

Welcome to Diabetes Education!

Why Should I Take Control of My Diabetes?

NEEDS and BENEFITS of SELF-MANAGEMENT

- ✚ You make choices about your life and health
- ✚ Controlling diabetes needs **every day** decisions
- ✚ Your providers are here to help you make good decisions
- ✚ People who manage their diabetes live longer with less complications

Put a check next to
the top 3 reasons
that are important
to you



Check It Out

Reasons to control blood sugar:

- To feel better
- To have more energy
- To do the things I enjoy doing
- To prevent complications
- To be able to work
- To see my children grow up
- To see my grandchildren
- I want to be independent
- I want to keep my driver's
license
- Other

* Goals *

You are going to learn to set goals to help you control
your blood sugar.

Facts About Diabetes

- Over 17 Million Americans have Diabetes. Half of them do not know it.
- Two-thirds of people with Diabetes die of some kind of heart disease or blood vessel disease
- There is no cure for Diabetes, but you can control it!

Risk Factors

- A family history of Diabetes (mother, father, brother or sister)
- Diabetes during pregnancy or a baby who weighed 9 pounds or more
- Being overweight
- Lack of exercise
- Having High Blood Pressure
- Having a High Blood Cholesterol
- If you are African American, Hispanic/Latino, Asian American, Pacific Islander or Native American

Signs and Symptoms

- Hungry or thirsty a lot of the time
- Going to the bathroom a lot - often at night
- Blurry vision at times
- Feel tired or weak a lot of the time
- Weight loss
- Very dry skin
- Cuts or sores that are slow to heal
- Problems with having sex
- Loss of feeling or get a tingling feeling in your feet and hands

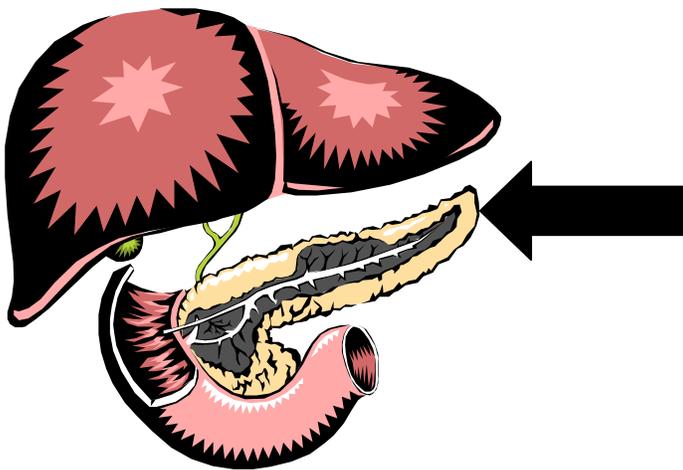


Do you have family or friends who have risk factors and/or symptoms? You can tell them how important it is to get checked for Diabetes?

What is Diabetes?

When you have Diabetes your body does not use insulin very well or does not make enough insulin. Because of this, you have high blood sugar.

Where does insulin come from?



The Pancreas makes **Insulin**.
The Pancreas is located behind the stomach.

Why do you need insulin?

The food we eat is turned into **glucose** (sugar). Our bodies use the glucose for energy. The insulin helps the glucose get into our cells. When you have diabetes, your body may not make enough insulin or the cells cannot use the insulin the body makes. When the insulin does not let glucose into the cell, the glucose builds up in your blood. When this happens you have **high blood sugar**.

This high level of sugar in your blood can damage your eyes, kidneys, nerves, and blood vessels over time.

What is the difference between type 1 and type 2 diabetes?

type 1 Diabetes

This kind of Diabetes was also known as Insulin Dependent Diabetes Mellitus (IDDM) or Juvenile Onset Diabetes. These are now called type 1.

Type 1 Diabetes usually begins when you are young but can happen at any time. It does not usually run in families. It usually occurs in thin to normal weight people.

In children there is a quick onset with frequent urination, thirst, extreme hunger; very tired, rapid weight loss and the blood sugar levels are very high.

If you have type 1 Diabetes your pancreas makes little or no insulin. You will need to take insulin shots every day to remain healthy.

type 2 Diabetes

This kind of Diabetes was also known as Non-insulin Dependent Diabetes (NIDDM) or Adult Onset Diabetes. This is the most common kind of diabetes. About 90 % of people with diabetes have type 2 diabetes.

You may not have enough insulin or your body does not use the insulin that is made. Usually with type 2 diabetes your body still makes insulin.

Type 2 diabetes usually starts slowly and the person may not even know they have a problem. It most often occurs in people over 30 years of age but can start at any age. There are an increased number of teenagers with type 2 diabetes today.

Problems that cause high blood sugar (Diabetes)

There are three things that can happen with diabetes type 2 to cause high blood sugar

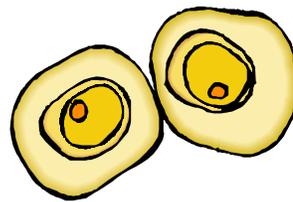


The liver puts out too much sugar.

The liver stores glucose (sugar). When the body has low blood sugar the liver sends glucose to raise the blood sugar. In diabetes it is like a leaky faucet and does not know when to stop sending out glucose.



The Pancreas may not make enough insulin or may not make any insulin at all.



Cells

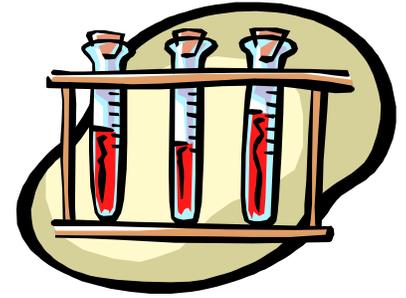
Sugar cannot get into the cells to be used as energy so it stays in the blood, and you have high blood sugar.



