

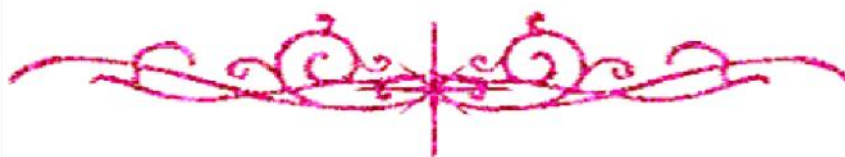
hossam maghraby



بسم الله الرحمن الرحيم

مركز الشبكات وتكنولوجيا المعلومات

قسم التوثيق الإلكتروني



hossam maghraby



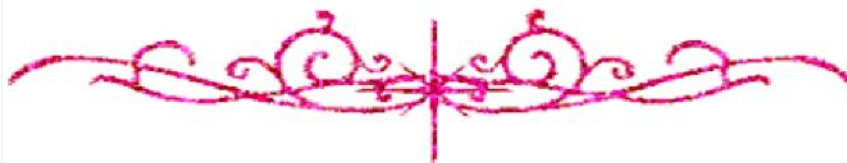
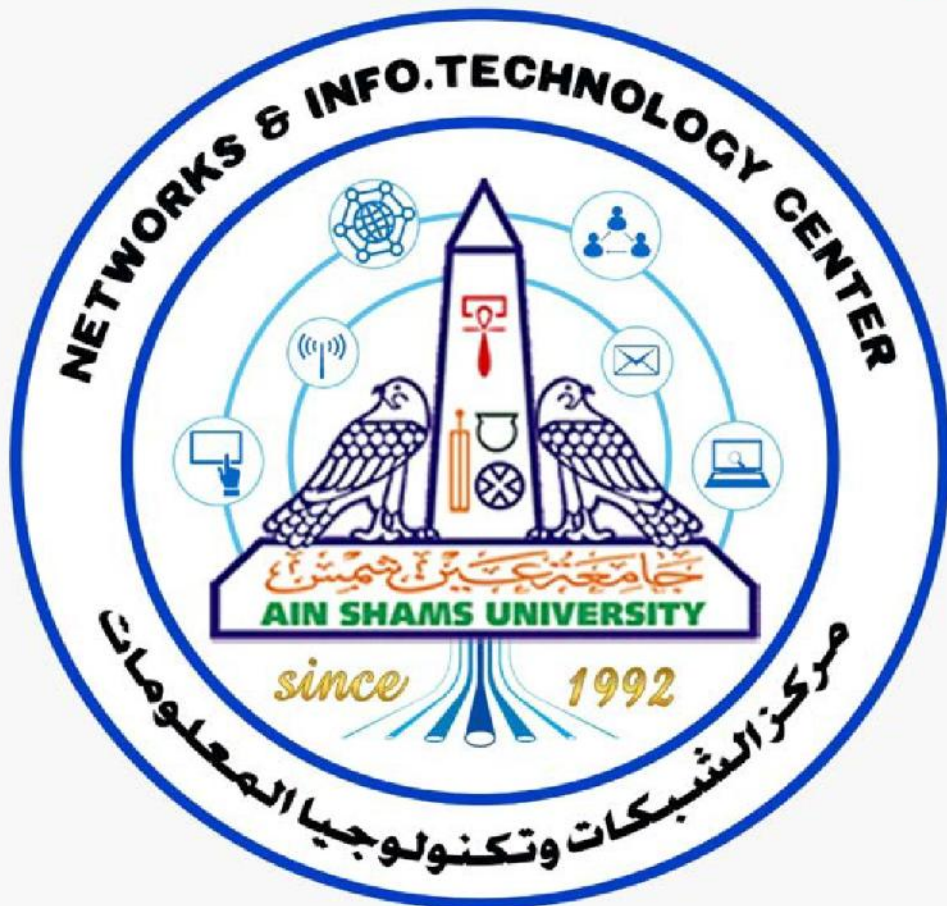
جامعة عين شمس

التوثيق الإلكتروني والميكرو فيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها

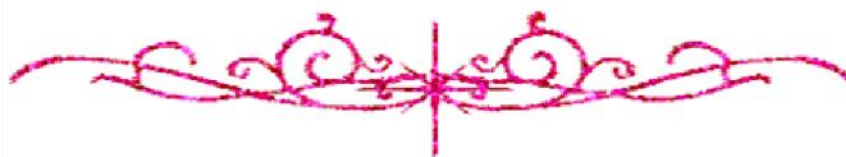
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



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**بعض الوثائق الأصلية تالفة
وبالرسالة صفحات لم ترد بالأصل**





Minufiya University
Faculty of Home Economics
Dept. of Nutrition and Food Science

B17826

STUDIES ON SOME FACTORS RELATED TO MAILLARD REACTION RETARDATION

BY

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Thesis

**Submitted in Partial Fulfillment of the
Requirements for the Degree of Master**

IN

Nutrition and Food Science

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2000



DEDICATION

TO MY FAMILY...
FATHER, MOTHER, AND SISTERS FOR THEIR
GREAT HELP.

TO *PROF. Dr. / AKILA SALEH HAMZA...*
FOR HERE SUPPORT AND ENCOURAGEMENT.

Wael.



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Degree: Master in Nutrition and Food Science

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IST OF ABBREVIATIONS

Abbreviation	Word
ARPs	Amadori rearrangement products
a_w	Water activity
BTG	Browned tryptophan-glucose mixture
°C	Degrees Celsius (Centigrade)
DPPH	1,1-diphenyl-2-picrylhydrazyl
DSH	3,4-dideoxy-4-sulphohexosulose
e.g.	For example
et al.	And others
g	Gram
HPLC	High performance liquid chromatography
hr	Hour
HTST	High temperature short time
IQ	2-amino-3-methylimidazo[4,5-f]quinoline
IR	Infrared spectrum
Kg	Kilogram
MeIQx	2-amino-3,8-dimethylimidazo[4,5-f]quinoxaline
mg	Milligram
min	Minute
ml	Milliliter
MRPs	Maillard reaction products
nm	Nanometer (10^{-9} m)
ORD	Optical resolution density
PER	Protein efficiency ratio
r	Correlation coefficient

TLC	Thin layer chromatography
TPN	Total parenteral nutrition
UHT	Ultra high temperature
UV	Ultraviolet
WL	Wave length
w/w	Both components measured by weight
μg	Microgram
μl	Microliter
XL	Xylose and lysine