

Brick 732.903.7700	Marlboro 732.536.2027	Oakhurst 732.663.0222	Brooklyn 718.998.8898	Cedarhurst 516.569.6400
------------------------------	---------------------------------	---------------------------------	---------------------------------	-----------------------------------

KIDZ EYE VIEW ... ON OVERWEIGHT AND DIABETES



Hi everyone.

It seems like every day we keep hearing two words on the TV news or in newspapers and magazines—**overweight** and **diabetes**—and about how so many kids these days are overweight, and because of that more of us than ever before are getting diabetes. While it's easy to just look in the mirror and see that you are overweight, most kids really don't understand what 'overweight' means, from the inside. My mom helped me to understand why we get overweight and how diabetes is often a result of that.

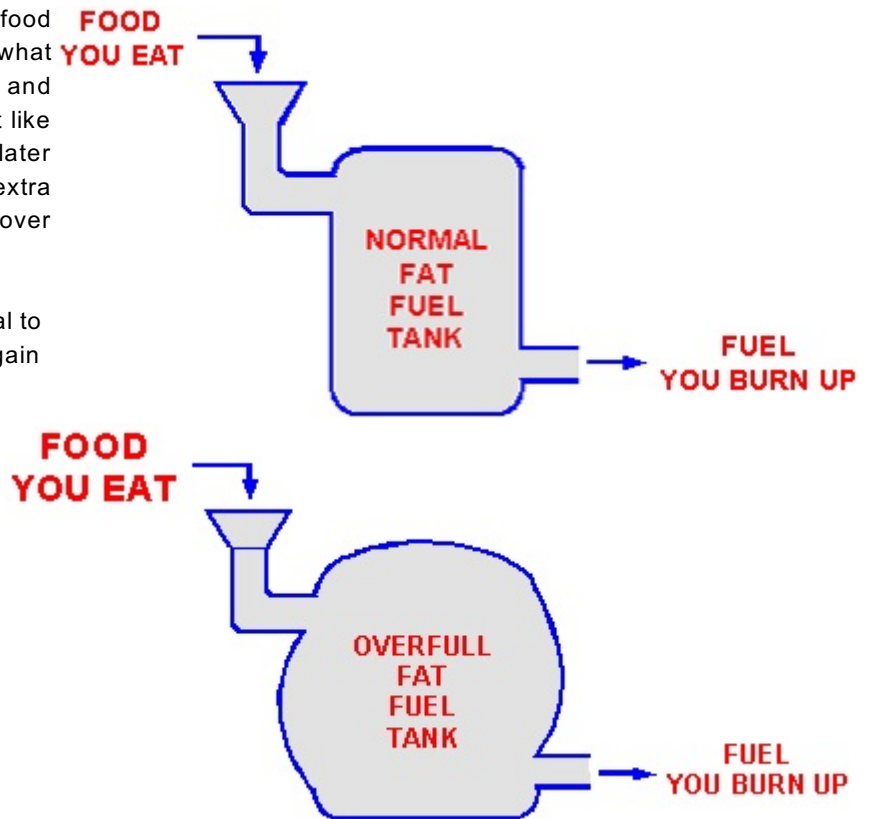
Why do you get overweight? Your body needs food to live. Food is your body's fuel. Food is also what your body uses to make body parts like muscle and bones. Your body can store fuel for later use, just like you can store fuel in your car's gas tank to use later when your car goes on a trip. Your body turns extra fuel into fat and stores the fat in a tank located all over your body.

If the fuel that you burn up to run your body is equal to the fuel that you take in from food, then you don't gain weight. Since there is no extra fuel, none of it is stored as fat. But if you take in more food than your body burns up, then the extra fuel is turned into fat and your body gains weight. It's pretty simple. The extra fuel is stored in your fat fuel tank, which gets bigger and heavier as it overfills.

The amount of fuel in a food is called **calories**, sort of like octane in gas. You can look on a food's label to see how many calories are in the food. 3500 extra calories eaten will cause one pound weight gain. Exercise burns up calories. For example, walking one mile burns up 100 calories. So, if you eat 500 Calories less each day, or you walk 5 miles a day, you will lose one pound a week.

