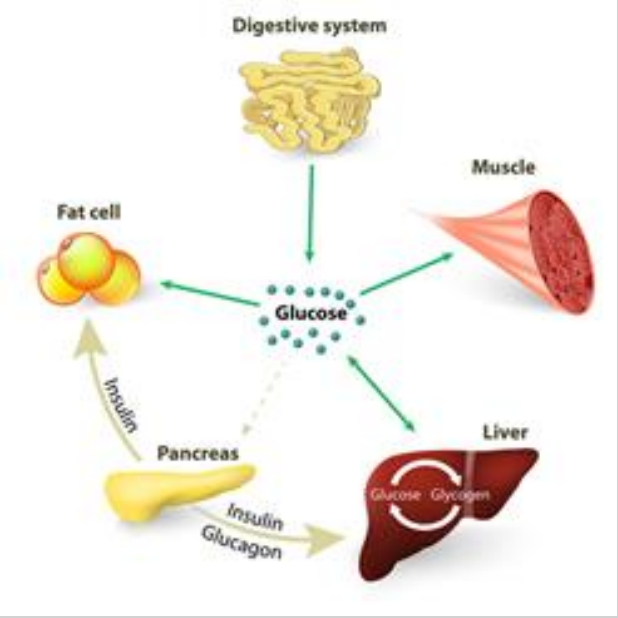
EIGHT Diabetes Terms You Should Know

- **Diabetes**: a disease in which the body does not produce or properly use insulin.(the hormone that is needed to convert glucose into the energy needed for daily life.) The two major forms of diabetes have different causes, although both are characterized by elevated blood sugars and insulin problems.
- **Type 1 Diabetes**: the pancreas either no longer produces insulin or it doesn't produce enough of it.
- **Type 2 Diabetes**: your pancreas makes insulin, but you experience high glucose levels either because 1) The pancreas may not be producing insulin in sufficient quantity, 2) The body's cells may have lost their ability to respond to insulin - even if the pancreas is producing enough insulin, or 3) A combination of these two factors



- **Pre-Diabetes**: a condition where an individual has levels of sugar in the bloodstream that are higher than normal, but not yet high enough to be classified as diabetes. Pre-diabetes can be detected with a number of different blood tests
- **Pancreas**: The pancreas is a large gland that is located in the abdomen, behind your stomach. The main function of the pancreas is to produce insulin, digestive enzymes, and other hormones. To maintain the proper balance of glucose in your blood, the pancreas produces two hormones: insulin and glycogen.
- **Insulin** is a hormone produced by the beta cells of the pancreas that helps move blood sugar (glucose) into the cells of your body. Insulin is like a key that opens up the locks on your body's cells so that glucose (blood sugar) can get inside and be used for energy.Insulin also plays a role as a fat storing hormone.
- **Glucagon:** a hormone produced by the ALPHA cells of the pancreas released when your blood sugar levels are low to stimulate the liver and muscles to break down stored glycogen and release the glucose into the bloodstream for energy.
- **Insulin Resistance:** a condition in which cells fail to respond to the normal actions of the hormone insulin**.**

NINE Risk Factors for Type 2 Diabetes

If you have any of the following risk factors, (or a combination of factors) you may be at an increased risk for diabetes. You should be particularly vigilant for the symptoms of diabetes and getting tested. If you have any of the items below, talk with your physician about your risk for diabetes and whether you should be tested.

- Family History
- 20% over a healthy weight or obese
- Sedentary Lifestyle
- You are African-American, Latino, Asian, Native American or Pacific Islander
- Diabetes during pregnancy or had a baby who was 9 lb. or more at birth
- Low HDL (good cholesterol) or high overall cholesterol levels
- Very high blood pressure or very high triglycerides
- Higher than normal Blood glucose (blood sugar) levels (“pre-diabetes”)
- Polycystic ovary syndrome (PCOS)

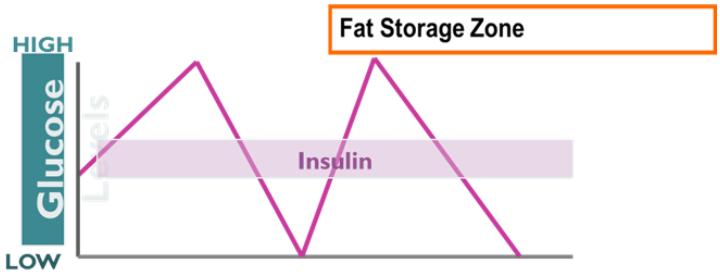
TWELVE Symptoms of Type 2 Diabetes

Diabetes has a number of symptoms that you might not suspect are associated with the disease. If you have one or more of these symptoms, discuss diabetes testing with your physician.

- Frequent urination
- Excessive thirst
- Unexplained weight loss
- Unusual hunger
- Extreme fatigue
- Irritability
- Frequent infections
- Blurred vision
- Slow to heal cuts & bruises
- Vaginitis or recurring yeast infections in women
- Tingling or numbness in hands or feet
- Recurring skin, gum or bladder infections

TEN Steps On the Path to Type 2 Diabetes

- The habitual overconsumption of simple carbohydrates like flour and sugar causes chronic glucose and insulin spikes.
- Insulin, is also a fat storage hormone, and chronic high insulin levels increase the storage of fat (as belly fat)



- If the cycle of spiking glucose and spiking insulin continues over a long period of time, the muscle, fat and liver cells begin to stop responding properly to insulin. This is the beginning of ***insulin resistance***.
- Now, less glucose is getting into the cells and more remains floating in the bloodstream, setting the stage for "high blood sugar levels".
- In this situation, the body tries harder to bring glucose levels down to normal by producing even more insulin --which results in more fat storage. while also blocking the appetite-control hormone "leptin". So your brain doesn't get the "I'm full" message and you are constantly hungry, (usually for more carbohydrates.)
- Too much fructose makes the situation even worse in two ways. First, It goes right to your liver where it starts to manufacture fat,(which triggers more insulin resistance and high insulin levels that drive your body to store more fat). Too much fructose can also cause a condition called "fatty liver" which generates inflammation. (leading to more weight gain and worsening insulin resistance)
- As insulin resistance worsens, more insulin is produced and more and more fat is stored. Finally, the pancreas starts to tire. This is when ***pre-diabetes*** appears as a warning sign that something is wrong.
- Most likely either your cells have become insulin resistant and insulin can no longer function effectively to transport glucose into your cells or the cells in your pancreas that produce insulin are becoming worn out and your pancreas is no longer producing enough insulin. Or it could be a combination of both.

Left untreated, this situation can lead to full blown ***type 2 diabetes***.