



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم



MONA MAGHRABY



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شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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Effect of Fasting Ramadan on Different Laboratory Parameters on Type 2 Diabetic Mellitus Patients

Thesis

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of Internal Medicine

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا

سبحانك لا علم لنا
إلا ما علمتنا إنك أنت
العليم العظيم

صدق الله العظيم

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Candidate

 **Yomna Neamtallah AL Kabany**

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List of Abbreviations

Abbr.	Full-term
ADA	: American Diabetic Association
ADF	: American Diabetic Federation
AF	: Atrial fibrillation
APO1-A	: Apolipoprotein 1 A
APO1-B	: Apolipoprotein 1 B
BMI	: Body MASS Index
CRD	: Caloric Restrictive Diet
CRD	: Caloric restrictive Diet
CRP	: C-reactive protein
CVA	: Cerebro vascular – Accident
CVD	: Cardio vascular disease
CVD	: Cardio –Vascular Disease
DASH	: Diastolic And Systolic Hypertension
DBP	: Diastolic Blood Pressure
DM	: Diabetes mellitus
FABP2	: Fatty acid binding protein 2 genotype
FBG	: Fasting Blood Glucose
HA1C	: Hemoglobin A1C

HARRT	: Human Resource Round Tables
HDL	: High Density Lipoprotein
HF	: Heart Failure
HNT	: Hypertension
HT	: Height
IDDM	: Insulin dependant Diabetes
IDF	: International Diabetic Federation
IFG	: Impaired fasting glucose
IGT	: Impaired Glucose Tolerance
IR	: Insulin Resistance
LCD	: Low caloric Diet
LDL	: Low Density Lipoprotein
MAP	: Mean Atrial pressure
NIDDM	: Non Insulin dependant Diabetes
OGTT	: Oral Glucose Tolerance Test
PCO	: Polycystic ovarian disease
RBS	: Random Blood Sugar
SBP	: Systolic Blood Pressure
SF	: Saturated Fatty Acid
T2DM	: Type 2 Diabetes mellitus
TC	: Total Cholesterol

TFA	: Trance Fatty Acid
TG	: Triglyceride
WC	: Waist Circumference
WHR	: Waist Hip Ratio

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ABSTRACT

Background: Diabetes mellitus (DM) is one of the most common chronic diseases in nearly all countries, and continues to increase in numbers and significance, as changing lifestyles lead to reduced physical activity, and increased obesity. It has been estimated that by the year 2030, there will be 8.6 million adult with diabetes in Egypt, making it the country with the tenth largest population of diabetic in the world. **Objective:** To study the impact of Ramadan fasting on metabolic parameters and anthropometry in type 2 DM in Egypt. **Patients and Methods:** This study was conducted on 80 type 2 diabetic patients who were intending to fast Ramadan. During Ramadan (2014) the average fasting hours were 15 h. Patients were recruited from the internal medicine outpatient clinic at Ain Shams University hospitals and from the nutrition institute. **Results:** We found that there was a statistically significant increase as regard lipid profile (serum triglycerides, serum total cholesterol, LDL-cholesterol and HDL-cholesterol) in after Ramadan measurement. Also CVD risk parameters have untimely increased after Ramadan this parameters including (10 years risk (Framingham score) systolic and diastolic blood pressure). In addition (Creatinine, HOMA IR and fasting insulin) showed increased level in after Ramadan measurement which indicate deterioration of blood glucose parameters.

Conclusion: Ramadan fasting appears to have significant effect on lipid profiles that could adversely impact cardiovascular outcome. These effects are mostly due to quality and quantity of food intake during Ramadan and the negative impact of sedentary life style. In addition the number of fasting days and period of daily fasting could affect glycemic control and renal function tests. Bad dietary habits, lack of exercise and irregular drug intake during Ramadan has a negative impact on glycemic control.

Keywords: Diabetes mellitus, cardio vascular disease