So ... to balance your weight you can either decrease the fuel (food) you take in, or you can increase the amount of fuel you burn up (by exercise). Exercise, even simply things like walking, dancing or shooting basketball, will burn up a lot more fuel than just sitting and watching TV.

What is Type 2 Diabetes? There are two kinds of diabetes, but I'm going to talk about the one that's most common. Diabetes is a disease people can develop that lasts their whole life. Most researchers believe that people develop Type 2 Diabetes because their body is at an unhealthy weight. Diabetes can harm many parts of a person's body. It is important to know if you are at risk for developing it so you can protect your body from harm.



How Does Type 2 Diabetes Develop? Most people get Type 2 Diabetes because they weight more than their healthy weight range. To understand why diabetes develops, you have to know how our bodies use food for fuel.

When you eat a meal, your body breaks your food up into tiny pieces in your stomach and then keeps breaking it up further in your gut. One of the main things your body breaks the food into is called **glucose**. You may also hear this being called **blood sugar**. This is not the same thing as sugar from food. This glucose gives the smallest parts of our bodies, called **Cells**, fuel to run the bigger things like your heart, eyes, lungs, legs and toes. It even brings energy to our brains to help us think.

When your body receives the signal that glucose has entered your blood, your body releases a tool called **insulin**. Insulin acts like a key to help the glucose get into the cells. Without insulin, your cells cannot get fueled. Without this fuel, it is harder for your body to work.

Type 2 Diabetes can develop from many different things. First a person's cells can get covered up with fat. This happens when a person is out of their healthy weight range. This fat covers up the keyhole that insulin needs to use to let the glucose into the cell. Without the insulin working, the glucose cannot fuel the body. Instead, it ends up just floating around in the person's blood and building up.

Even though a person's blood may be filling up with glucose, the cells still are not getting fueled. A person's body then sends out an alarm to tell the body to make its own glucose. It can be made in a place called **the liver**. The liver leaks the glucose into the blood like a leaky pipe and the glucose in the blood gets higher and higher. The insulin still cannot work since the keyholes are still blocked by too much fat. The fuel still cannot get into the cell.

Since a person's blood may get more filled up with glucose, the body may tell the insulin factory to make more insulin to help bring it down. Over time, the insulin factory, a place in our body called **the pancreas**, may get tired and weak. It may even stop working or run out of insulin.

What happens to a person's body over time with diabetes? All of that glucose building up in the blood can cause damage. This damage does not happen overnight, but it can happen slowly over years. The blood jammed packed with glucose (almost like a traffic jam) can cause little cuts and bruises to the parts that carry the blood (the **blood vessels**). You have these vessels all over your body. They go everywhere blood needs to go like your heart, brain, lungs, fingers, toes, legs, stomach, eyes and many more! All of these cuts and bruises can happen anywhere in a person's body whose glucose is too high for too long. This can cause heart disease, blindness, trouble feeling things, kidney failure, trouble walking, and loss of fingers, toes and legs. Even cavities can be caused by high blood sugar! Every part of a person's body can be hurt by diabetes and they might not even know it!!

What does it feel like if you have diabetes? A person may never know if he or she has diabetes since diabetes does not feel like the flu or a cold. A person usually does not feel very sick. Diabetes can still cause damage to the body, even though the person does not feel it. Sometimes, people complain of the following things before their doctor tells them they have diabetes:

Always tired	Goes to the bathroom to urinate a lot	Dizzy	Hungry a lot
Thirsty a lot	Blurry vision	Sweaty	Feels sick to the stomach or nauseous

What can you do to prevent diabetes?

Maintain a healthy weight.

Eat 3 meals a day and do not skip meals.

Eat fruits, vegetables, whole grains, lean meats and proteins, low fat diary products daily.

Eat less high fat snacks like chips, pastries and cookies.

Stay away from high calorie drinks like soda, juices, sweetened teas, fruit punch.

Increase physical activity to 60 minutes a day most days of the week.

You and your parents can ask your pediatrician or family physician if you are at risk.

So get in the habit of good eating habits ... because good stuff happens when you eat the good stuff!