



INSPIRING PEOPLE

All About Diabetes

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Diabetes

- Dispelling myths
- What is diabetes?
- How is it treated?
- How can we prevent it?
- Resources

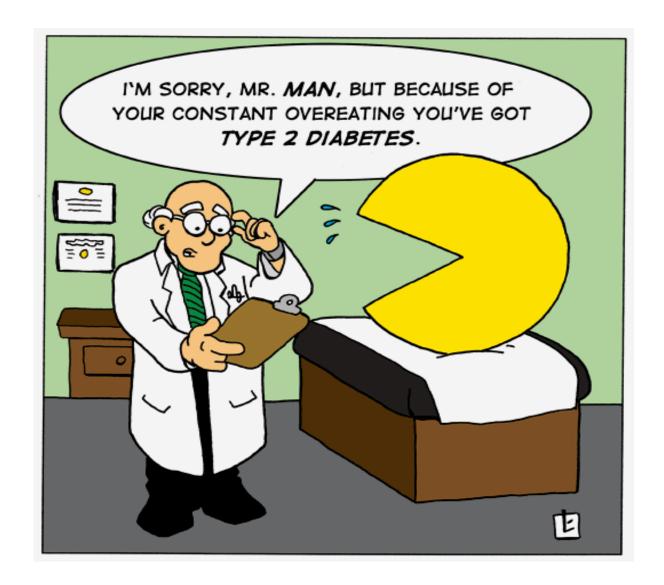


True or False

Eating too much sugar causes diabetes.







False

Fact:

- Eating too many calories causes diabetes.
 An increase in caloric intake puts people at risk for diabetes. Sugary foods are usually higher in calories but so are other foods.

 Sugar alone does not cause diabetes.
- For example, skipping sugar in your coffee but eating a 'high-starch'/'high calorie' breakfast is more of a risk.



True or False

If you are overweight or obese, you will develop type 2 diabetes.



False

Fact:

- Being overweight is a risk factor for developing this disease, but other risk factors, such as family history, ethnicity, and age, also play a role. Most overweight people never develop type 2 diabetes, and many people with type 2 diabetes are at a normal weight or only moderately overweight.
- Studies show that people at high risk for diabetes can prevent or delay the onset of diabetes by losing 5 to 7 percent of their weight.



True or False People with diabetes should eat special diabetic foods.







False

Fact:

- A healthy meal plan for people with diabetes is generally the same as a healthy diet for anyone:
 - low in fat (especially saturated and trans fat)
 - moderate in salt and sugar
 - meals based on whole grain foods, vegetables, and fruit
- Diabetic and "dietetic" foods generally offer no special benefit. Most of them still raise blood glucose levels, are usually more expensive, and can also have a laxative effect if they contain sugar alcohols.



True or False

Fruit is a healthy food. Therefore, it is okay to eat as much of it as you wish.



False

Fact:

- Fruit is a healthy food. However, fruit contains carbohydrates, which need to be factored into your daily carbohydrate count.
- We will discuss carbohydrates in a later slide.



True or False

Diabetes is irreversible and difficult to treat.



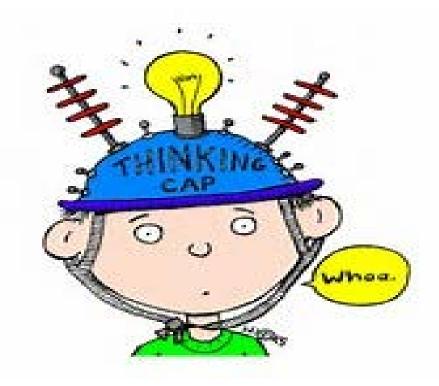
False

Fact:

Equipped with knowledge about your condition, you can take steps to TREAT and REVERSE diabetes through healthy lifestyle changes!

