### Twitter Thread by Shreya Shah





#### Diabetes!

India has 77 Milion Diabetics, second highest in the world!

Diabetes is a lifestyle disease that can be caused by many factors such as stress levels etc.

A threaden what is diabetes, the types of diabetes and the lifestyle changes needed for diabetics

Lets go■



### **DIABETES**



#### ■What is Diabetes?

As food is digested, it is broken down into glucose (also known as sugar), which provides energy and powers our cells.

Insulin, a hormone made in the pancreas, moves the glucose from the blood to the cells.

However, if there is not enough insulin or the insulin isn't working properly, then the glucose stays in the blood and causes blood sugar levels to rise.

■There are 3 main types of Diabetes

Type 1, Type 2 and Gestational diabetes



# **TYPES OF DIABETES**

TYPE 1	TYPE 2	GESTATIONAL
Type 1 results from the pancreas no longer being able to make insulin and is usually found in children, teens, and young adults.	In type 2 Diabetes, body produces insuli but is unable to use insulin because of insulin resistance in the cells	Gestational diabetes is a type of diabetes that can develop during pregnancy in women who don't already have diabetes. It can occur near the end of a woman's pregnancy and usually disappears after the baby's birth.

■Risk factors

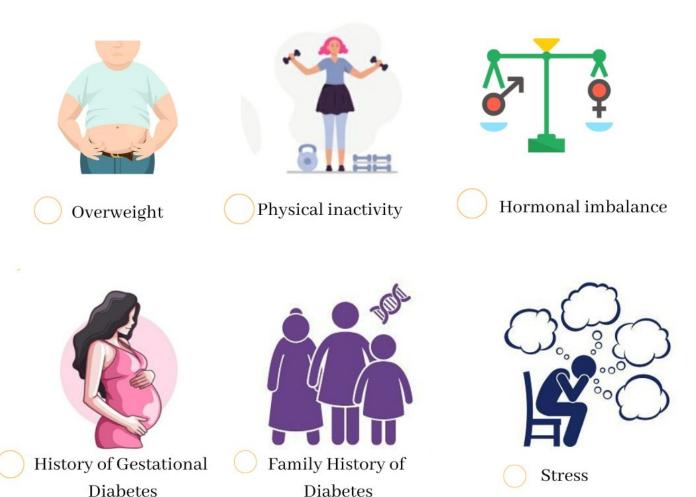
The most common form of diabetes is type 2.

Risk factors include ■

## **DIABETES**



### Are you at risk??



### If your score is >2, it calls for an immediate attention

■Symptoms of Diabetes

If you have any of the following diabetes symptoms, see your doctor about getting your blood sugar tested■



## **SYMPTOMS OF DIABETES**



Fatigue



Dizziness



Always hungry



Tingling sensation on hands and feets





Increased thirst



Frequent urination



Blurry vision

**■**Diagnosis

Diagnostic criteria for Normal, pre-diabetes and diabetes■



## **DIAGNOSTIC CRITERIA**

## Normal, Pre-diabetes, Diabetes

Sr.No	PARAMETERS	NORMAL	PRE- DIABETES	DIABETES
1.	Fasting Plasma Blood glucose (mg/dl)	<100	100-125	≥126
2.	2hrs. Plasma blood glucose or OGTT (mg/dl) (75gm of glucose)	<140	IMPAIRED GLUCOSE TOLERANCE 140 - 199	≥200
3.	HbA1c (%)	<5.7	5.7-6.4	≥6.5

■Diabetes: What Role Does Diet Play?

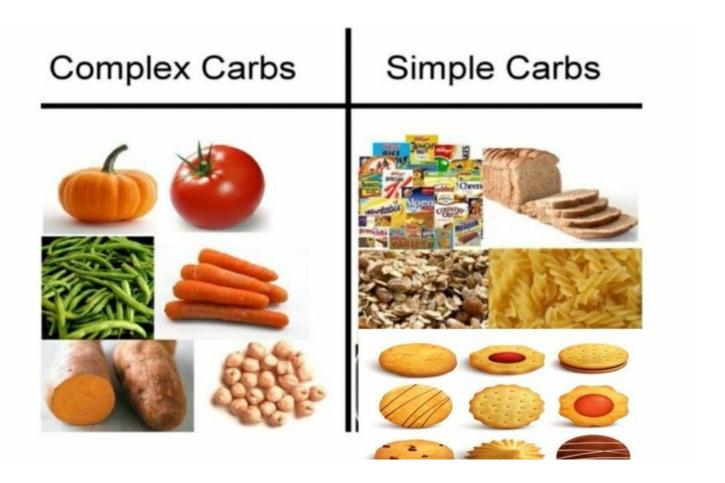
"Food can either promote diabetes or help prevent it, depending on how it affects the body's ability to process glucose,"

