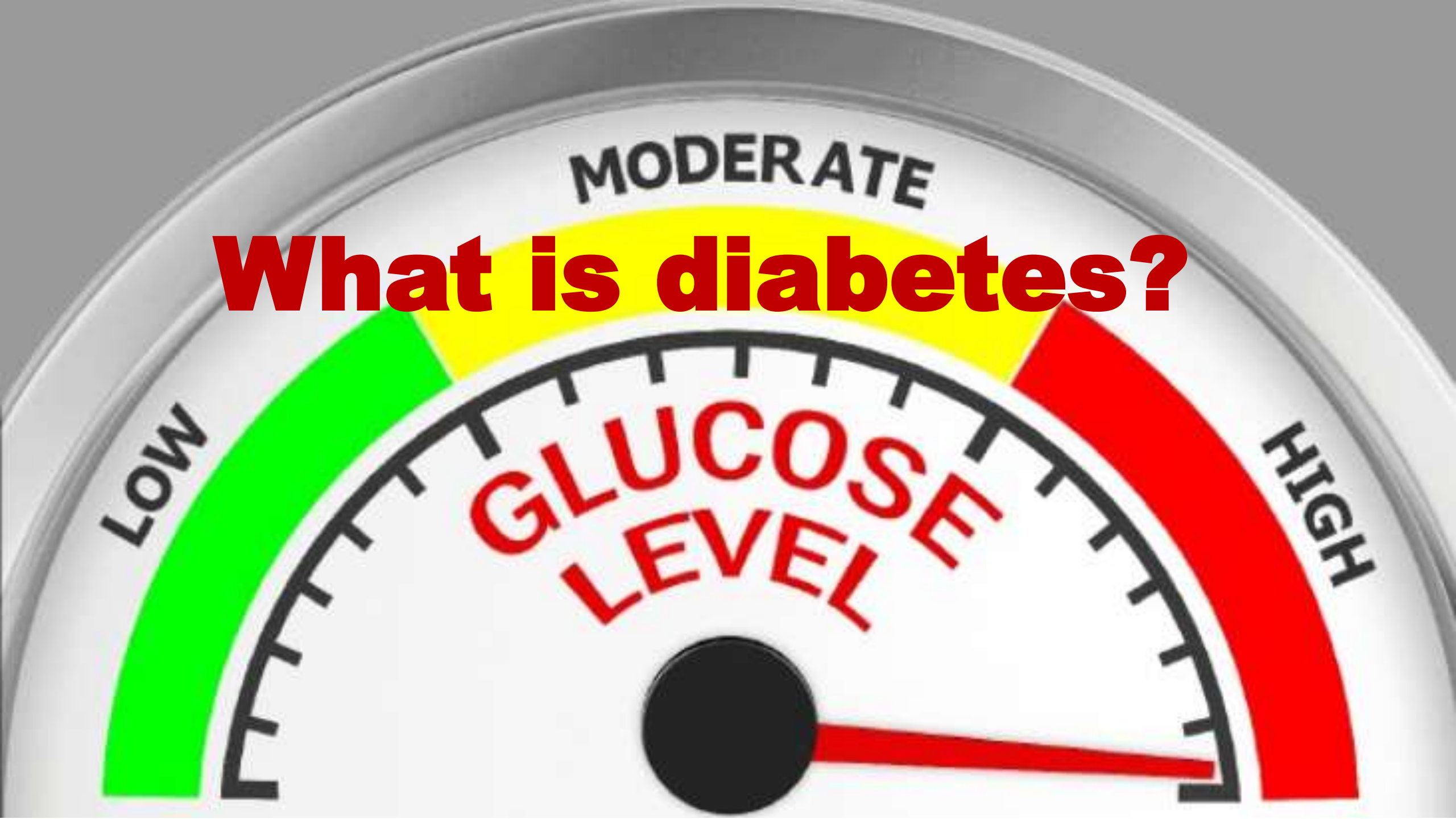