Insulin is the key that unlocks the cell so the glucose can get in. When the lock is broken the Insulin (the key) cannot help the glucose (sugar) get in the cell.

How do you know if you have diabetes?

Tests are done at the clinic when a person has signs and symptoms of diabetes or risk factors for diabetes. As part of your routine clinic visit, you will have a fasting or random blood sugar test done.



1. Random or Casual Blood Glucose Test - A finger stick or a tube of blood is taken even if you have had something to eat. This is used when you have symptoms of diabetes. If the result is more than 200 mg/dl you have diabetes.

2. Fasting Blood Glucose Test - No food for 8 hours. The lab will take a finger stick or a tube of blood. Usually this test confirms diabetes.

Normal = below 110 milligrams per deciliter (mg/dl)

Pre-Diabetes= 111 to 125 mg/dl

Diabetes= more than 126 mg/dl

3. Glucose Tolerance Test: You fast over night, nothing to eat or drink and go to the lab in the morning. At the lab you will have blood taken and then drink a sweet drink. 2 hours later you will have blood taken again.

Normal is below 140 mg/dl

Pre-diabetes is 141-199 mg/dl

Diabetes is above 200 mg/dl.

Pre-Diabetes

How is Pre-diabetes different from diabetes?

Pre-diabetes is a way to explain higher than normal blood sugar levels. When a person's blood sugar levels are higher than normal but not high enough to be diabetes it is pre-diabetes.

Other terms for pre-diabetes:

- ✚ Impaired glucose tolerance
- ✚ Borderline diabetes
- ✚ Insulin resistance
- ✚ Impaired fasting glucose

Why is it important to know if you have pre-diabetes?

- ✚ You may already be experiencing effects of diabetes
- ✚ If you have pre-diabetes you have a higher risk for cardiovascular (heart and blood vessel) disease.
- ✚ If you have pre-diabetes, you can and should do something about it. Studies show that you can prevent or delay type 2 diabetes by up to 58% by changing your life style.
 - Reduce weight by 5 to 10 %. Even if you do not get to an ideal body weight, a loss of 10 to 15 pounds can make a big difference.
 - Change your meal plan (smaller portions and fewer carbohydrates).
 - Moderate exercise (walking 30 minutes a day, 5 times a week).

If someone you know has pre-diabetes you may want to share this information.

Hemoglobin A1c

HbA1c more than 9 your average blood sugar is 210 mg/dl or more

HbA1c of 7.5 to 9 your average blood sugar is 180 to 210 mg/dl

HbA1c of 6 to 7 your average blood sugar is 120 to 150 mg/dl

% Hemoglobin A1c

14		360
13.5		
13	Seriously	330
12.5	elevated	
12	levels	300
11.5		
11		270
10.5		
10	Elevated	240
9.5	levels	
9		210
8.5	Slightly	
8	elevated	180
7.5	Good	
7	Goal!	150
6.5		
6		120
5.5	Non-	
5	Diabetic	90
4.5	levels	

Average Blood Glucose (mg/dl)

Hemoglobin A1c Test - A hemoglobin A1c (HbA1c) test is a number that tells how your blood sugar numbers were over the last three months. If your blood sugars have been high the HbA1c will also be high. This test should be done every 3 to 6 months. **This test tells if your diabetes is in control.**

You and your provider

You are in control of your diabetes



You and your provider (doctor, nurse practitioner, or physician assistant) are a team!

When you have Diabetes it is important to see your provider regularly

At least every 3 months, you and your provider should:

- Review your blood sugar numbers
- Look at your feet
- Check your blood sugar
- Check HbA1c

Once every year:

- Do blood work for Liver, if needed
- Do blood work for fats in your blood
- Referral to a Podiatrist (foot doctor) if needed
- Referral to an Eye Doctor
- Referral to a Dentist
- Flu shot
- Test your Urine

Schedule a visit with your Provider:

- Bring "My Diabetic Record" to visit.
- Bring all your medicine bottles.
- Bring a list of your questions.
- Bring the numbers from blood sugar checks in your logbook.
- Bring your "My Goals" record.
- Tell the provider if you have been following a diet.
- Tell the provider how much exercise you get.
- Tell your provider if you are having any of the following:
 - ✓ Problems with your eyes
 - ✓ Headaches or dizziness
 - ✓ Increased hunger, thirst or urination
 - ✓ Numbness or tingling in your hands or feet
 - ✓ Chest pain or trouble breathing. Call your provider, this may be an emergency!
 - ✓ Nausea, vomiting or diarrhea
 - ✓ Pain in legs with exercise



Other Healthy things to do:

- Get a tetanus shot every 10 years
- Get a Pneumovax
- Get a TB skin test



Questions To Ask The Provider



- What type of Diabetes do I have? _____
What is Diabetes?
- What medicine do I take? _____
Medicine

- When do I take my medicine? _____
Medicine
- Can I eat and take my medicine the day of my appointment? _____
What is Diabetes?
- How often should I check my blood sugar? _____
High blood sugar, low blood sugar
- What should my Hemoglobin A1c be? _____
What is Diabetes?
- What should my blood sugar be? _____
High blood sugar, low blood sugar
Fasting: _____

Before Bedtime: _____

After eating: _____
- What should I do if my blood sugar is low? _____
High blood sugar, low blood sugar
- What should I do if my blood sugar is high? _____
High blood sugar, low blood sugar
- What do I do if I get sick: _____
Sick Days
- What medicines should I not take when I am sick? _____
Sick Days

- Do I need to lose or gain weight? _____
What is Diabetes?
- What Diet should I follow? _____
Nutrition
- What kind of exercise should I do and how often? _____
Exercise
- When do you want to see me again: _____
What is Diabetes?

Write other questions you have on the back of this paper.