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EVALUATION OF LIPID PROFILE IN TYPE 2 DIABETES MELLITUS

A Thesis

**Submitted to the Council of the Soran Technical College as Partial
Fulfillment of the Requirements for the Degree of diploma (Nursing)**

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DECLARATION

We declare, that this thesis entitled (**Evaluation of Lipid Profile in Type 2 Diabetes Mellitus**) is our own original work, and hereby, we certify that unless stated, all work contained within this thesis is our own independent research, and has not been submitted for the award of any other degree at any institution, except where due acknowledgement is made in the text.

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DEDICATION

We dedicate this thesis to:

Our dear Father and Mothers

To all our lovely friends

ACKNOWLEDGEMENTS

First of all, thanks to "**ALLAH**" the Almighty for blessings that we managed to complete our thesis. We wish to express our appreciation and gratitude to our supervisor **Dr. Hazhar Muhammad Balaky** for his beneficial guidance, support and patient throughout the duration of this research work. Finally, thanks to all our friends and relatives who supported us, thanks a lot for everything. May Allah reward and blessing all.

ABSTRACT

Background: Diabetes mellitus (DM) is a chronic metabolic disorder characterized by persistent hyperglycemia. It may be due to impaired insulin secretion, resistance to peripheral actions of insulin, or both. **Subjects:** This study was performed to assess an association between type 2 diabetes mellitus and lipid profile (sixty patients were included in the present study and divided into two groups, group I: 30 male, group II: 30 females with age range (40-59), Also, 30 apparently healthy individuals of matched age and gender were utilized as a control group. This study was performed during the period between December - 2022 and April-2023. **Results:** The data showed that the level of serum total cholesterol, low density lipoprotein, serum triglycerides were significantly elevated in patients in comparison with controls. Moreover, patients showed significantly reduction of serum high density lipoprotein in comparison with controls. **Conclusions:** The significant elevation in serum level of total cholesterol, low density lipoprotein, serum triglycerides were seen among patients while there was a significant reduction in serum high density lipoprotein, and this was an indicator of that the patients should be aware of life threatening health complications such as cardiovascular disease.

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LIST OF ABBREVIATIONS

ADA	American Diabetes Association
CETP	Cholesterol ester transport protein
CI	Confidence Interval
ER	Endoplasmic reticulum
GDM	Gestational diabetes mellitus
HDL	High density lipoprotein
LDL	Low density lipoprotein
mg/dL	Milligram per deciliter
MODY	Maturity-onset diabetes of the young
rpm	Round per minute
SST	Serum separator tubes
T1DM	Type 1 diabetes mellitus
T2DM	Type 2 diabetes mellitus
TC	Total cholesterol
TG	Triglycerides
VLDL	very low density lipoproteins