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 of the Anticarcinogenic Effect of certain Flavonoidal Constituents of Some Local Egyptian Foods Against Dietary Carcinogens

Thesis

submitted to the High Institute of Public Health

in partial fulfillment of the requirements for the

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(*Nutrition*)

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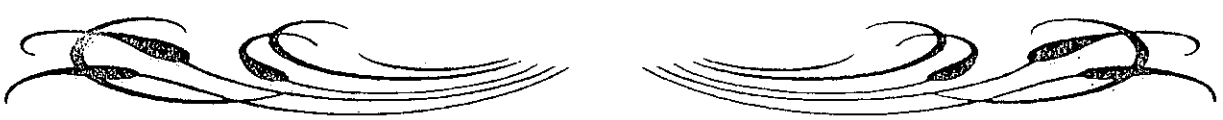

List of contents

List Of Tables

List of Figures

List of Abbreviations

PAHs	:	Polycyclic hydrocarbons
HAs	:	Heterocyclic amines
AFB_1	:	Aflatoxin B_1
Vit. A	:	Retinoids
Vit. E	:	Tocopherols
UV	:	Ultra violet
PC	:	Paper chromatography
R_f	:	Relative position on P.C.
Q	:	Quercetin
K	:	Kaempferol
M	:	Myricetin
Qmg	:	Quercetin monoglucoside
Qdg	:	Quercetin diglucoside
µgm	:	Microgram
mg/L	:	Milligram per litre
TAA	:	Total antioxidant activity
BHT	:	Propyl galate
TBHQ	:	t-butyl hydroquinone (BHA)
S.C.	:	Subcutaneous
LD_{50}	:	Lethal dose
I.V.	:	Intravenous
ppm	:	Part per million
I.C.	:	Inhibition concentration

γ-irradiation	:	Gamma rays
IQ	:	2-amino-3-methyl imidazo[4,5-f]quinoline
n.mol/ml	:	Nano mole per mellilitre
HCAs	:	Heterocyclic aromatic amines
MeIQ	:	2-amino-3,8-dimethyl imidazo[4,5-f]quinoxaline
PhIP	:	2-amino-1-methyl 1-6-phenylimidazo[4,5-b] pyridine
Glu-p-1	:	2 amino -6-methlyldipyrido[1,2-a:3 [illegible], 2` -d]imidazole
Glu-p-2	:	2-aminodipyido [1,2-a:3 [illegible], 2` -d] imidazole
MeIQ	:	2-amino-3,4-dimethyl imidazo[4,5-f]quinoline
Trp_1	:	3-amino-1,4-dimethyl-5H-pyrido[3,4-b]indole
Trp_2	:	3-amino-1-methyl-5H-pyrido[3,4-b]indole
P450s	:	Set of cytochrome enzymes which have maximum spectra at 450 n.m.
CYP_3A_4, CYP_2C_9, CYP_1A_2,	:	:Isoforms of cytochrome enzyme
HTHQ	:	1-o-hexyl-2,3,5-trimethyl hydroquinone
IUPAC	:	Systemic name of compounds
E.A.	:	Ethyl acetate
HCl	:	Hydrochloric acid

INTRODUCTION

Diet plays an important role in cancer development, both by increasing or reducing the risk of cancer. During the cooking of meats, several highly mutagenic heterocyclic amines are produced. On the other hand, epidemiological studies showed that the consumption of vegetables and fruits were negatively correlated with the incidence of human cancer in stomach, colon, breast, prostate and even lung and bladder. These exciting epidemiological discoveries have encouraged scientists to determine whether specific vegetable components are responsible for the observed associations. Flavonoids occur naturally in plant foods and are a common component of our diet. They occur in food as O-glycosides, and the estimated human oral daily consumption is about 0.02 gm/kgm/day[1,2].

Adequate data on the occurrence of flavonoids in local Egyptian food are lacking. Food derived flavonoids such as flavonols (Quercetin, Kaempferol, Myricetin) and flavones (Apigenin and Luteolin), were purified chromatographically and their suppressing activity with ***Salmonella typhimurium***. TA 98 has been reported[2].