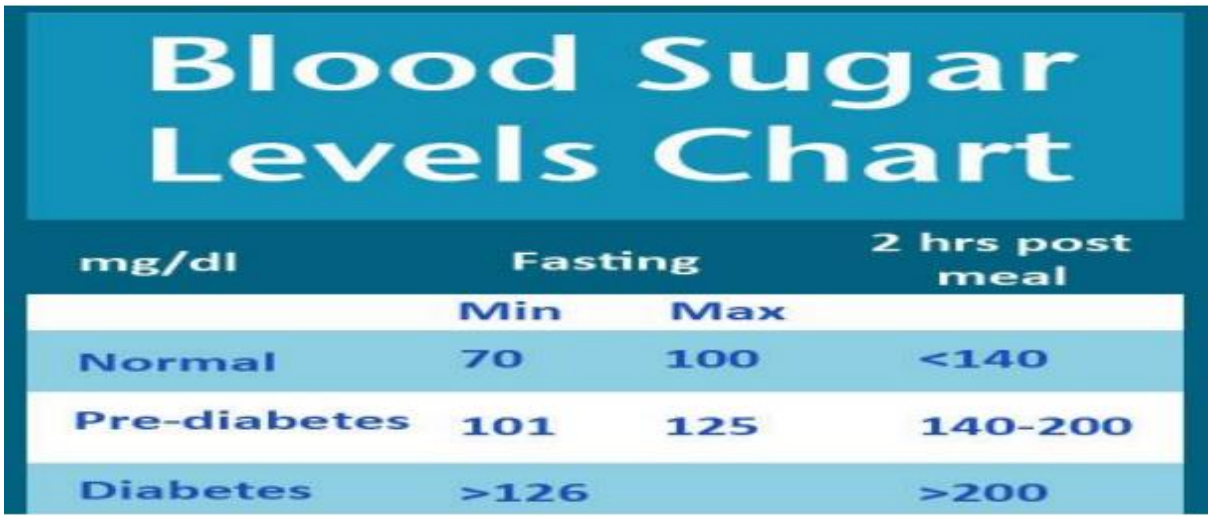
Hi everyone,

This is **U.A.Suresh Kumar** sharing a few contents of my book – **Let's Cure Diabetes- TCM** (Acupuncture- Traditional Chinese Medicine) way as submitted for my Ph. NAD with a request to you all to spare a few minutes of your valuable time to understand the reason for growing number of Diabetes patients in our country which could **well be detected in the earlier stages** and may **get cured if treated well** when **the symptoms starts showing** and follow up **certain amendment in the life style** practices.

Diabetes mellitus, often known as diabetes, is a group of common **endocrine diseases** characterized by sustained **high blood sugar levels.** Diabetes is due to either the **pancreas not producing enough insulin** (Type-I) or the **cells** of the body becoming **unresponsive of the hormone's effects (Type-II)**.

Classic symptoms include thirst, polyuria, weight loss, and blurred vision. If left untreated, the disease can lead to various health complications, including disorders of the cardiovascular system, eye, kidney and nerves.



When the fasting blood sugar level is between 70 to 100 mg/dl it is termed as normal sugar level and if the level touches between 101 to 125 it is termed as border line that is not diabetic at present and termed as pre-diabetes but there is a possibility of becoming Diabetic patients if there is surge of sugar level beyond 126 mg/dl, and when the fasting blood sugar touches **above 126 mg/dl** they are termed as **Diabetic Patients**.

The food we take as carbohydrates are converted in to Glucose and this glucose as a form of energy is required for functioning of all cells. This **glucose needs the support of Insulin** to reach the cell, this insulin hormone attaches the glucose and sends signal to the **receptor** to open the gate called Glucose Transporter **(GLUT)**, only then the **blood glucose will reach** the **cells as energy**.

