

Biochemical Study On Erythrocyte Metabolism In Children With Insulin Dependent Diabetes Mellitus

**Thesis Submitted for Partial fulfillment of
the Master Degree of Pediatrics**

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بِسْمِ اللَّهِ الرَّحْمَنِ
الرَّحِيمِ

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

"سُبْحَانَكَ لَا عِلْمَ
لَنَا إِلَّا مَا عَلَّمْتَنَا
إِنَّكَ أَنْتَ الْعَلِيمُ
الْحَكِيمُ"

صَدَقَ اللَّهُ الْعَظِيمُ

(البقرة آية ٣٢)

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List of abbreviations

- A. Gly. :** Glycohemoglobin Absorbance.
A. Tot. : Total Hemoglobin Absorbance.
ADA : American Diabetes Association.
AR : Aldose Reductase.
ATP : Adenosine Triphosphate.
CBC : Complete Blood Count.
DKA : Diabetic Ketoacidosis.
EDTA : Ethylene Diamine Tetra Acetate.
FAD : Flavin Adenine Dinucleotide.
FCPD : Fibro-Calculous Pancreatic Diabetes.
GSH : Reduced Glutathione.
GSS : Oxidised Glutathione.
H₂O : Water.
H₂O₂ : Hydrogen Peroxide.
Hb : Hemoglobin.
Hb A₀ : The Non Glycosylated Hemoglobin.
HbA_{1c} : Glycosylated Hemoglobin.
IAA : Insulin Autoimmune Antibodies.
ICA : Islet Cell Autoantibodies.
IDDM : Insulin Dependent Diabetes Mellitus.
K : Potassium.
MRDM : Malnutrition Related Diabetes Mellitus.

Na : Sodium.

Na OH : Sodium Hydroxide.

NAD : Nicotinamide Adenine Dinucleotide.

NADPH : Nicotinamide Adenine Dinucleotide Phosphate.

NADPH : Reduced Nicotinamide Adenine Dinucleotide Phosphate.

NDDG : National Institute of Health Diabetes Data Group.

NIDDM : Non - Insulin Dependent Diabetes Mellitus.

O₂ : Oxygen.

OGTT : Oral Glucose Tolerance Test.

PDPD : Protein Deficient Pancreatic Diabetes.

PGE₂ : Prostaglandins Synthetase E₂.

RBC : Red Blood Cell.

RBG : Random Blood Glucose.

SD : Sorbitol Dehydrogenase.

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