- ■■ Help you control your blood sugars and blood lipids
- ■■ Help you maintain a healthy weight
- ■■ Help in Preventing Long-term and short-term complications of Diabetes.
- ■■Processed foods as well as items high in fat or sugar not only can disrupt the balance between glucose and insulin, resulting in inflammation, but can also contribute to risk factors such as being overweight.

carbohydrate intake in the right way is key!

No matter what your health goal is, if you do your carbs right, that's half the battle won!

As you all know, carbs can be either complex/simple or "good" or "bad".



■Carbohydrates and Glycemic index

Glycemic index indicates impact of different carbohydrate food on the blood glucose levels

■Low GI: 55 or less ■Medium GI: 55-69 ■High GI: 70 or above

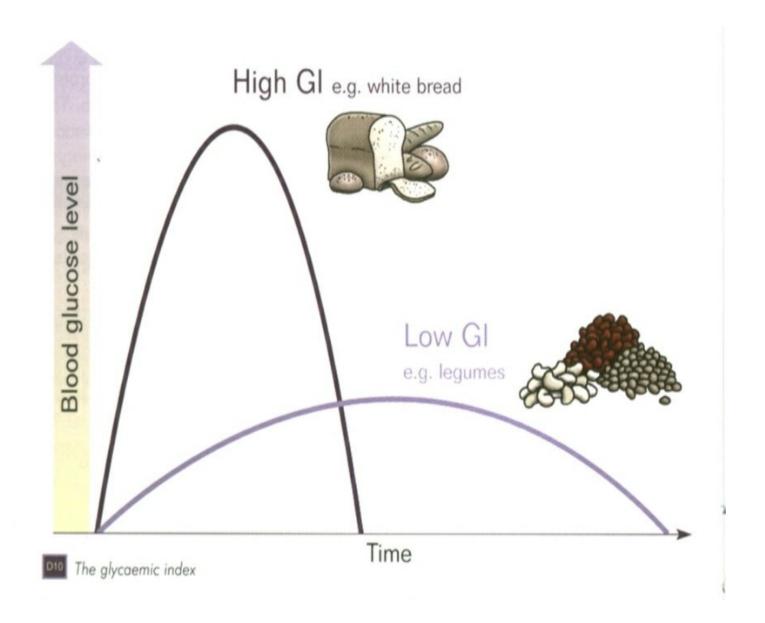
Low GI foods are best for blood glucose control

- ■■Low Glycemic Index foods that cause a slow & sustained release of glucose into the blood. These include all fats and most proteins. All whole grains in their natural, unprocessed form fall in this category. Also, juice fruits like Apple, Pear, Berrie, Oranges fall in this category.
- ■■Medium Glycemic Index moderate speed of glucose release.Other than certain fruits like banana,mango, pineapple,musk melon,papaya,figs, raisins,this group largely comprises semi or home processed food&dal based dishes. Idli,dhokla, dosa,roti,paratha will come in this category.
- ■■High Glycemic Index They cause an instant surge in blood sugar levels leading to a sudden rise followed by crash and fat deposition. Sugars, desserts, watermelon, fruit juices, white rice, baked sweet potato are all in this category.



€ High		Glycemic Index List						Low 3	
Grain/Stare	ch	Vegetable		Fruit		Dairy		Protein	
Rice Bran Bran Cereal Spaghetti Corn, sweet Wild Rice Sweet Potatoes White Rice Cous Cous Whole Wheat Bread Muesli Baked Potatoes Oatmeal Taco Shells White Bread Bagel, White	27 42 42 54 57 61 64 65 71 80 85 87 97 100 103	Asparagus Broccoli Celery Cucumber Lettuce Peppers Spinach Tomatoes Chickpeas Cooked Carrots	15 15 15 15 15 15 15 15 33 39	Grapefruit Apple Peach Orange Grape Banana Mango Pineapple Watermelon	25 38 42 44 46 54 56 66 72	Low-Fat Yogurt Plain Yogurt Whole Milk Soy Milk Fat-Free Milk Skim Milk Chocolate Milk Fruit Yogurt Ice Cream	14 14 27 30 32 32 35 36 61	Peanuts Beans, Dried Lentils Kidney Beans Split Peas Lima Beans Chickpeas Pinto Beans Black-Eyed Beans	244444555

