بسم الله الرحمن الرحيم

شبكة المعلومـــــات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

﴿ قـــسـم ﴾

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد اعدت دون آية تغيرات

يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15 – 20 مئوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of
15 – 25c and relative humidity 20-40 %

بعض الوثائق الأصلية تالفة

بالرسالة صفحات

لم ترد بالأصـــل

A Study on Some Food Pollution Under Different Environmental Conditions

By

Mahmoud Hellmy Moustafa Onsy

A THESIS

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Abstract

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This study is focussed on some Egyptian foods ,milk preserved in multilayer packaging materials, white cheese produced by micro filtration system, packaged in polystyrene boxes ,luncheon packaged in cellulose acetate and tin, corned beef packaged in polyethylene and tin. All samples kept under the same treatment for the validity period at 20°c and 5°c . The main pollutants were tyramine, histamine, tryptamine, cadaverine, putrescine, spermine, phenylethylamine and spermidine. It was concluded that there is strong correlation between storage time , temperature and the amount of biogenic amines. The interaction between the packaging material and the food involved was also investigated . The reaction between food component and the packaging materials was studied using FTIR . One of the problems that were studied carefully is to use a reliable method to assess the eight biogenic amines . This was overcomed by using the Scanner at 245 nm UV also the visual method was used . The migration of lead and arsenic in luncheon and corned beef in tin was investigated . It is concluded that there is a strong correlation between time and the amount of lead and arsenic and temperature. Also the possibilities of forming N-nitrosoamines were discussed due to the presence of biogenic amines . It is strongly recommended to minimize the amount of biogenic amines in our foods and reduce the shelf life of our preserved foods to the minimum to minimize the risk of forming biogenic amines and consequently reduce the chance of forming N-nitrosoamines.

Key Words : Egyptian foods, biogenic amines, packaging material, nitrosoamines, shelf life, FTIR.