

Diabetes 101

A discussion about the disease and helpful tips on prevention and treatment



What is diabetes?

Diabetes mellitus is a disease that prevents your body from properly using energy from the food you eat. It is a disease of the pancreas, an organ behind your stomach. The pancreas is responsible for producing the hormone insulin, which helps the body use sugar for energy.

Diabetes occurs when either:

1. The pancreas produces little or no insulin.
-or-
2. The pancreas makes insulin, but the insulin made does not work as it should. This condition is called insulin resistance.

Diabetes is a lifelong disease, and it is important that people with diabetes manage their disease to stay healthy.

What causes diabetes?

Healthcare providers aren't sure yet what exactly causes diabetes. However, there are some factors that increase your risk of developing the condition:

- Family history
- African-American, Hispanic, Native American or Asian-American race or ethnic background
- Being overweight
- Increasing age
- Certain medicines
- Injury to the pancreas
- Autoimmune disease
- Pregnancy*

*Pregnancy puts extra stress on a woman's body that causes some women to develop diabetes. Blood sugar levels often return to normal after childbirth. Yet, women who get diabetes during pregnancy have an increased chance of developing diabetes later in life.



What are the types of diabetes?

There are two types of diabetes:

Type 1 diabetes – The pancreas makes little or no insulin. A person with type 1 diabetes must take insulin to survive. This type occurs most often in people who are less than 30 years old. Currently, there are no known ways to prevent type 1 diabetes.

Type 2 diabetes – Insulin is made but it doesn't work as it should. Nine out of 10 people with diabetes have type 2 diabetes. This type occurs most often in people who are more than 40 years old and overweight. Lifestyle changes may reduce the risk of developing type 2 diabetes.

How do I know if I have diabetes?

Your health care provider can perform blood and urine tests to see if you have diabetes. Normal blood sugar is between 70 mg/dl and 100 mg/dl. The standard diagnosis of diabetes is made when two blood tests show that your fasting blood sugar level (blood sugar before you have eaten anything) is 126 mg/dl or greater.

Common symptoms of diabetes include:

- Increased thirst
- Increased hunger (especially after eating)
- Dry mouth
- Frequent urination
- Unexplained weight loss (even though you are eating and feel hungry)
- Fatigue
- Blurred vision
- Numbness or tingling of the hands or feet

Other symptoms include:

- Slow-healing sores or cuts
- Itching of the skin (usually in the vaginal or groin area)
- Yeast infections
- Recent weight gain



Can diabetes be cured?

A cure for diabetes has not yet been found. However, diabetes can be treated and controlled. Most people with diabetes manage their disease and lead normal lives.

Without proper care, however, diabetes can lead to:

- Heart disease
- Kidney disease
- High blood pressure
- Low blood pressure
- Eye damage and blindness
- Gum disease
- Serious infections in feet, sometimes requiring amputation
- Damage to nerves, resulting in pain or loss of sensation

Can I help manage diabetes with lifestyle changes?

You can help manage risk factors associated with diabetes by taking steps to lead a healthier lifestyle. You hold the keys to managing your diabetes by:

- Planning what you eat and following a balanced meal plan
- Exercising regularly
- Taking medication, if prescribed, and closely following the guidelines on how and when to take it
- Monitoring your blood glucose and blood pressure levels at home
- Keeping your appointments with your healthcare providers and having laboratory tests completed as ordered by your doctor. Remember that what you do every day affects your blood glucose more than what your doctor can do every few months during your check-ups.

How can I prevent type 2 diabetes?

Pre-diabetes is the term used to describe a condition that exists before you develop type 2 diabetes – it's a warning that type 2 diabetes is developing. You may have pre-diabetes if a fasting blood glucose is between 100 and 125 milligrams per deciliter (mg/dl) or if a two-hour glucose tolerance test is 140-199. This may also be called impaired fasting glucose, hyperglycemia or abnormal glucose value. No matter what you call it, a fasting blood glucose between 100 and 125 is cause for concern – and action.

The Diabetes Prevention Program was a major research project that looked for ways to prevent type 2 diabetes once an elevated fasting blood glucose was diagnosed. The project, in part, followed overweight people who began exercising and losing weight.

- 58% of overweight individuals who started exercising 30 minutes per day for at least 5 days per week and lost 7% of their body weight did not develop type 2 diabetes.
- Of the overweight individuals who lost 10% or more of their weight, 90% did not develop type 2 diabetes.

Weight loss – combined with exercise – is the single most important factor that will stop the progression toward type 2 diabetes in overweight individuals.

Cutting calories by choosing high-nutrient, low-calorie foods, making healthy food choices, and participating in a regular exercise program are the key lifestyle strategies you can follow to lower your risk of developing type 2 diabetes.



Where can I turn for more information?

Cleveland Clinic Health Information Center
clevelandclinic.org/health

American Diabetes Association (ADA)
703.549.1500 or 1.800.342.2383
diabetes.org

American Dietetic Association (ADA)
1.800.877.0877
eatright.org

National Institute of Diabetes and
Digestive and Kidney Diseases (NIDDK)
National Diabetes Information Clearinghouse
301.654.3327 or 1.800.860.8747
niddk.nih.gov

Here's to Your Good Health

You can enjoy tremendous health benefits when you make small but significant changes in the way you eat. A great first step is to take advantage of the Healthy Appetite program, designed by Cleveland Clinic and Heinen's. For nutrition tips and meal ideas, please visit www.heinens.com/healthyappetite. Here's to your good health!

Healthy Appetite

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9500 Euclid Avenue
Cleveland, Ohio 44195

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4540 Richmond Road
Warrensville Heights, Ohio 44128