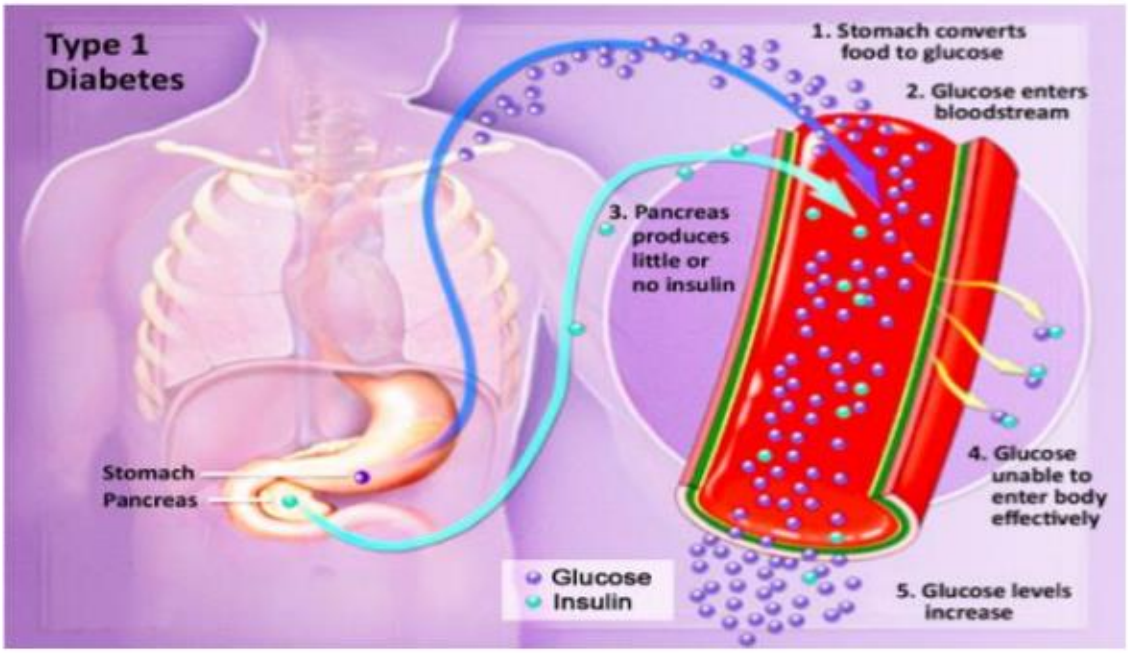
And in case the **gate not opened**, the **glucose will not be able to enter cells and deprive of energy** and the **glucose will remain in blood as** unused glucose, and this increases the patients' blood sugar level and the patient becomes diabetic

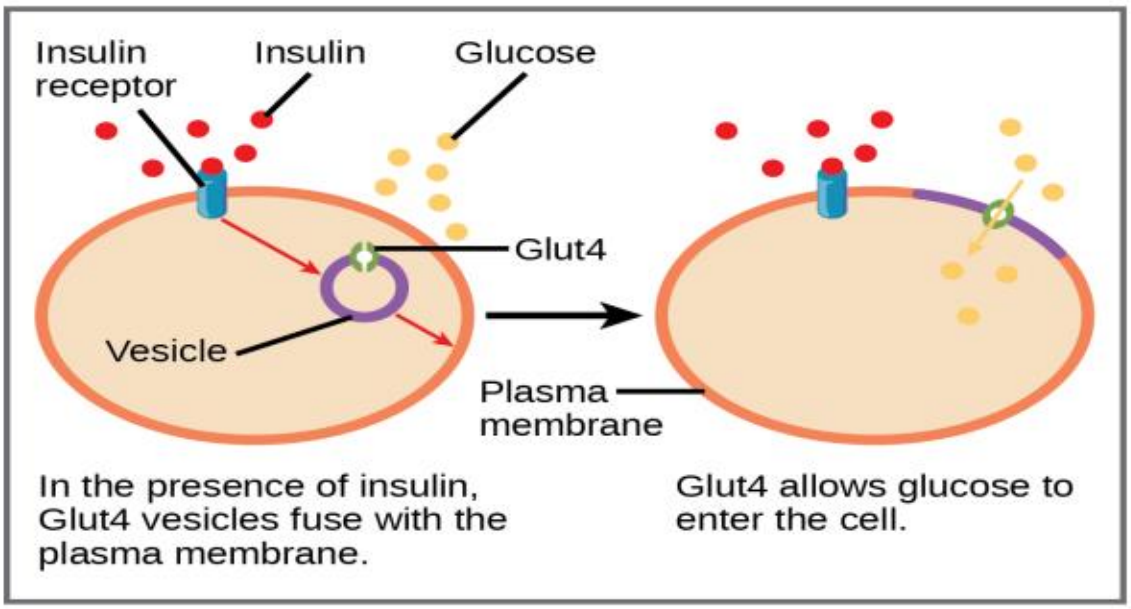
Why requiring Glucose Transporter (GLUT) Glucose is a key energy source for most living cells. Due to its polar nature and large size, **glucose molecules cannot traverse the lipid membrane of the cell by simple diffusion.** Instead, the entry of glucose molecules into the cells is affected by a large family of structurally related **transport proteins known as glucose transporters (GLUT).**

Glucose transporter type 4 (GLUT 4) is the insulin regulated glucose transporter found primarily in adipose **tissues** and **striated muscle (viz. skeletal and cardiac**). Striated muscles are

muscles that have a striped or banded appearance due to the presence of repeated units of muscle fibres called sarcomeres.