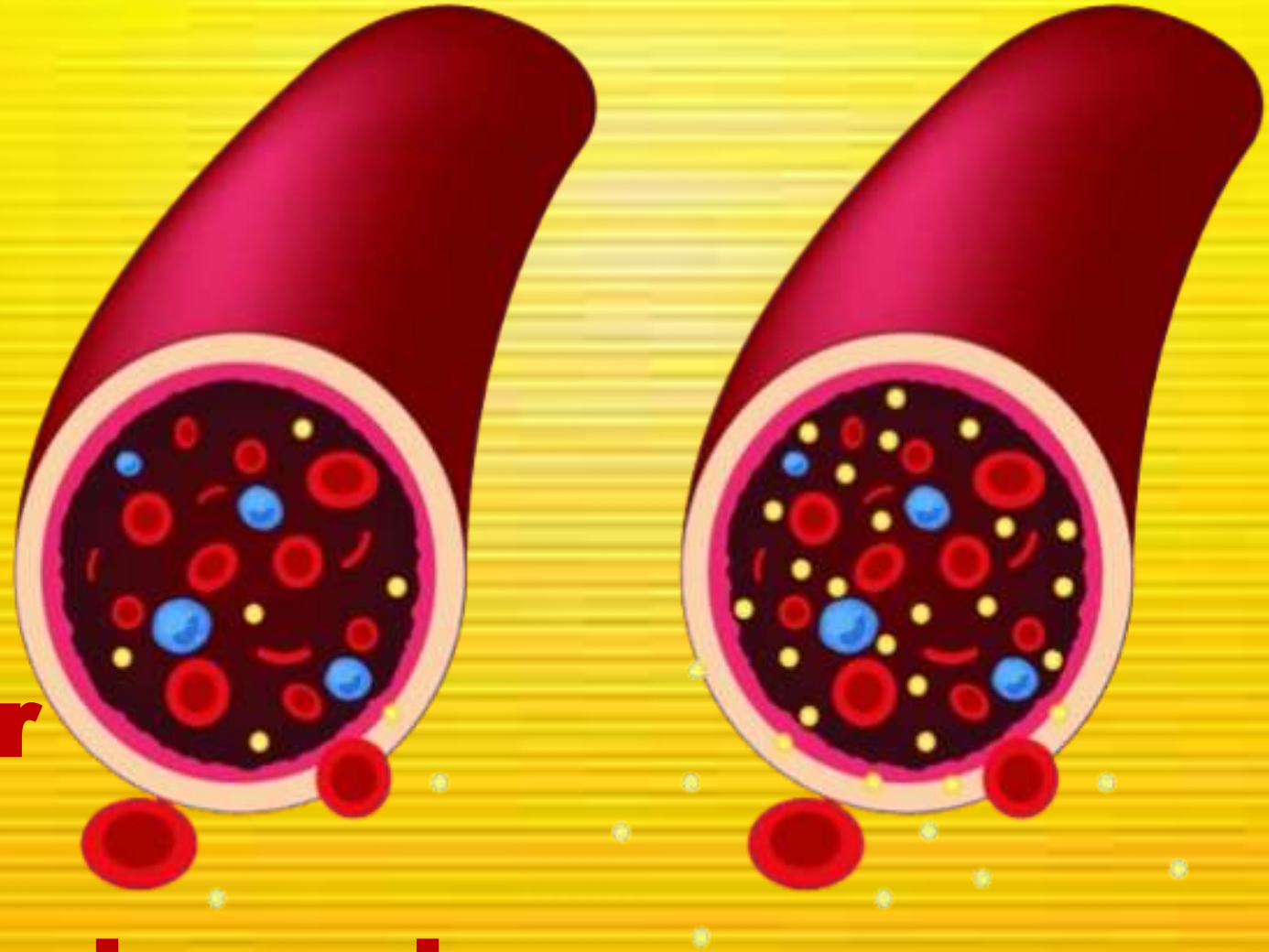
Training System


