hossam maghraby

شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

hossam maghraby

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التوثيق الالكتروني والميكروفيلم

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شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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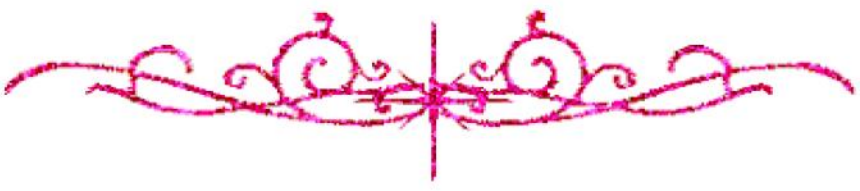

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بالرسالة صفحات لم ترد بالأصل

Prevelance of Campylobacter jejuni in fresh and frozen meat in Assiut governorate

THESIS

Submitted for fulfilment of
Master Degree In Microbiology

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C.fetus = Campylobacter fetus

C.jejuni = Campylobacter jejuni

Gr. = Gram

I.U. = international units

L. = litre

Min. = minutes

ml. = milli litre

Sp.= species

Subsp. = subspecies

INTRODUCTION

INTRODUCTION

Meat of animal origin is the main source of food protein in the human nutrition, the safety and wholesomeness of meat are the responsibility of the veterinary food hygienist all over the world.

It is now well known that *Campylobacter fetus subspecies jejuni* is a common cause of human enteric disease. Red meats are recognized as a vehicle of *Salmonellosis* but today, there is evidence to implicate a wide spread association between red meats and Campylobacter infection **Butzler and Skirrow (1979).**

The term Campylobacter (Greek name, compound of campy = curved, and bacter = rod = "curved rod"), was proposed by **Sebald and Veron (1963)** as a generic name for the *Microaerophilic vibrios*, on the bases that organisms differ in the growth, biochemical character, and in DNA base content between *True vibrios* on one hand , and *Related vibrios* and *Vibrio fetus* on the other hand. *True vibrios* are strictly aerobic, ferment selected sugars with acid production , can grow on 3 % sodium chloride, have G+C content of 47.2 mol %. On the other hand *Vibrio fetus* and *Retaled vibrio* are microaerophilic, neither ferment nor oxidize carbohydrates and have G+C content of 30-36 mol %. In light of these distinct differences a new genus named **"Campylobacter** " was proposed.

In recent years, reports from around the world have demonstrated beyond doubt the importance of *Campylobacter jejuni* was recognized as an enteric pathogen in human beings. There is also an increasing concern over the role of food animals as reservoirs of these organisms with the implication that Campylobacter diarrhoea is a zoonotic infection .However, the organism has been isolated from most common domestic animal species, so it has been inferred that direct transmission of the disease to human might occur via consumption of animal products especially raw or under cooked food of animal origin.**(Garcia et al. 1985 and Altekruse et al. 1994).**

Furthermore, a number of studies showed that *Campylobacter jejuni* is commonly found in healthy as well as diarrheatic animals and that the organism can be easly isolated from gall bladders and intestinal contents of pigs, sheeps and cattles **(Smibert 1965, Blaser et al. 1980 and Munrose et al. 1983).**