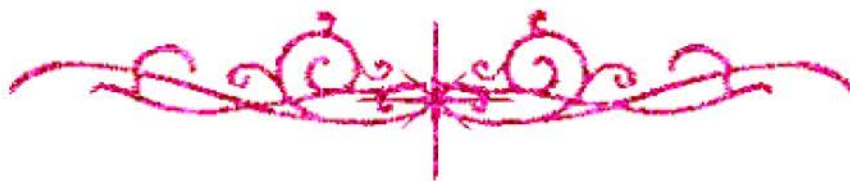


بسم الله الرحمن الرحيم





شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

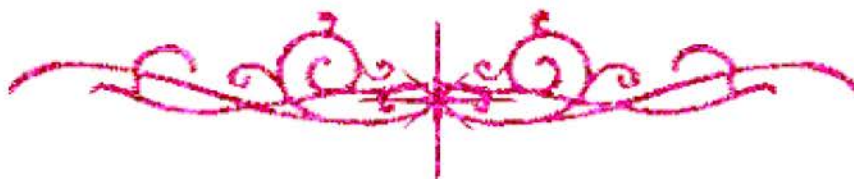
قسم

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



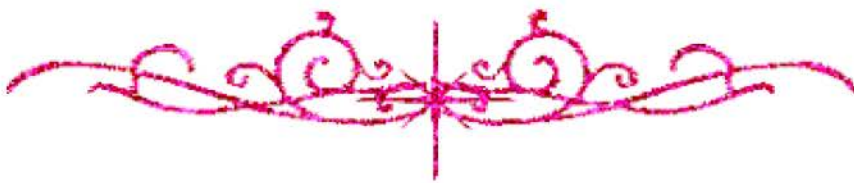
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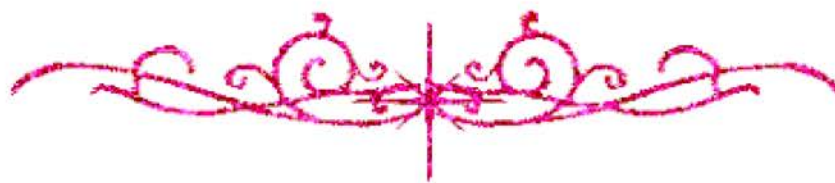


بعض الوثائق الأصلية تالفة





بالرسالة صفحات
لم ترد بالأصل



B1 V 07 3

THE ROLE OF CHROMIUM IN TREATMENT OF DIABETES MELLITUS

A Thesis Represented By

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

(سَنُرِيهِمْ آيَاتِنَا فِي الْآفَاقِ وَفِي أَنْفُسِهِمْ حَتَّى يَتَبَيَّنَ لَهُمْ أَنَّهُ
الْحَقُّ، أَوَلَمْ يَكْفِ بِرَبِّكَ أَنَّهُ
عَلَى كُلِّ شَيْءٍ شَهِيدٌ)

(سورة فصلت، الآية ٥٣)

First, and for most thanks to
ALLAH, the most merciful, gracious
and compassionate, to **ALLAH**
everything in life is resumed.

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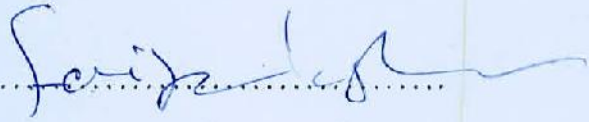
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APPROVAL SHEET

This thesis has been approved by the examination committee

Prof. Dr. Fayza Lashin



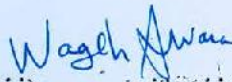
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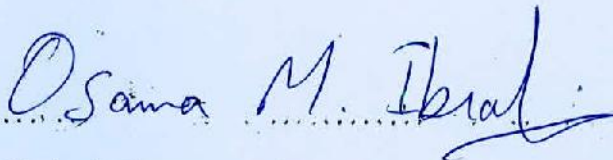
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LIST OF ABBREVIATIONS

ADP	Adenosine-5-diphosphate.
AGEs	Advanced glycosylation end products.
ALA	Alpha Lipoic acid.
ATP	Adenosine-5-triphosphate.
BMI	Body mass index.
BSA	Bovine serum albumin.
CE	Cholesterol esterase.
C _{ox}	Cholesterol oxidase.
Cr	Chromium.
DAP	Dihydroxy acetone phosphate.
DHLA	Dihydrolipoic acid.
DKA	Diabetic ketoacidosis.
DM	Diabetes mellitus.
EBF	Endoneurial blood flow.
EDTA	Ethylene diamine tetra acetic acid.
ESADDI	Estimated safe and adequate daily dietary intake.
ETA-AAS	Electrothermal atomic absorption.
FPG	Fasting plasma glucose.
GDM	Gestational diabetes mellitus.
GK	Glycerol Kinase.
GLUT-1	Glucose transporter type 1.
GLUT-4	Glucose transporter type 4.
G-3-P	Glycerol-3-phosphate.
GPO	Glycerol phosphate oxidase.
GTF	Glucose tolerance factor.
HbA1a	Glycated hemoglobin type a.
HbA1a ₂	Glycated hemoglobin type a ₂ .
HbA1b	Glycated hemoglobin type b.
HbA1c	Glycated hemoglobin type c.
HbA ₀	Non-glycosylated hemoglobin
HDL	High density lipoprotein.
HLA	Human leukocyte antigen.