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# What Is Type 1 Diabetes?

If your child has been diagnosed with type I diabetes, you probably have questions. Here are the basics.

#### What Is Type 1 Diabetes?

People who have type I diabetes can't use glucose (the body's main type of sugar) for energy. That's because their body stopped making the hormone insulin. Normally, after we eat, the amount of glucose in the blood (blood sugar) goes up. When it does, the pancreas sends insulin into the blood. Insulin works like a key that opens the doors of the body's cells to let the glucose in, giving the cells the energy they need.

In type I diabetes, the pancreas doesn't make insulin. Without insulin, glucose can't get into the cells. It stays in the blood, which leads to high blood sugar. Having too much sugar in the blood isn't healthy and can cause problems. Some problems happen quickly and need treatment right away, while others develop over time and show up later in life.

#### What Happens in Type 1 Diabetes?

In type I diabetes, the body's immune system attacks and destroys the cells in the pancreas that make insulin. So the body can't make insulin anymore.

This is different from type 2 diabetes, where the body still makes insulin, but the insulin doesn't work as it should.

#### Why Do Some People Get Type 1 Diabetes?

No one knows for sure why some people get type I diabetes. Doctors and scientists think a person's genes make them more likely to get it. But just having the genes for diabetes probably isn't enough. It's likely that something else needs to happen. Scientists are studying if other things — like some viral infections, a person's birth weight, or their diet — might make someone who already has the genes for type I diabetes more likely to get it.

Type I diabetes can't be prevented, and can happen in people of any age.

#### What Are the Signs & Symptoms of Type 1 Diabetes?

Type I diabetes can come on over time or suddenly. Sometimes, kids don't have diabetes symptoms yet and the condition is discovered when blood or urine tests are done for another reason. Kids who show symptoms may:

- need to pee a lot
- start to wet the bed after having been dry at night
- be thirstier and drink more than usual
- feel tired often

• lose weight

### How Is Type 1 Diabetes Diagnosed?

Doctors use a blood test that measures the amount of sugar (glucose) in the blood. High blood sugars show that a child has diabetes. Then, the doctor will do more blood tests to find out what type it is.

Kids with type I diabetes often go to a pediatric endocrinologist. This kind of doctor finds and treats problems affecting hormones, like diabetes.

# How Is Type 1 Diabetes Treated?

Type I diabetes needs lifelong treatment because there is no cure yet. Doctors treat type I diabetes using a diabetes care plan. The care plan tells you and your child the things to do every day to help keep blood sugar levels in a healthy range.

Each child's diabetes care plan is made just for them. But all plans have the same 4 basic parts:

- take insulin (by injection or an insulin pump)
- eat a healthy, balanced diet that includes counting carbohydrates
- check blood sugar levels at least 4 times a day
- get regular physical activity

Following the diabetes care plan helps kids stay healthy, now and into the future.

# What Problems Can Happen With Type 1 Diabetes?

Not having the right amount of sugar in the blood can lead to:

- hyperglycemia: This is when blood sugars are too high. Kids with hyperglycemia may be extra thirsty, pee more than usual, and lose weight. High blood sugars can be treated. If they aren't, kids can develop health issues later in life.
- diabetic ketoacidosis (DKA): This serious condition needs treatment right away. When there's not
  enough insulin in the body to let the glucose into the cells, the body starts to break down fat instead of
  sugar. Symptoms of DKA can include nausea, vomiting, belly pain, fast breathing, and, in severe cases,
  unconsciousness.
- hypoglycemia: This is when blood sugars are too low and can sometime happen when people are being treated for diabetes. Symptoms can include headache, weakness, shakiness, anxiety, and sweating.
- growth and development problems: Some kids might grow slower than their peers or start puberty (when kids start growing into adults) later than usual.

# How Can Parents Help?

Now is the perfect time to help your child to create healthy habits for life. Here's how:

- **Get involved with daily care.** Help your child put their care plan into action every day. From counting carbs, to calculating insulin doses, and giving injections, there's a lot to learn at first. Share the responsibilities with your child. Over time, they'll be able to take on more on their own. Turn to your child's care team with any questions about the care plan or daily care.
- Learn all you can about diabetes. The more you know about type I diabetes, the more confident you'll feel about helping your child manage it day to day. And a solid understanding of diabetes lets you advocate for your child. You can share your knowledge with important people in your child's life, like

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grandparents, teachers, coaches, and babysitters. Doing so helps you build a community of support for your child.

• Encourage your child. It can take a while to adjust to the new responsibilities that come with type 1 diabetes. Remind your child that many kids their age have type 1 diabetes, and they follow a similar care plan. If your child has concerns that you're not sure how to handle, ask the care team. They'll connect you with the right resources.

Having a child with type 1 diabetes may seem overwhelming at times, but you're not alone. If you have questions or problems, reach out to your child's diabetes care team — they can help with all kinds of issues, and will guide your family through this journey.

You also can learn more about type 1 diabetes online:

- The Juvenile Diabetes Research Foundation (JDRF)
- CDC: Type 1 Diabetes
- BeyondType1

**Medically reviewed by:** Cheryl Patterson, RD, LDN, CDCES Date reviewed: September 2021

Note: All information on KidsHealth® is for educational purposes only. For specific medical advice, diagnoses, and treatment, consult your doctor.

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