and contain all the proportion amount of essential amino acids which were required by the human body. It is excellent sources for vitamins and minerals, particularly B12, B2, Calcium, Phosphorus and Iron. The nutritive value of pigeon protein is rather good **(El-Sayed *et al.*, 1980).**

Rabbit meat could provide a good source of much needed protein in the world, (**Casady *et al.*, 1966**). Rabbit meat is higher in protein (20%), lower in calories (1.75 kcal/kg) and fat content (10%) than most other meats (**USDA, 1973**).

Turkey meat could be a relevant for beef meat especially for reasons that capitals required for turkey meat production is still lower and the operation is less risk than those with red meat production .

Duck, pigeon, rabbit and turkey meat are quick and easy to prepare and serve and have a desirable nutritional properties, they are the sources of both saturated and unsaturated fatty acid. The fat contains essential fatty acid and the protein is a good source of essential amino acids. The most fibers are tender easy to chew or grind, easy to digest and their flavor has mild and blend well with seasoning and other food.

Raw duck, pigeon, rabbit and turkey meats are frequently contaminated by food borne pathogens (e.g. *Salmonella, S. aureus, Clostridium perfringens, Campylobacter jejuni*, **ICMSF, 1980**).

Disease surveillance reports frequently identify poultry as vehicles in outbreaks of salmonellosis, staphylococcal food poisoning, *C. perfringens* and other enteric illnesses **(Bryan, 1980; Hepner, 1980; Horwitz and Gangarosa, 1976; FAO/WHO, 1979)**.

Microorganisms are brought into processing plant in or on birds and spread to other carcasses and parts during the handling, processing and marketing operation until they appear in the consumer's kitchen. **(Mountney and Parkhur, 1995)**.

Although the microbiological quality is for a long time considered to be the basic hard work and criteria for the quality evaluation of food, professionals agreed the physical, chemical and sensory characteristics of