Diabetes
HIGH
BLOOD
SUGAR

What is diabetes?

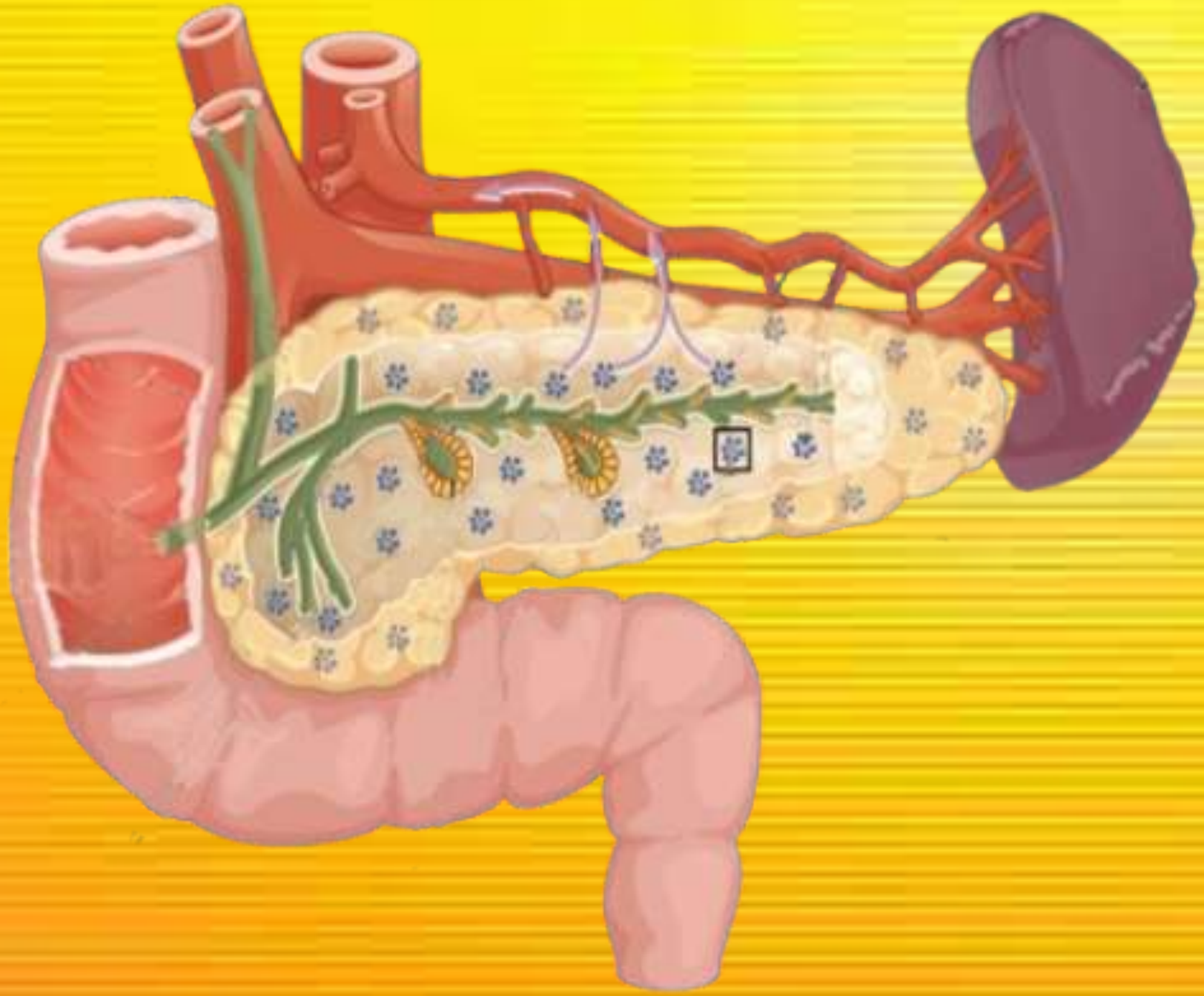


Diabetes is a metabolic condition that happens when your blood sugar is too high



Known as Hyperglycemia

Just look at our pancreas



What are the different types of diabetes?

The most common types of diabetes are

A. Type I

B. Type II

C. Gestational diabetes.


Type I diabetes

Type I diabetes

If you have type I diabetes, your body does not make insulin

Type I diabetes

Immune system attacks and destroys the cells in your pancreas that makes insulin

It is called

Insulin dependent diabetic mellitus (IDDM)

Type I diabetes is usually diagnosed in children and young adults

Although it can appear at any age

People with type I diabetes need to take insulin every day to stay alive

Type II diabetes

Type II diabetes

Body is unable to effectively use insulin to bring glucose into your cells

Type II is the most common type of diabetes

It is called

Noninsulin dependent diabetes mellitus (NIDDM)

Type II diabetes

Type II diabetes can develop at any age, even during childhood

However, this type of diabetes occurs most often in middle-aged and older people

Gestational diabetes

Gestational diabetes (GDM) develops in some women when they are pregnant.

