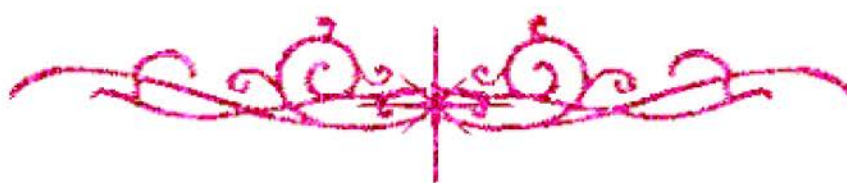


سامية محمد مصطفى



شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم



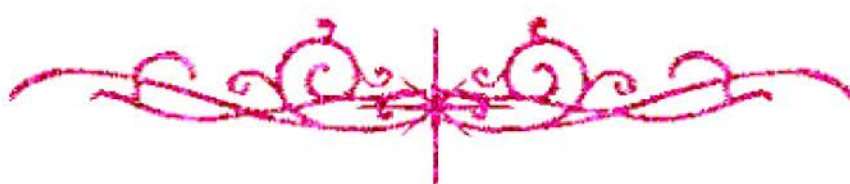
سامية محمد مصطفى



شبكة المعلومات الجامعية



شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



سامية محمد مصطفى



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

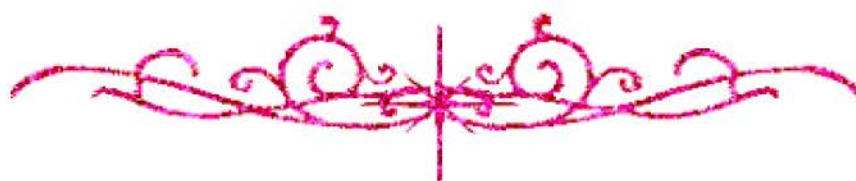
قسم

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



يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



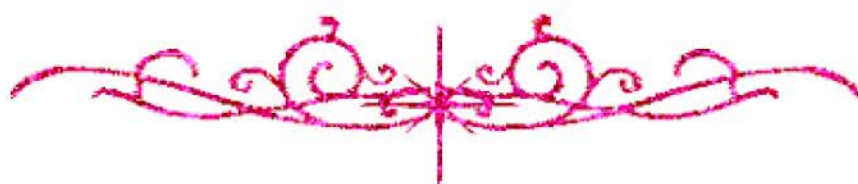
سامية محمد مصطفى



شبكة المعلومات الجامعية



بعض الوثائق الأصلية تالفة



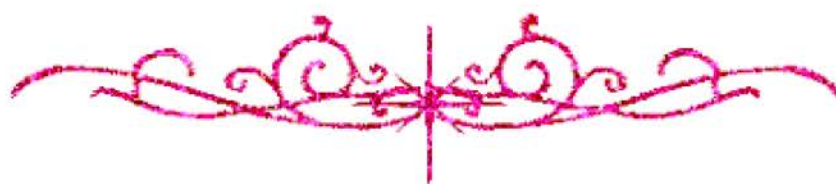
سامية محمد مصطفى



شبكة المعلومات الجامعية



بالرسالة صفحات لم ترد بالأصل



Application of (HACCP) System in hospital kitchens and the nutritive value of served meals

By

Osama Abdel-Aty Mohamed Rashwan

B.Sc. Agric., (Food Science and Technology)

Cairo University (1986)

M.Sc. Agric., (Food Science and Technology)

Cairo University (1996)

Thesis

Submitted in partial fulfillment of the Requirements

for the Degree of Ph.D.

In Food Science and Technology

Cairo University

Faculty of Agriculture

Food Science and Technology

2004

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Under the supervision of

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Faculty of Agriculture, Cairo University.

Prof. Dr. Mohamed Fahmi Saddik

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Cairo

Approval Sheet

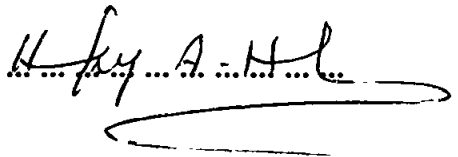
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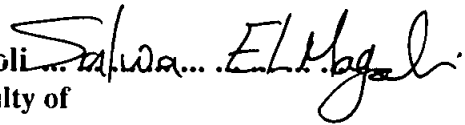
Prof. Dr: Hanafi Abd El-Aziz Hashim
Prof. of Food Science and Technology.
Faculty of Agriculture, Al Azhar University.



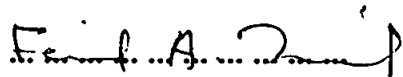
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(Committee in charge)

Date: / / 2004

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Name of Candidate: Osama Abdel-Aty Mohamed Rashwan Degree: Ph.D.
Title of Thesis: Application of (HACCP) system in hospital kitchens and
the nutritive value of served meals.
Supervisors: Dr. Salwa B. El-Magoli, Dr. Mohamed Fahmi Saddik,
Dr. Ferial Abd-Elaziz Ismail.
Department: Food Science and Technology
Branch: Approval / / 2004

ABSTRACT

HACCP is used as food safety assurance system. It has been used to assess the safety of the foods prepared at some catering activities in some hospitals. The results showed that the served items, vegetable salad was found to have microbial loads in the range of 1.0×10^4 to 2.5×10^6 CFU/gm, mold and yeast in the range of 1.4×10^4 to 4.6×10^7 CFU/gm and coliforms ranging from 2.3×10^1 to 5.0×10^3 organism/gm. Fecal coliforms for the vegetable salad at Damanhour hospital kitchen was found to be 0.9×10^1 organism/gm. Cooked rice was found to have microbial load in the range of 1.5×10^3 to 5.4×10^3 CFU/gm, mold and yeast in the range of 1.0×10^3 to 6.5×10^3 CFU/gm and coliforms group was found to be 1.3 organism/gm at Ahmed Maher hospital kitchen. Cooked macaroni was found to have microbial load in the range of 2.5×10^2 to 1.5×10^4 CFU/gm, mold and yeast in the range of 2.6×10^2 to 5.0×10^4 CFU/gm and coliforms group ranging from 3.5×10^1 to 9.0×10^1 organism/gm. Cooked chicken was found to have microbial load in the range of 2.7×10^2 to 6.0×10^2 CFU/gm, mold and yeast in the range of 1.5×10^2 to 7.0×10^2 CFU/gm and coliforms group was found to be 0.9×10^1 organism/gm at Damanhour hospital kitchen. Cooked pea, cooked squash and boiled meat were found to have microbial load 2.8×10^2 , 1.0×10^3 and 5.0×10^3 CFU/gm respectively, mold and yeast 4.8×10^3 , 2.1×10^3 and 4.5×10^3 CFU/gm respectively while cooked squash was found to be coliforms 3.0×10^1 organism/gm. Implementation of the HACCP system at the hospitals of the study led to on appreciable improvement in the hygienic quality of the served food, as could be shown from the microbiological quality of the different items after implementation,

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