**DM:**

**Introduction:**

In general, if any person suffering from diabetes, people used to say, he is suffering from sugar. Everybody contain sugar (glucose) in blood in normal levels. But diabetic patient contain more amount of sugar than normal level.

**Normal levels:**

Fasting blood sugar levels (FBS) or preprandial: 70-100mg/dl

Post lunch blood glucose levels, 2hrs after a meal (PLBS) or postprandial: 110-140mg/dl

If the FBS levels increase more than 100mg/dl and PLBS levels increase more than 140mg/dl, then that condition is known as hyperglycemia, it is a characteristic feature of diabetes mellitus.

**Definition:** Diabetes mellitus is a metabolic disorder caused by deficiency of the pancreatic hormone insulin, which results in a failure to metabolize sugar.

**Insulin:** It is a hormone secreted by β-cells of pancreas, made up of 51 amino acids divided into 2 chains as chain A and chain B. Chain A contain 21 amino acids and chain B contain 30 amino acids, these two chains are interlinked with 2 disulfide bonds.

![Fig 1: Structure of Insulin](image-url)