

# UNDERSTANDING DIABETES

## Here are a few facts that you would like to know about Diabetes:

### 1. When is a person considered to have Diabetes?



When a person experiences symptoms like frequent episodes of urination, excessive thirst, extreme hunger, unexplained weight loss or slow healing of wounds, one could suspect abnormally high blood sugars. This person may have diabetes.

Normally, carbohydrates in food are digested and broken down to simple sugars. Insulin, a hormone produced by pancreas helps glucose enter cells. But, if one has Diabetes, this process gets disturbed, and blood sugar levels go up.

Diabetes is diagnosed<sup>1</sup> when any of the following test results are positive.

Fasting\* Plasma Glucose (FPG)  $\geq 126$  mg/dL OR

2-h plasma glucose  $\geq 200$  mg/dL during an Oral glucose tolerance test (OGTT\*\*) OR

In a patient with classic symptoms of hyperglycemia, a random plasma glucose  $\geq 200$  mg/dL OR

Glycated Hemoglobin (HbA<sub>1c</sub>)  $\geq 6.5\%$  (140mg/dL).

\* Fasting is defined as no caloric intake for at least 8 h

\*\*OGTT test should be performed as described by the WHO, using a glucose load containing the equivalent of 75-g anhydrous glucose dissolved in water

### 2. What are the types of Diabetes?



Type 1 Diabetes - due to autoimmune  $\beta$ -cell destruction, usually leading to absolute insulin deficiency)



Type 2 Diabetes - due to a progressive loss of adequate  $\beta$ -cell insulin secretion frequently on the background of insulin resistance



Gestational diabetes mellitus (GDM)-Diabetes diagnosed in the second or third trimester of pregnancy that was not clearly overt diabetes prior to gestation

\*Specific types of diabetes due to other causes, e.g., neonatal diabetes, maturity-onset diabetes of the young, diseases of the exocrine pancreas (such as cystic fibrosis, pancreatitis), and drug- or chemical-induced diabetes (such as with glucocorticoid use in the treatment of HIV/AIDS, or after organ transplantation)

### 3. Does Diabetes pass on from generation to generation in a family chain?



While Diabetes has been shown to be an inherited disease, it is caused by a combination of genetic and environmental factors and one can also get diabetes when none else in the family has it. We cannot modify our genes but can follow a healthy life style to prevent type 2 diabetes.

### 4. Can Diabetes be prevented?



Type 1 diabetes is an autoimmune disorder and cannot be prevented. Unlike type 1 Diabetes, type 2 Diabetes is caused by a combination of genetic and environmental factors which includes, sedentary life style, stress and wrong eating habits. Type 2 Diabetes can be prevented by maintaining a healthy diet and regular physical activity.

### 5. Can people with diabetes live long and healthy lives?



Yes, a few changes in one's lifestyle and food habits along with proper medication and monitoring can help a person with Diabetes lead a normal healthy life. There are many people with Diabetes in their respective fields without any hindrance by managing Diabetes well.