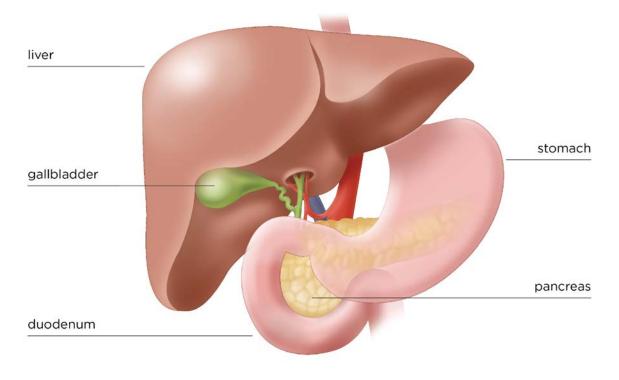


Science of Diabetes





Pancreas



- Releases pancreatic enzymes
- Releases hormones (insulin and glucagon)
- Responds to what we eat



Glucose

- Gives us energy
- Obtained from two sources
 - -Food (starches/carbohydrates)
 - Manufactured by the liver and muscles

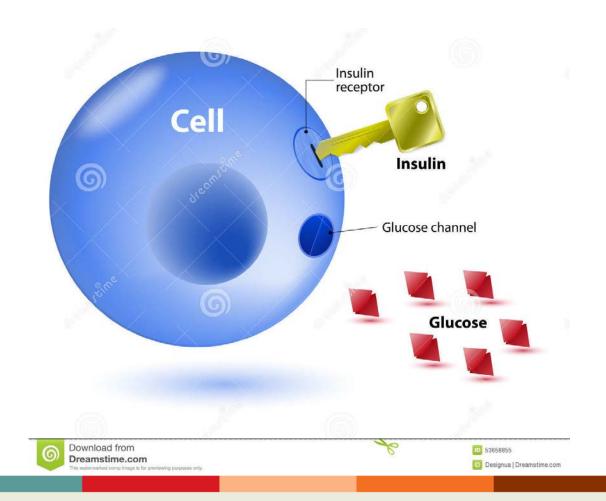


Insulin

- Hormone produced by the pancreas
- Helps the body use glucose (sugar) for energy
- Acts like a key

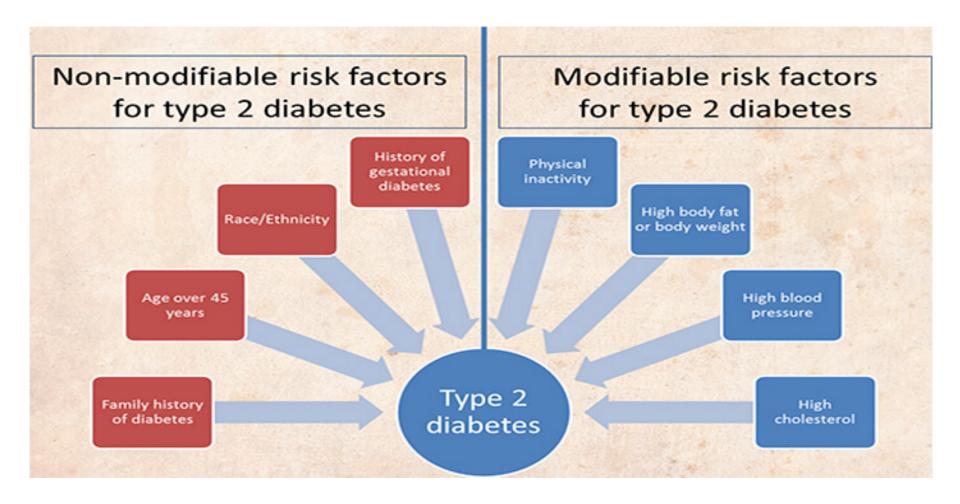


The Diabetes, Glucose, Insulin Connection





Diabetes Risk Factors







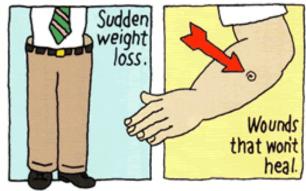


DIABETES

KNOW THE SYMPTOMS



















Types of Diabetes

- Type I (previously known as juvenile diabetes)
- Type II (previously known as adult onset)
- Gestational (during pregnancy)
- Pre-diabetes (warning)



Type 1 Diabetes

- Usually diagnosed in children or young adults (under age 40)
- Autoimmune disorder: The body sees the pancreas as a foreign body and attacks it.
- Pancreas stops producing insulin
- Cause unknown: Environmental factors are thought to play a role (twins example).



