WHAT IS DIABETES?

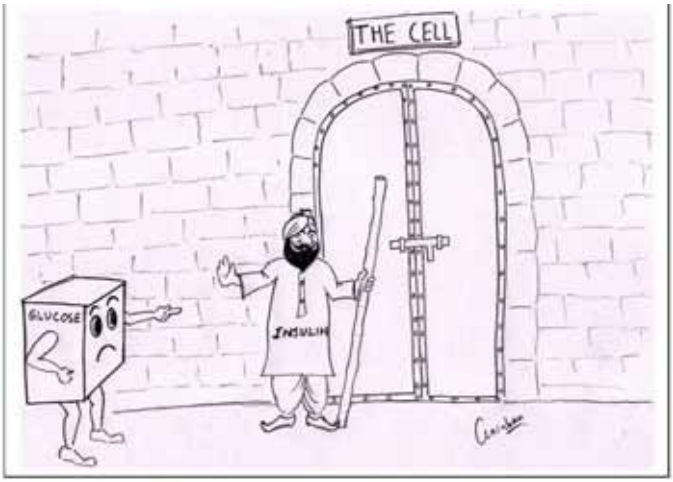
Millions of people have diabetes. Even children suffer from this disease. That is why I feel that you are fortunate that your disease has been diagnosed at right time. This is one of the most widely studied, researched and advance areas in the medical field. At present there is no cure in any of the PATHIES for this disease. But with modern medical advancement you can definitely live near normal healthy life. We are here to add life to your life. We care for you and for your diabetes. Your cooperation is mandatory because A DIABETIC WHO KNOWS THE MOST ABOUT HIS DISEASE FACES LEAST PROBLEMS. In any disease it is said that half the battle is won by confidence and I intend to give you confidence in this booklet, confidence to live with the disease gracefully and confidence to tackle your problems intelligently.

Let us start with the basic question i.e. WHAT IS DIABETES?

Glucose is essential for providing energy for normal body functions. In diabetes the blood glucose levels are increased due to relative or absolute deficiency of insulin. Insulin is a hormone. A Hormone is a chemical secreted by one of the glands in our body. This gland is situated in abdomen and is known as pancreas. Insulin acts as a gatekeeper that allows entry of glucose into the cell.

If the amount of insulin is abnormal or the function of insulin is at fault excess of glucose accumulates in the body with harmful effects on the cells of various organs. Diabetes is a metabolic disorder in which body is unable to handle glucose for its energy requirements. As we have already discussed, insulin is essential for entry of glucose in to the cell that is why

1) Cells can not adequately utilise glucose, so
2) Body tries to produce more glucose (gluconeogenisis).



This is how blood glucose keeps on rising even if there is no food intake. There are two major types of diabetes. The first type i.e. insulin dependent diabetes. It can be treated only with insulin as the main drug. This is common in younger age group of patients. The second type is non-insulin dependent diabetes (Type II). This is more common in India. This usually affects people above 40 years of age. This group can be managed with diet, exercises and oral medications. Some patients in this group may require insulin sometime later in life.

The comparison of two types of diabetes is shown in following table.

FEATURE	TYPE I (IDDM)	TYPE II (NIDDM)
Age of Onset	Younger age group	Above 30-35 years
Insulin level in blood	Negligible	Decreased or High
Bodyweight	Underweight or Normal	Overweight or Normal
Usual Treatment	Insulin	Oral and Insulin
Inheritance	Less Significant	More Significant

Uncontrolled diabetes can lead to deleterious effects on every part of the body if not looked after well at the right time. Even if one may not, in actual sense suffer the consequences of the disease today, it needs to be adequately treated. Complacency and neglect is always dangerous.

Remember that the disease has to be well controlled as it is critical in leading a normal life.

Poorly controlled diabetes can be a major aggravating factor for later diabetes complications. Following chart shows some of these complication risks. This is only to make you aware how important it is to control diabetes and not to scare you about this disease.

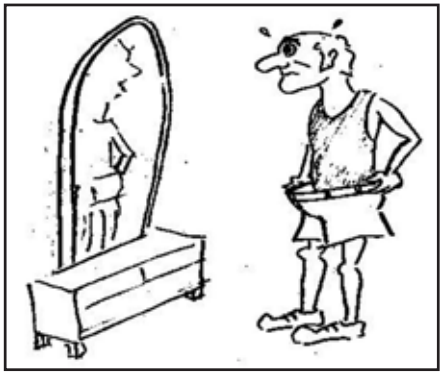
Complication	**Frequency, in comparison to non-diabetics**
Retinopathy leading to blindness	25 times higher
Kidney disease	15-20 times higher
Foot problems	20-30 times higher
Paralysis	2 times higher
Heart disease	2-4 times higher

Let us understand how this disease starts making its impression on your life. Usually, disease creeps in silently. One comes to know of it generally during routine blood sugar test for getting licenses, insurance etc. Sometimes it is detected only during treatment of other concomitant illness or before surgery.

Following are the common manifestations of diabetes.

REPORT AS A SURPRISE

INCREASED APPETITE AND THIRST



SIGNIFICANT WEIGHTLOSS

INFECTIONS IN FOLDS

INCREASED URINATION

EXHAUSTION

Who should test themselves for diabetes?

1. **Everybody with above mentioned symptoms.**
2. **Close relatives of Diabetes Patients.**
   For Type 1 diabetes hereditary factor is less prominent.
   If a father is diabetic then the risk to the child is 5-10%. If a mother is diabetic then the risk is 5%.
   Type 2 or NIDDM has significant genetic predisposition. If one parent has diabetes the risk is 40%. If both parents are diabetic the risk is 90%.
3. **Pregnant women** Diabetes is not uncommon due to various hormonal and metabolic changes during pregnancy.
4. **Those having high blood pressure, obesity, heart disease and paralysis etc.**
5. **A lady who delivered a baby weighing more than 4.5 kg**
6. **All above 45 years of age should check their sugar level once in a year.**

How is diabetes detected?

Estimation and interpretation of blood glucose is the only test for diagnosis of diabetes. World Health Organization (WHO) has laid down guidelines for diagnosis.

Criteria for diagnosis of diabetes
Fasting Venous plasma glucose > 140 mg/100ml
and
Two hours after 75 gm ingestion of glucose > 200 mg /100ml

Recently, American Diabetes Association has accepted the fasting plasma glucose values as >126mg/100ml for diagnosis of diabetes.

How to prepare for blood test?

How one should prepare for the blood test is also very important. The person should have normal diet 3-4 days prior to the test.