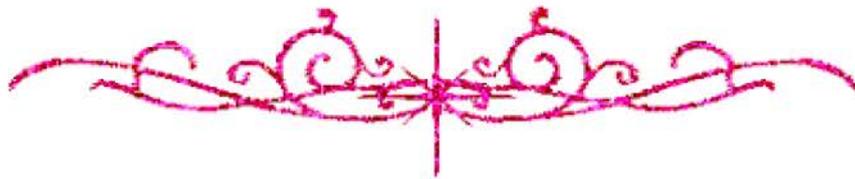


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شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



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جامعة عين شمس

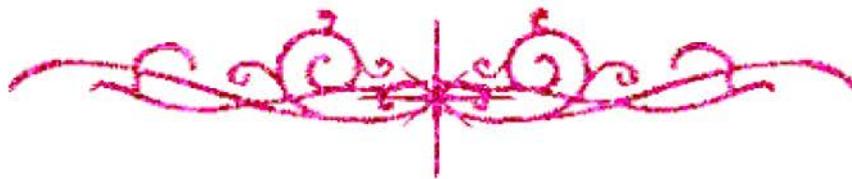
التوثيق الإلكتروني والميكروفيلم
قسم

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



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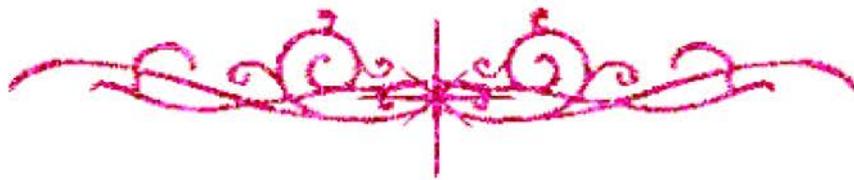


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بالرسالة صفحات

لم ترد بالأصل



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ENTEROPATHOGENS IN FISH AND ITS PRODUCTS

B 15948

Thesis Presented

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For

The Degree of Ph.D. in Veterinary Science

(MEAT HYGIENE)

To

Department of Food Hygiene

Faculty of Veterinary Medicine

Alexandria University

EGYPT

2003

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قامت لجنة الحكم و المناقشة بفحص هذه الرسالة ووجدت أن لها قيمة علمية حيث اشتملت على بحوث هادفة و مواضيع لها أهميتها فى مجال الرقابة الصحية على اللحوم و الأسماك و المنتجات الحيوانية كما قامت اللجنة بمناقشة الطالبة مناقشة مستفيضة و وجدت انها ملمة إماما كاملا بكل ما جاء بها.

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Introduction

1. INTRODUCTION

Fish is considered as an excellent source of protein of high biological value representing 12% of the total animal protein consumed in the world. Moreover, it contains high level of vitamins A and B complex (**Stansby, 1962**).

Fish constitute a part of protein in the diet of some people in Egypt, it may be consumed either in the fresh state or after preservation. The preservation of fish aims to keep it as near its natural state as possible for relatively long time and to produce miscellaneous product, which help in stabilizing fish prices. The preservation of fish may be by smoking, salting, pickling and/or freezing of some kinds of fish.

Health hazards related to consumption of contaminated fish and fish products with enteropathogens involved in food poisoning cases. Enteropathogenic bacteria include *Escherichia coli*, *Shigella* spp., *Bacillus cereus*, *Vibrio parahaemolyticus*, *Aeromonas* spp., *Vibrio cholerae*, *Clostridium perfringens*, *Salmonella* spp., *Yersinia enterocolitica* and *Listeria monocytogenes*. Preventive steps taken by such organizations as FAO/WHO and the Polish Ministry of Agriculture and Food are outlined (**Bykowski, 1998**).

The enteropathogens isolated from fish and fish products include different strains.