



**#MADEEASY**

**DIABETES MELLITUS**





# What is Diabetes Mellitus?

- ***It is a chronic endocrine pathology.***
- ***It is characterized by high blood glucose levels.***

***It is mainly of two types :***

- ***Type 1 Diabetes Mellitus***
- ***Type 2 Diabetes Mellitus***



# Can you please explain Type 1 Diabetes?



## **Type 1 Diabetes Mellitus**

*It is commonly seen in children and adolescents.*

### **Etiology**

- Genetic predisposition
- Environmental triggers: viral infection etc.

### **Pathogenesis:**

- Autoimmune disorder
- Leads to immune-mediated destruction of beta cells (insulin producing cells) in pancreas.
- Marked insufficiency or complete absence of insulin.

### **Microscopic changes in pancreas:**

- Islet cell destruction.

# Can you please explain Type 2 Diabetes?



## **Type 2 Diabetes Mellitus** *Seen mostly in adults*

### **Etiology**

- *Genetics and environmental combined.*
- *Family history, Obesity/Sedentary lifestyle*
- *Drugs (glucocorticoids/thiazide etc)*

### **Pathogenesis:**

- *Target tissues do not respond to insulin due to insulin resistance.*
- *There is initial beta cell hyperplasia which produces more insulin with deposition of amyloid and later undergo atrophy due to exhaustion.*
- *As a result, there is decreased insulin production by beta cells hyperglycaemia.*

### **Microscopic changes in pancreas:**

- *Initial increase in beta cell mass, followed by a decline.*
- *Islet hypertrophy*
- *Amyloid deposition as Islet Amyloid Polypeptide (IAPP).*