

# WHAT YOU SHOULD KNOW ABOUT TYPE 1 DIABETES MELLITUS

## What Is Type 1 Diabetes Mellitus?

Type 1 diabetes mellitus occurs when the pancreas stops making insulin, a hormone that controls blood sugar (glucose) levels. Without insulin, sugar from foods cannot get into cells and builds up in the blood. High blood sugar causes symptoms such as increased thirst, frequent urination, and fatigue. Very high blood sugars can lead to diabetic ketoacidosis, a life-threatening condition. Over time, high blood sugar can damage the kidneys, nerves, eyes, and heart. Type 1 diabetes can develop at any age. Treatment prevents short- and long-term complications.

Although type 1 and type 2 diabetes both result in high blood sugar and can cause similar complications, they are different diseases. In type 2 diabetes, the pancreas makes plenty of insulin, but the body does not respond to it normally.

## What Are the Signs and Symptoms?

- Frequent urination, including at night
- Increased thirst
- Fatigue
- Abdominal pain
- Weight loss
- Failure to grow normally in children

## What Are the Risk Factors?

The main risk factor is having a first-degree relative (sibling or parent) with type 1 diabetes. Antibody testing in people with a family history can help determine risk for type 1 diabetes.

## How Is It Diagnosed?

When symptoms that could be due to type 1 diabetes develop, diagnosis is made by measuring blood glucose levels and/or hemoglobin A<sub>1c</sub>, which indicates blood sugar levels over the previous 3 months.

## How Do I Know if I Have Type 1 or Type 2 Diabetes?

Type 2 diabetes is likely if the patient has overweight or obesity, has a history of prediabetes, had high blood sugars during pregnancy (gestational diabetes), or has no symptoms or symptoms that developed gradually. Type 1 diabetes is likely if the patient is younger, does not have overweight or obesity, has a family history of type 1 diabetes, and has symptoms that developed rapidly. Testing for autoantibody levels can also help confirm type 1 diabetes.



## Can It Be Prevented?

There are currently no known ways to prevent type 1 diabetes. Once diagnosed, it can be managed by working with a health care team to control blood sugar levels and prevent complications.

## How Is It Treated?

The focus of type 1 diabetes management is controlling blood sugar to reduce short- and long-term complications of high blood sugar (hyperglycemia) while avoiding dangerously low blood sugar (hypoglycemia). Patients with type 1 diabetes require insulin treatment to replace the insulin their body can no longer make. Many technical advances have occurred in ways of measuring blood glucose and administering insulin, so people with type 1 diabetes should work with a health care team with experience in treating the condition. Management of diet and physical activity are also important, as are tests to screen for and treatments to reduce risk for complications.

## Questions for My Doctor

- What are optimal blood sugar and hemoglobin A<sub>1c</sub> targets for me?
- How often do I need to check my blood sugar?
- Would I benefit from using a continuous glucose monitor?
- How do I know how much insulin to take?
- Would I benefit from using an insulin pump instead of injections?
- How do different foods affect blood sugar?
- How does physical activity affect blood sugar?
- What are symptoms of low blood sugar, and what should I do if it happens?
- How often do I need to see my health care team?

## For More Information



American College of Physicians  
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Centers for Disease Control and Prevention  
[www.cdc.gov/diabetes/basics/what-is-type-1-diabetes.html](http://www.cdc.gov/diabetes/basics/what-is-type-1-diabetes.html)  
American Diabetes Association  
[www.diabetes.org/diabetes/type-1](http://www.diabetes.org/diabetes/type-1)