Type II Diabetes

- Most common form
- 29.1 million (children/adults)
- 9.1 million are un-diagnosed
- Usually in adults but becoming more common in kids
- The body does not produce enough insulin or cannot properly use insulin



Gestational Diabetes

- 4% of pregnant women
- Unknown cause The body is not able to make and use all the insulin it needs for pregnancy.
- This does not mean that you have diabetes before conception or that you will have diabetes after giving birth.



Pre-Diabetes

- Warning Sign
- 86 million people have pre-diabetes

Diagnosis:

- Fasting Blood sugar 100-125
- A1C: 5.7% 6.4%
- Reversible (through lifestyle changes)



Blood Test Levels for Diagnosis of Diabetes and Prediabetes

	A1C (percent)	Fasting Plasma Glucose (mg/dL)	Oral Glucose Tolerance Test (mg/dL)
Diabetes	6.5 or above	126 or above	200 or above
Prediabetes	5.7 to 6.4	100 to 125	140 to 199
Normal	About 5	99 or below	139 or below

Definitions: mg = milligram, dL = deciliter

For all three tests, within the prediabetes range, the higher the test result, the greater the risk of diabetes.



Why is A1C so important?

- A1C is a type of hemoglobin, a protein found in your red blood cell
- It carries glucose through our blood stream
- Red blood cell lives 90 days
- Correlates with sugar levels

- The percentage of sugar in your blood
- Diabetic goal: A1C<7% ADA <6.5 AACE
- If your A1C is at goal, keep up the good work.
 If not... let's get to work!

American Diabetes Association (ADA) American Association of Clinical Endocrinologists (AACE)



A₁c 12 Danger! 11 10 9 Caution! 8 6.5 Success! 6 5 4

If you have diabetes, what's next?

"Fear, Frustration, Hopelessness."

We are here to help you!

- Doctor visits: Become informed
 - Review of glucose readings (glucometer/strips)
 - Review food log
 - Regular medical visits: Check weight, blood pressure, cholesterol, feet, kidney health
 - Discuss treatment regimen

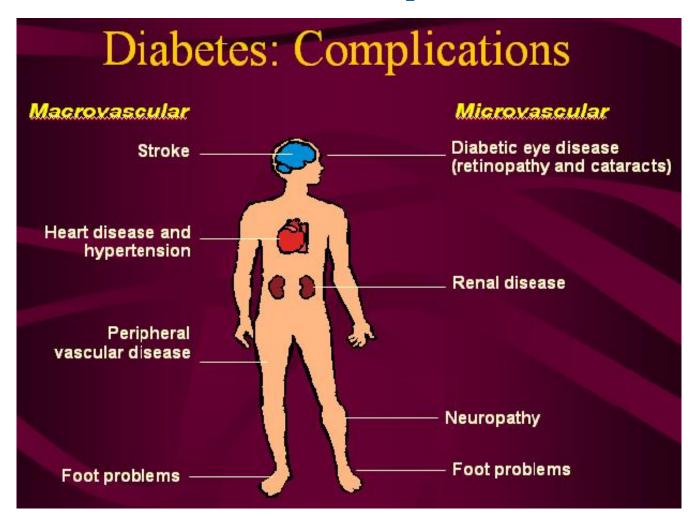


Other Recommendations for Diabetics

- Smoking Cessation
 - Smoking causes blood glucose to increase
 - Diabetic nerve complications increase
- Cut down on alcohol
- Eye and foot exam (at least one time per year)
- Keep feet moisturized and nails clipped
 - Beware of nail salons (increased risk of infection)



Diabetic Complications







"Don't slice the pizza. My diet says I'm only allowed to eat one piece."



Dietary Recommendations

- Diabetics can eat all types of foods in moderation.
- There is not one "magic diet" for everyone.
 You need an individualized meal plan based on your lifestyle to achieve goals.
- Key Terms: Carbohydrates, Glycemic Index, Glycemic Load, Fat, Fiber, Protein, Calories



Carbohydrates

- Our body turns 'carbs' into glucose (sugar).
- Meats and fats do not contain carbohydrates.
- Carbohydrate counting is important in keeping your blood sugar stable and your weight under control.
- The amount needed is different for every individual (based on activity level, medications, and diet).