■■Graph showing the effect of high glycemic index food on blood glucose levels



#### **■**Protein

- ■■When you eat carb in combination with protein (or fat), it can take longer for your body to convert the former into glucose, leading to lower post-meal BS levels in patients with Type 2 diabetes
- ■■1 g of prot provides 4cal,same as carbs, it reduces the cal intake by providing satiety,which also helps in BS control
- ■■A low prot diet leads to muscle los which increases the risk of falls&fracture in elderly diabetics
- ■Low muscle mass is a contributor to insulinresistance
- ■Fat
- ■■People mistake going low-carb& high protein without focusing on healthy fat
- ■■Your body needs good fats as these are precursors to your hormones, including insulin which is crucial to maintaining your BS levels
- ■■Add good fat like quality nuts, seeds, & cold-pressed oils

■Diabetes: What Is a Healthy Diet?
A healthy diet for diabetes is virtually the same as a healthy diet for anyone.

Low carb, high protein, and good fats

When you go low-carb, you also need to make sure that you balance it out with quality proteins and fats.

■Dietary Guidelines
■Avoid sugar honey and jaggery in the diet
■Avoid fruit juices, coconut water, and sugarcane juice.
■■ Restrict the amount of salt in the diet
■■Restrict the amount of oil to 3-4tsp/day i.e. ½ litre oil/person/month.
■■Avoid deep fried foods.
■■Include more amount of fruits and vegetable in your diet.
■■ Steaming, boiling, poaching, pressure cooking, grilling should be preferred method of cooking.
■■Avoid Fruit juices instead prefer whole fruit

Avoid all kinds of processed food like chips, biscuits, ready to eat food items.

■■Avoid carbonated&sweetened beverages

■■ Limit the use of refined flour& products made up of refined flour like: Bread,pay, biscuit,toast.



USE FREELY	LIMIT	AVOID
➤ INCLUDE MORE AMOUNTS OF VEGETABLES IN THE DIET.  ➤ FOR SALADS USE VEGETABLES LIKE CARROT, CUCUMBER, ONION, TOMATO, BEETROOT.  ➤ INCLUDE MORE AMOUNTS OF FRUITS LIKE APPLE/ PEAR/ PINEAPPLE (1-2 SLICE)/ PAPAYA (1 SMALL BOWL)/ ORANGE/ GUAVA.  ➤ HIGH FIBRE FOODS LIKE OATS, SPROUTS, WHOLE GRAIN CEREALS.  ➤ VEGETABLE SOUPS LIKE PALAK SOUP, TOMATO SOUP, DAL- VEGETABLE SOUP WITHOUT ADDITION OF MAIDA. NO CREAM SOUPS.	USE OF OIL TO 3- 4TSP/DAY. AND GHEE – 1TSP/DAY.  > ROOT VEGETABLES SUCH AS POTATO, SURAN, ARVI.  > USE OF PEANUTS, FRESH COCONUT/DRY COCONUT/ COCONUT MILK, AND OTHER TYPES OF NUTS TO MAKE GRAVIES IF USED.	ALL THE FRIED FOODS LIKE PURI, PAKODA, NAMKEEN, CHIPS.  AVOID SUGAR, HONEY AND JAGGERY IN THE DIET.  SWEETS AND CONCENTRADED MILK PREPARATIONS LIKE GULAB JAMUN, BARFI, PEDHA.  FRUIT JUICES, COCONUT WATER AND SUGARCANE JUICE.  REFINED FLOUR PRODUCTS LIKE BISCUITS, CREAM BISCUITS, KHARI, AND RUSK.  ALL PROCESSED FOODS LIKE CHEESE PAPAD, SAUCES, PICKLE, SALTED BUTTER, COLD DRINKS AND ALL READY-TO-EAT FOOD ITEMS.  SMOKING AND DRINKING.

#### ■Conclusion

Diabetes is a disease that plagues millions around the world.

It is a lifestyle disease!

I have shared few tips to manage a diabetes

Not to forget along with all these dietary changes, your stress levels, sleep pattern and exercise will play an equally imp role.