Most of the time, this type of diabetes goes away after the baby is born

But gestational diabetes, have a greater chance of developing type 2 diabetes later in life.

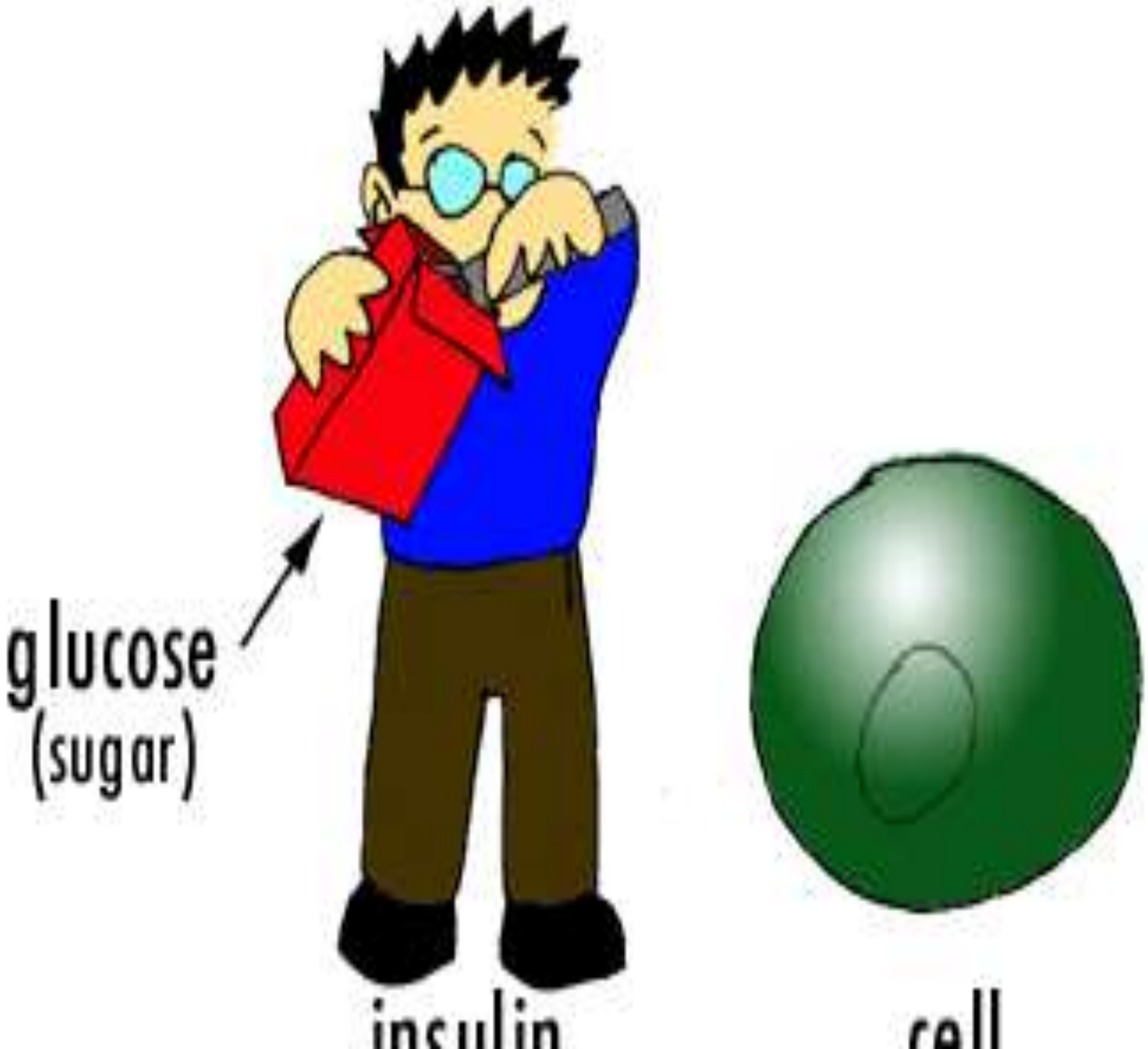
Sometimes diabetes diagnosed during pregnancy is actually type II diabetes

