

## Diabetes Mellitus

Diabetes mellitus (D.M) is a metabolic disorder firstly characterized by a loss of glucose homeostasis with disturbances of fat, carbohydrate and protein metabolism result from defect in insulin action, secretion, or both. Without sufficient insulin hormone, the cells of the body cannot absorb sufficient glucose from the blood that lead to hyperglycemia. If the glucose level in the blood remains high level over a long period of time, this can result in long-term damage to organs, such as the liver, kidneys, eyes, nerves, heart and blood vessels, Complications in some of these organs can lead to death.

People with diabetes were deficient in a single chemical that was normally produced by the pancreas known as insulin, from the Latin insula, meaning island, in reference to the insulin producing islets of Langerhans in the pancreas. Insulin is a protein hormone produced by the  $\beta$  - cells of the islets of Langerhans in the pancreas. Higher doses of insulin hormone virtually always result in lower levels of glucose, and many studies have demonstrated that the glycemic levels are nearly to normal when adequate doses of insulin are used.

Some authors stated that the diabetes mellitus is associated with the male reproductive dysfunction.

The major components of the treatment of diabetes are:

**A- Diet and Exercise**

**B- Oral hypoglycaemic therapy**

**C- Insulin Therapy**