

2.1 Definition and Types of Diabetes Diabetes mellitus is a chronic metabolic disorder characterized by elevated blood glucose levels (hyperglycemia) resulting from defects in insulin production, insulin action, or both. Gestational Diabetes: A temporary form of diabetes that develops during pregnancy. There are three main types of diabetes: Type 1 Diabetes (T1D): An autoimmune condition in which the immune system attacks and destroys insulin-producing beta cells in the pancreas. Insulin is a hormone produced by the pancreas that regulates blood sugar levels by allowing glucose to enter the body's cells for energy. It is strongly associated with lifestyle factors such as obesity, poor diet, and physical inactivity. Although it often resolves after childbirth, it increases the risk of developing Type 2 diabetes later in life. It usually develops in children or young adults and requires lifelong insulin therapy.