

## Type 2 Diabetes in Children

### What is type 2 diabetes?

Type 2 diabetes is a disease that affects the way your body handles sugar, or glucose. In type 2, the amount of sugar in the blood rises because your body cannot use insulin the right way. Over time, the pancreas cannot make enough insulin.

Insulin helps the body use sugar for energy. It also helps the body store extra sugar in muscle, fat, and liver cells. Without insulin, this sugar cannot do its work. It stays in your blood instead. Your blood sugar level then gets too high.

### What are the causes?

There is not just one cause. Some can be controlled (diet, exercise) and some cannot be (genetics, race/ethnicity, family history). There are many risk factors for getting type 2 diabetes in childhood.

Risk factors include:

- Being overweight (based on age and sex)
- Being in or close to puberty
- Others in the family having diabetes
- Race/ethnicity
- Lack of exercise
- Polycystic ovarian syndrome (PCOS)
- Mother having diabetes during pregnancy

In kids, we often detect type 2 around the ages of 10-19. At these ages it is harder for your body to use the insulin you are making. In time, your body cannot make enough insulin and your blood sugar gets too high.

### What are the symptoms?

Some kids don't have any signs before they are diagnosed. This might be because the blood sugar levels rise so slowly. Sometimes diabetes is found when routine labs are drawn.

Common symptoms of high blood sugar:

- Extreme thirst
- Going to the bathroom a lot
- Extreme hunger
- Headache or blurry vision
- Feeling tired
- Infections or sores that heal slowly
- Darkening of the skin on the neck

### How is it diagnosed?

You and your family will be asked questions about your health. Your blood sugar levels, urine, and hemoglobin A1C might be checked. The A1C test gives us the average amount of sugar in your blood over the last few months. You might also be checked for autoimmune markers that are found in people with type 1 diabetes. If these markers are not present, a diagnosis of type 2 is more likely.

### Are adults the only ones who get type 2?

Many people think that type 2 diabetes is only for older people. It is getting more common in kids and teenagers. About 5000 kids in the United States are diagnosed each year and this number keeps going up.

We think the increase in kids is due to:

- The genes that a person inherits, and
- Being overweight and a not getting enough exercise.

**Why does it need to be treated?**

Over time, high blood sugar levels can damage eyes, heart, kidneys, and nerves. Exercise, food, and medicine can keep blood sugar levels down which helps decrease the risk of damage. We know that teens who get diabetes are at higher risk for these problems. Sometimes kids will have problems like high blood pressure, eye changes, or nerve problems in their limbs (numbness, tingling) when they are diagnosed.

**What are the treatments?**

Treatment for type 2 diabetes often involves a mix of exercise, healthy food choices and taking medicine. Your health care team will create a treatment plan based on factors specific to you.

Treatment also includes yearly blood tests, eye exams, and foot exams. These things help to notice any changes in your body.

You and your family are the most important members of your diabetes team. You will work together every day to make healthy choices and take medicines. You will see the rest of your diabetes team about every 2-3 months.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 6/2020 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HFFY#8149.