We first need to understand the role of insulin in our body

Insulin is a type of hormone

The role of insulin in the body is to allow glucose in the blood to enter cells, providing them with the energy to function

Role of insulin



Common symptoms include:

Polyuria
Polydipsia
Polyphagia

Common symptoms include:

Polyuria (more and frequent urination)

Common symptoms include:

Polydipsia (Being more thirsty than usual)

Common symptoms include:

Polyphagia (Always feeling hungry)

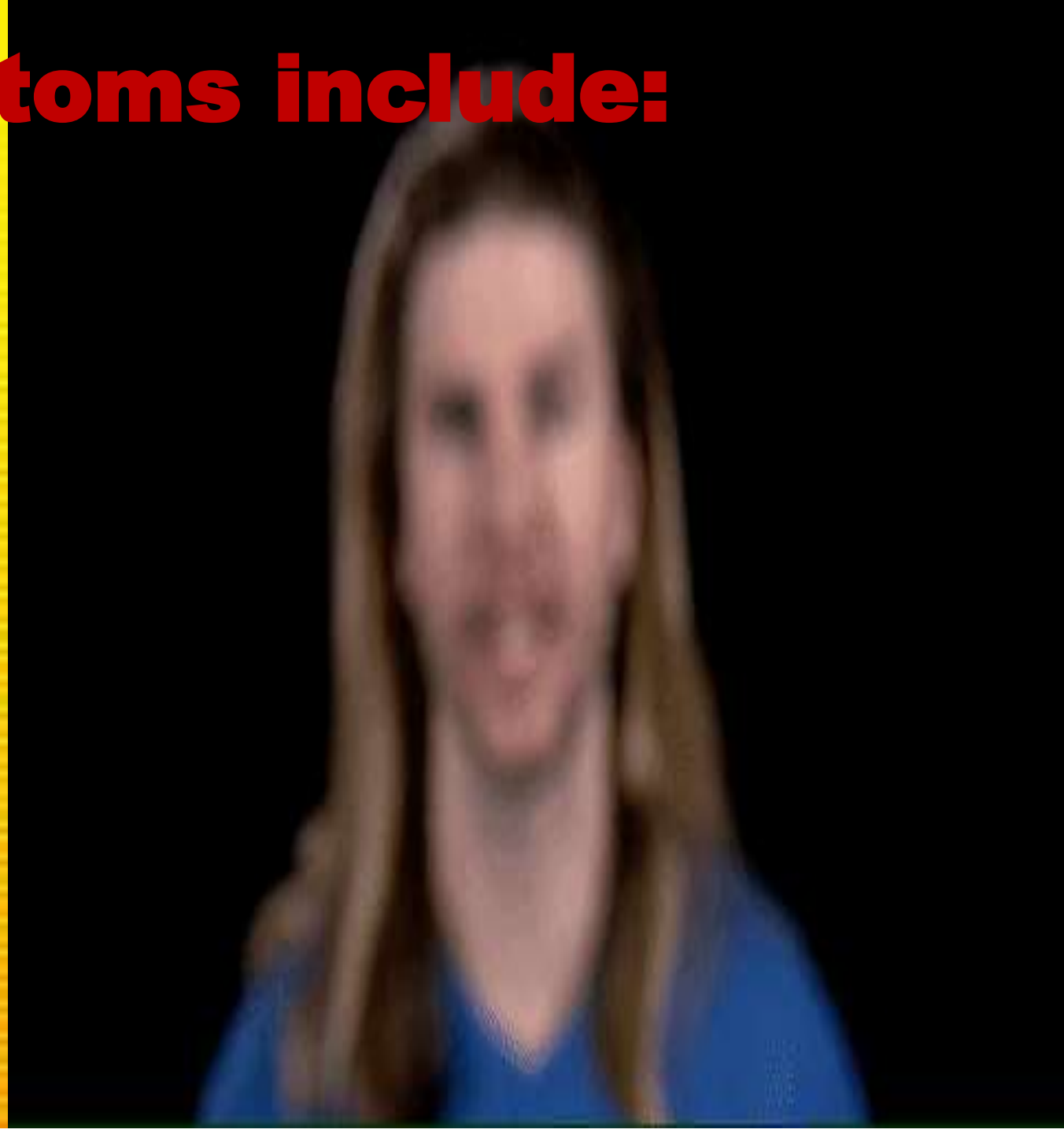
Common symptoms include

Feeling tired and lethargic

Common symptoms include:

