

شبكة المعلومات الحامعية

## بسم الله الرحمن الرحيم



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شبكة المعلومات الحامعية



شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم





ببكة المعلم مات المامعية

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## جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

### قسو

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



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بالرسالة صفحات لم ترد بالأصل



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## Zagazig University – Benha Branch Faculty of Veterinary Medicine – Moshtohor Biochemistry Department

# MEMBRANE FATTY ACIDS IN NORMAL AND EXPERIMENTALLY INDUCED DIABETES MELLITUS IN RATS

#### A thesis

Submitted To Faculty of Veterinary Medicine, Moshtohor, Zagazig
University (Benha Branch) for the Master Degree of Vet. Med. Sci.,
(Biochemistry and Clinical Biochemistry)

#### By

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#### APPROVAL SHEET

This is to approve that the dissertation presented by Mamdouh Kamal El-Haggar to Zagazig University (Benha branch) entitled in "Membrane Fatty Acids In Normal and Experimentally Induced Diabetes Mellitus In Rats" for the Master Degree of Veterinary Medical Science (Biochemistry and Clinical Biochemistry) has been approved by the Examination Committee in 8 / 5 / 2005.

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#### LIST OF ABBERVIATIONS

AA	Arachidonic .
ABCA1	ATP-binding cassette transporter A1.
ALA	Alpha – linolenic acids.
CAD	Coronary artery disease .
CAT	Catalase.
CE	Cholesteryl esters
CETP	Cholesterol ester transfer protein.
CuZn SOD	CuZn Superoxide dismutase.
DG	Diacylglycerol .
DGLA	Dihomo gamma linolenic acid
DHA	Docosahexaenoic acid .
DHGLA	Dihomo – gamma – linolenic acid.
DKA	Diabetic ketoacidosis.
DM	Diabetic rats
DPA	Docosapentaenoic acid.
DPP	Diabetes prevention program.
DR	Diabetic retinopathy .
EM	Erythrocyte membrane.
EPA	Eicosapentaenoic acid.
FA	Fatty acid.
FFA	Free fatty acids.
FO	Fish oil.
GCs	Glucocorticoides.
GHb	Glycosylated haemoglobin .
GLA	Gamma linolenic acid .
GSH	Glutathione.
GSH-Px	Glutathione peroxidase.
GST	Glutathione-S-transferase.
HDL	High- density lipoprotein .
HMG	3-hydroxy –3– methylgutaryl CoA
HSL	Hormone – sensitive lipase.
HTG	Hypertriglyceridemia.
IDDM	Insulin-dependent diabetes mellitus
IRI	Plasma insulin .
IV	Intravenously.
LA	Linoleic acid .
LAT	Lysophosphatidylcholine acyl-Co A transferase
LCT	Long – chain triacylglycerols.

LDL	Low density lipoproteins .	
LOOHs	Lipid hydroperoxides .	
LPL	Lipoprotein lipase .	
LXP	Liver-X- receptor .	
MCT	Medium – chain triacylglycerols.	
MDA	Malonedialdehyde	
NA	Nicotinic acid	
NCV -	Nerve conduction velocity.	
NEFA	Nonesterified fatty acids.	
NIDDM	Non insulin-dependent diabetes mellitus	
ОН	Hydroxyl radical	
OLETF	The Otsuka long-evans Tokushima Fatty.	
00	Olive oil .	
OX-LDL	Oxidized low density lipoprotein	
P/S	Polyunsaturated / saturated fatty ratio	
PC	Phosphatidylcholine.	
PDH	Pyruvate dehydrogenase complex .	
PE	Phosphatidylethanolamine	
PFK	Phospho fructokinase .	
PG12	Prostacyclin	
PI	Phosphatidylinositol.	
PL	Phospholipids .	
PLC	Propiony – L – carnitine.	
PON	Paraoxonase .	•
PPP	Platelet – poor plasma.	
PS	Phosphatidylserine.	
PUFA	Polyunsaturated fatty acids.	·
RBC	Red blood cells.	
ROS	Reactive oxygen species.	
SM	Shpingomyelin	
SN	Sciatic nerve .	
SO	Sunflower oil	

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