Early and late phases of Type2 diabetes

1. Initial early stage of Type 2 diabetes

"It is the stage of insulin resistance. The insulin levels in the blood are higher than normal. At this stage, it is possible to reverse Type 2 diabetes rapidly by the food and lifestyle modifications."

During the initial phase of diabetes, the problem is insulin excess and insulin resistance occurring from the high levels of glucose in the blood. Insulin resistance saves the body cells from getting flooded with high damaging amounts of glucose. Unfortunately, this mechanism of insulin is overprotective. It locks out the glucose from the cells putting them in a starvation mode. When the cells cannot get the desired amount of glucose, the body signals the pancreas to produce more insulin. Early diabetes, therefore, is a disease of insulin excess and insulin resistance or imbalance. Type 2 diabetes, can be diagnosed at this initial stage by the clinical signs, symptoms, and liver ultrasound examination. The clinical signs, symptoms, and tests:

- Lack of energy (vigor and vitality), because glucose from the blood, cannot get inside the cell in the normal amount for making much needed energy.
- Fatty Liver- This is the first abnormality in the body which eventually leads to Type 2 diabetes. Abnormal fat deposition in the liver occurs 10-12 years before Type 2 diabetes declares itself by clinical symptoms and blood tests. So the fatty liver is a prediabetic condition. The good news is that fatty liver is a reversible condition. Within a few months of starting food and lifestyle modifications of holistic food and a fasting plan, fatty liver can clear up rapidly.
- Excessive appetite and food cravings- High blood insulin level is a significant driver for appetite and hunger. If someone feels hungry all the time or has food cravings -a feeling of urgency to eat, he/she has insulin resistance. This individual is at risk, of developing frank Type 2 diabetes soon.
 - Abdominal obesity (larger than normal Waistline)
- Metabolic syndrome It is an advanced prediabetic state. It is reversible by food and lifestyle modification and intermittent fasting program



Metabolic Syndrome

- Fatty liver
- · High fasting blood sugar
- Abdominal Obesity
- High Blood Pressure
- High Triglycerides
- Low HDL Cholesterol
- 2. The late stage of Type 2 diabetes Failure of insulin production with a rapid rise in blood glucose.

"Diabetes can still be reversed or more effectively controlled to prevent serious complications."

During the initial phase of diabetes, there is insulin resistance. The insulin resistance prevents glucose from entering the cells. The excess of glucose leftover in the blood gets converted into fat. More fat accumulates in the abdominal organs starting with liver first. The fat finally gets into the pancreas gland. Fat deposits in pancreas choke up the beta cells of the pancreas, reducing their capacity to produce Insulin. The failure of insulin production leads to a rapid rise in blood glucose and the late stage of Type 2 diabetes. The late disease presents itself as very high blood glucose. It is the high blood glucose which causes excessive thirst and appetite, excessive urination, extreme tiredness, blurry vision, and infections.

