8. causes and Harmful effects of Insulin Resistance

The three significant reasons for Insulin resistance are:

- 1. *Factory-made commercial foods* --Sugary foods, packaged snacks and drinks (fruit juices, sweet sodas), and refined wheat flour products made from milled wheat flour, and maida (bread and baked foods)
- 2. **Physical inactivity** Almost 50-60% of the glucose entering the body via food gets used to make energy for muscle activity. If a person is not physically active, the glucose does not get used up. The excess of glucose gets converted to reserve energy fat. The unwanted fat collection in the liver and abdomen creates more insulin resistance.
- 3. *Unbalanced lifestyle* Multiple meals, snacks, late-night eating, and inadequate sleep with stress contribute to high blood sugar and insulin levels leading to insulin resistance.

Harmful Effects of Insulin Resistance--Insulin resistance is a protective mechanism designed by the body to save the body cells from the damaging effects of high glucose levels. However, insulin resistance in itself produces many harmful effects:

- a) **Excessive appetite and food cravings**—When less glucose enters the cells because of Insulin resistance, cells get into starvation mode. That leads to food cravings and overeating. If you feel hungry and cannot control hunger, there is a good likelihood that you suffer from insulin resistance.
- b) *Excess fat production* When less glucose enters the body cells for making energy, extra glucose leftover in the blood gets converted to reserve energy fat by Insulin. That leads to overweight and Obesity, and many food and lifestyle diseases- PCOS, Type2 diabetes, Fatty liver, Hypothyroidism, High blood pressure, and Heart disease.
- c) **Demand for more Insulin**—When cells receive less glucose due to Insulin resistance, there is a demand for more Insulin to get more glucose inside the cells. Therefore, insulin resistance sets up a vicious cycle of producing more Insulin, making the situation worse. The only way to break this vicious cycle of high Insulin is to change the food, lifestyle and be more physically active.