Foods that Contain Carbohydrates

- Grains like rice, oatmeal, and barley
- Grain-based foods like bread, cereal, pasta, and crackers
- Starchy vegetables like potatoes, plantains, yuca
- Fruit and juice
- Milk and yogurt
- Beans
- Sweets and snack foods





WHY CARBOHYDRATES MATTER TO YOU

COMPLEX CARBS = GOOD

Good carbs are also referred to as complex carbohydrates. Their chemical structure and fibers require our bodies to work harder to digest, and energy is released over a longer time.

For the most part, good carbs are in their 'natural' state - or very close to it (including whole-grain breads, cereals and pastas).



Breads



Cereals







Vegetables

Fresh **Fruits**

WHY ARE THEY GOOD?

SIMPLE CARBS = BAD

Simple carbohydrates are smaller molecules of sugar that are digested quickly into our body. The energy is stored as glycogen in our cells, and if not used immediately gets converted to fat.

Bad carbs are generally 'processed' carb foods that have been stripped of their natural nutrients and fiber to make them more 'consumer friendly.'









Desserts

Sugary Drinks

Breads

WHY ARE THEY BAD?



Natural Therapy & Tips



 Talk to you PCP prior to starting natural/herbal remedies as some can interact with medications.



Natural Remedies for Diabetes

- White mulberry leaf, brown seaweed, cinnamon, sorghum bran, aloe vera, fenugreek, gingseng, CoQ10, chromium, and magnesium (all shown to decrease blood sugar)
- "One size does not fit all"
- If you're a diabetic, monitor sugar closely when starting the use of supplements.



Diabetic Medications

- Many types of medications
 - Oral (pills)
 - > Metformin is the most common
 - Insulin
 - Non-insulin injectables

 It's Important to talk to your doctor about what is right for you.



Keys to Success

- Get at least 30 minutes of moderateintensity physical activity five days per week (or 150 minutes per week)
- Keep a blood sugar log and a food log
- Eat a variety of foods that are low in fat and reduce the number of calories you eat per day

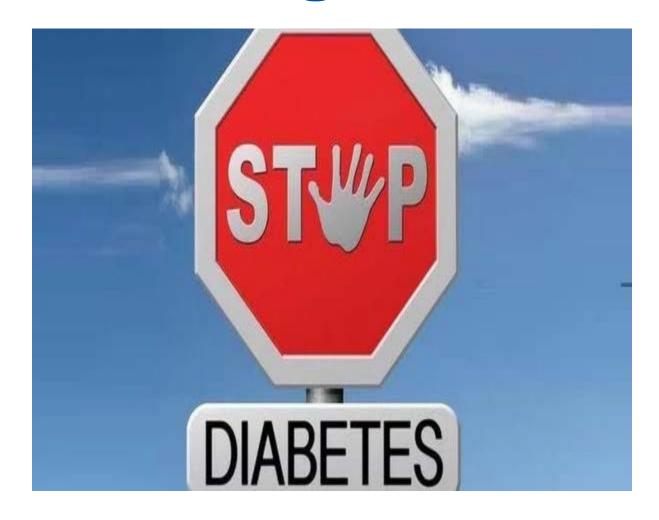


How We Can Help!

- Come in for a fasting glucose screening
- Health coaching to work on healthy eating and increasing physical activity
- Have diabetes?
 - We can check your A1C level
 - We can help you manage your diabetes or pre-diabetes.



Knowledge = Power





Stay tuned: 5 week diabetes education class

Where: City Hall Commission Chambers When: 12:00PM – 1:00PM

- Monday, July 31: Diabetes Diet and Eating Healthy
- Monday, August 7: Diabetes Basics Part 1
- Monday, August 14: Diabetes Basics Part 2
- Monday, August 21: Diabetes Complications: Prevention and Treatment
- Monday, August 28: Medical Treatments of Diabetes



Resources

- American Diabetes Association
 - www.diabetes.org
- National Diabetes Information Clearinghouse (NDIC)
 - http://diabetes.niddk.nih.gov/
- National Diabetes Education Program
 - www.ndep.nih.gov
- Life Extension Foundation
 - www.lef.org
- <u>Dr. Neil Barnard's Program for Reversing Diabetes</u>. Neil Barnard M.D., 2006.
- Marathon Health ePortal/Personal Health Record
 - www.marathon-health.com/MyPHR



Questions?

Thank You!