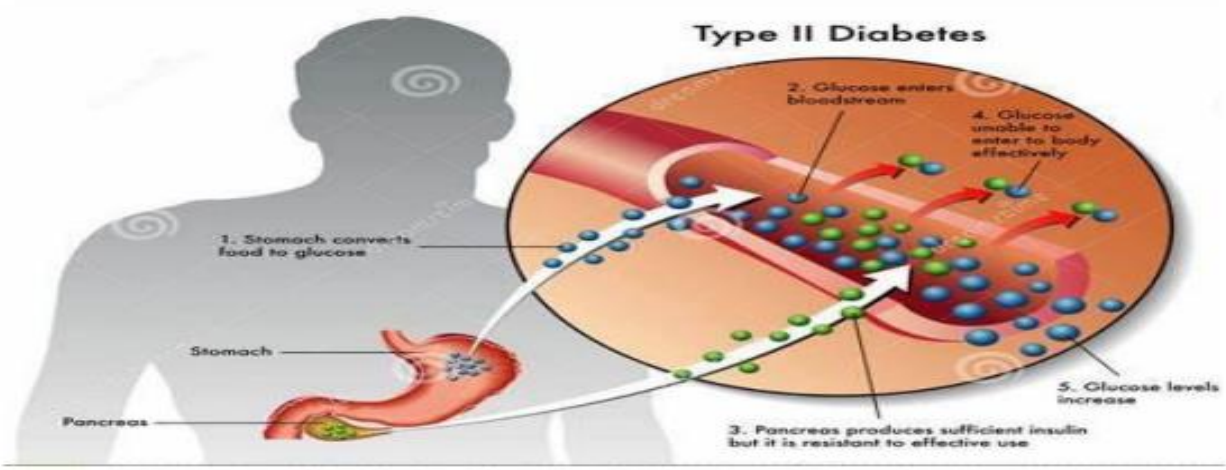
Is all human body tissues require insulin for Glucose Energy Absorption? No, not at all, only the Adipose tissues and Striated Muscles (viz. **Skin, Muscles and Heart**) require insulin for energy absorption and the rest of the body can derive Glucose energy directly from the Blood Stream.



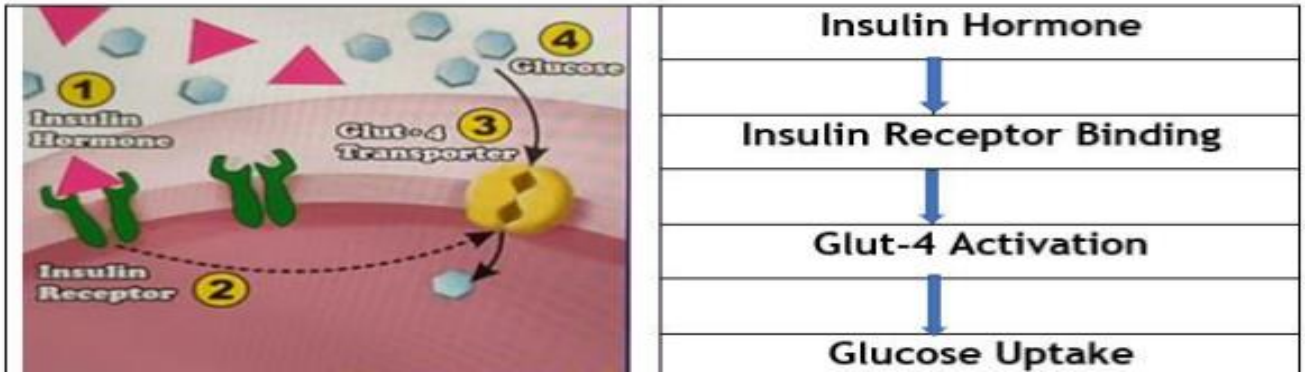


Now let's look at the Type-2 Diabetic Mellitus;

In this condition there is abundant Insulin available but Insulin receptor rejecting the insulin as there is change of shape of Insulin Receptor. The insulin resistance due to Insulin receptor problem, it does not respond for Insulin Hormone, so Glucose is still waiting and circulating in Blood stream.



Glucose Uptake Process diagram



What are the general symptoms of Diabetes disease,

i. Thirstiness, Fatigue, poor vision
ii. Polyuria - Night time urination
iii. Sudden Weight loss

iv. Tongue – Sides teeth mark, centre crack mark, tongue centre yellow or white coating, excess wetness / dryness, reddish mark on tip of tongue.

I hope this would be of help to understand the basis of Diabetes disease and will explain in detail by calling for a meeting at my mobile / what's app number **98400 59347** for appointments for clinical examination and treatments.

Thank you all, **LET'S CURE DIABETES – TCM Way**