Unexplained weight loss

Common symptoms include:

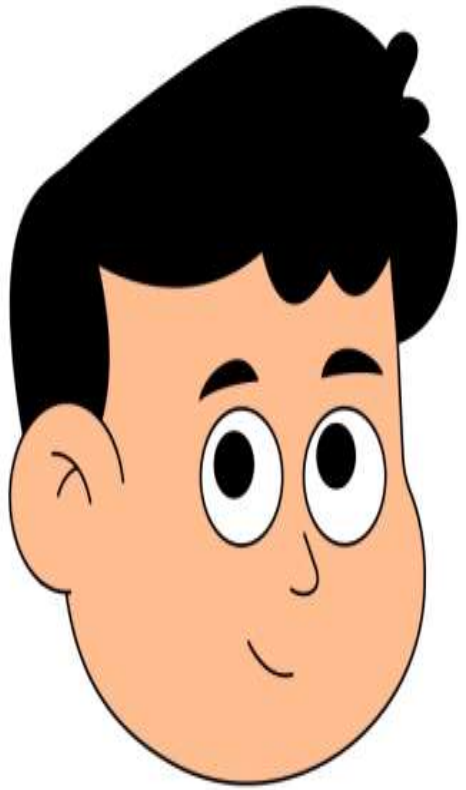


Blurred vision

Having cuts that heal slowly

Itching, skin infections

Mood swings



Leg cramps

Feeling dizzy

Headaches


THE WAR ON
DIABETES
NEEDS YOU

Category of a person	Fasting Value		Post- Prandial
	Minimum Value	Maximum Value	Value 2 h after consuming glucose
Normal	70	100	Less than 140
Early Diabetes	101	126	140 to 200
Established Diabetes	More than 126	-	More than 200

TREATMENT

Anti-Diabetic Range

Diabetic Care Juice


Neem

Azadirachta indica
Neem

Nimbin (triterpene) helps for activation of the insulin resistance pathways

Nimbin (triterpene) increase in pancreatic islet function (insulin secretion)


Jamun

Syzygium cumini
Jamun

Helps in conversion of carbohydrates to energy and regulates blood sugar levels


Amla

Phyllanthus emblica
Amla

It supports healthy digestion and metabolism that prevents excess sugar from depositing

Amla is known for its hypoglycaemic properties

Phyllanthus emblica
Amla

Amla berries have a high soluble fibre

Amla helps slow down the rate glucose absorption

Phyllanthus emblica
Amla

Amla comprises chromium, a mineral that regulates carbohydrate metabolism and more responsive to insulin


Methi

Trigonella Foenum Graecum Methi

Several clinical trials showed that fenugreek seeds can improve most metabolic symptoms associated with both type 1 and type 2 diabetes

Trigonella Foenum Graecum Methi

Several clinical trials showed that fenugreek seeds lowers blood glucose levels and improving glucose tolerance

Trigonella Foenum Graecum
Methi

Soluble fibres in fenugreek including glucomannan fibre delays intestinal absorption of ingested sugars

Trigonella Foenum Graecum Methi

Alkaloids such as fenugrecin and trigonelline have hypoglycemic action

Trigonella Foenum Graecum Methi

Amino acids in fenugreek, act on pancreas to release insulin

Trigonella Foenum Graecum Methi

Alkaloids such as fenugrecin and trigonelline have hypoglycemic action

Amino acids in fenugreek, act on pancreas to release insulin


Karela

Momordica Charantia
Karela

Bitter melon has properties that act like insulin

Bitter melon which helps to bring glucose into the cells for energy

Momordica Charantia
Karela

Karela contains three active substances with anti-diabetic properties

Lectin

Vicine

Charantin

Momordica Charantia
Karela

Vicine is an insulin-like compound known as polypeptide-p

Momordica Charantia
Karela

Vicine helps to regeneration of pancreatic β cells

Momordica Charantia
Karela

Vicine improves insulin sensitivity

Momordica Charantia
Karela

Charntin in karela is a polypeptide that imitate insulin

Charntin helps to regulating the metabolism and use of sugar the body has consumed

Momordica Charantia
Karela

Charntin helps to prevent unpredictable spikes and drops in insulin levels

Momordica Charantia
Karela

Lectins are defined as proteins, can bind carbohydrates reduces the rate of carbohydrate absorption

Bitter gourd is a rich source of vitamins and minerals

Momordica Charantia
Karela

Its high fibre content slows down glucose absorption

Momordica Charantia
Karela

Various anti-oxidants and anti-inflammatory compounds are present in bitter gourd which It strengthens the immune system

Momordica Charantia
Karela

It contains iron, magnesium, calcium, potassium and vitamins like A and C


Bell Leaf

Aegle marmelos
Bell Leaf

The active constituent “Feronia gum, Polyphenols and flavonoids present in the Bell Leaf

Aegle marmelos
Bell Leaf

Feronia gum in Bell Leaf regulates the production of insulin from the cells into the blood stream

Aegle marmelos
Bell Leaf

Enhances insulin sensitivity

Aegle Marmelos is rich in anti-oxidants which helps in insulin secretion which leads to low blood sugar levels

Kutki

Picrorhiza kurroa
Kutki

The medicinal herb is packed with antihyperglycemic properties, which help in lowering blood sugar levels

Picrorhiza kurroa
Kutki

Helps in Detoxification of blood

Maintains blood sugar level

Picrorhiza kurroa
Kutki

Kutki contains active compounds like **Picrorhizin** and **Kutkin**, which help in reducing and controlling blood glucose levels

Picrorhiza kurroa
Kutki

It helps to improve digestion, metabolism of carbohydrates

Picrorhiza kurroa
Kutki

Picrorhizin and **Kutkin**
these compounds stimulate
the beta cells of the
pancreas

Picrorhiza Kurroa
Kutki

Picrorhizin and **Kutkin**
increasing insulin production

Diabetic Control

COMPOSITION

Neem
Curcuma Amada
Methi
Kerela
Jamun
Billav Patra
Gurmar
Amlaki
Bivalai
Jamun Beej
Mameejawa
Gudhuchi


Gudhuchi

Tinospora cordifolia
Guduchi

Tinospora Cordifolia was evaluated for hypoglycemic and anti-hyperglycemic activity

Guduchi supplementation can relieve diabetic neuropathy

Tinospora cordifolia
Guduchi

Extracts from the herb have been found to have a high density of phytosterols, alkaloids, and glycosides, among other organic compounds

Tinospora cordifolia
Guduchi

Guduchi can also promote improvements in glucose metabolism and increase glucose tolerance

Tinospora cordifolia
Guduchi

One of the alkaloid compounds in giloy is **berberine**

Tinospora cordifolia
Guduchi

Studies have shown that **Berberine** works in a similar way to the diabetes medication metformin

Tinospora cordifolia

Giloy helps to boost our immune system

Reducing insulin resistance

Tinospora cordifolia
Guduchi

Giloy, the Ayurvedic herb, can help the body to naturally create insulin, which can be beneficial in managing diabetes


Curcuma
Amada

Curcuma amada
Mango ginger

β-cells population

Treatment with Curcuma amada dramatically reduced HbA1C levels and restored normal insulin levels

Curcuma amada
Mango ginger

It is rich in antioxidant properties and certain mineral compounds


Gurmar

Gymnema sylvestre
Gurmar

Stops the pancreatic cell damage

Increase insulin secretion

Gymnema sylvestre
Gurmar

Gymnema sylvestre can also block receptors in your intestines and thus sugar absorption, lowering your post-meal blood sugar levels

Vijayasara

Vijayasara

Pterocarpus marsupium Vijayasara

support healthy blood sugar levels

Pterocarpus marsupium Vijayasara

The active phytoconstituent phenolic C-glycosides present in Pterocarpus marsupium are responsible for the antihyperglycemic activity

Pterocarpus marsupium Vijayasara

helps to improve the function of normal cells, membrane permeability, and metabolic stability

Stevia

Neem

thanks!