



Maximize control over your diabetes

What is diabetes?

Diabetes is a disease that affects the way our bodies convert food into energy. Most of the food we digest turns into glucose (sugar), which passes into the bloodstream. The body relies on insulin, a hormone produced by the pancreas, to move glucose from the bloodstream to the cells, where it fuels the body and gives us energy.

In people with diabetes, the body doesn't produce enough insulin or doesn't respond properly to the insulin produced. Glucose accumulates in the bloodstream and passes out of the body through urine, leaving the body without its main source of energy.

In 2007, 24 million Americans – almost eight percent of the population – had diabetes, and in 2006 it was the seventh leading cause of death in this country. And while diabetes is a serious condition, there are ways people can control the disease and lower the risk of developing complications from it.

Symptoms

Sometimes symptoms of diabetes are difficult to recognize. In fact, of the 24 million Americans who have diabetes, almost six million are undiagnosed. The symptoms for both Type 1 and Type 2 diabetes are similar. Symptoms usually develop quickly for Type 1 diabetes. For Type 2 diabetes, they may develop slowly or never appear at all. Talk to your doctor if you experience any of the following:

- Extreme thirst
- Unexplained weight loss
- Frequent urination
- Blurred vision
- Excessive hunger

Types of diabetes

Diabetes is actually a group of diseases. The two most prevalent forms are Type 1 and Type 2.

In **Type 1 diabetes**, the body's immune system attacks the cells that produce insulin. As a result, the pancreas produces little or no insulin. People with Type 1 diabetes must take insulin daily in order to survive, and there is no known way of preventing the onset of the disease. Roughly five to 10 percent of people with diabetes have Type 1.

In **Type 2 diabetes**, the pancreas doesn't produce enough insulin or the body's cells don't use insulin properly. As glucose builds up in the bloodstream and the body's need for insulin increases, insulin production decreases. Although Type 2 is linked to such factors as inactivity, obesity and older age, it is increasingly being diagnosed in children and adolescents.

Another condition related to diabetes is pre-diabetes. A person with pre-diabetes has higher than normal blood glucose levels, but those levels aren't high enough to be in the diabetes range. This condition has become increasingly common in the United States and is linked to a higher risk of developing Type 2 diabetes, heart disease and stroke. Estimates suggest that 57 million adults over the age of 20 have pre-diabetes, a diagnosis that carries a greater risk for developing Type 2 diabetes.

Treating and managing your condition

There is no known cure for diabetes, but the disease and related complications – including heart disease, stroke, high blood pressure, blindness, kidney disease and amputation – can be managed through medication and healthy behaviors.

People with Type 1 can control their condition by taking insulin, eating healthfully and getting regular physical activity. People with Type 2 can manage their symptoms with healthy eating, exercise and regular blood glucose testing.

In both cases, self-care is essential. This includes monitoring your blood glucose, blood pressure and cholesterol levels and making a daily commitment to healthy habits. Preventive care practices – like scheduling regular eye exams and other medical checkups – can help keep complications at bay. Even better, for those with pre-diabetes, research has shown that losing weight through diet and exercise can lower the risk of developing Type 2 diabetes.

Risk factors, prevalence and economic impact

Type 1 diabetes most often appears in childhood but can occur at any age. It appears equally among males and females and is more common in whites than non-whites.

Type 2 diabetes is more common in older

people, especially those who are overweight. Other risk factors include a family history of diabetes, a history of gestational diabetes, impaired glucose tolerance and a sedentary lifestyle. African Americans, Hispanic/Latino Americans, American Indians and some Asian Americans and Pacific Islanders have a higher risk of developing Type 2. In fact, American Indians have one of the highest rates of diabetes in the world.

With a growing senior population, a fastgrowing segment of Hispanic/Latinos and other minority groups, and an increasing number of Americans who are overweight and inactive, the incidence of diabetes is likely to increase in the United States.

Sources:
Centers for Disease Control and Prevention (CDC) website, *Frequently asked questions/ Basics about Diabetes* (June 27, 2006): cdc.gov/diabetes/faq/basics.htm, *Frequently asked questions/Diabetes statistics and research* (June 23, 2008): www.cdc.gov/diabetes/faq/research.htm.

National Diabetes Education Program website, *Diabetes Prevention Program Fact Sheet* (July 2008): http://ndep.nih.gov/diabetes/pubs/DPP_FactSheet.pdf, *Facts About Diabetes: America's Seventh Leading Cause of Death* (July 2008): http://ndep.nih.gov/diabetes/pubs/FS_GenSnapshot.pdf.

Diabetes online resources

There is a wealth of information about diabetes online. Some good places to start include:

American Diabetes Association, www.diabetes.org. The mission of this non-profit organization is to prevent and cure diabetes and to improve the lives of those affected by it. The user-friendly website is filled with recipes, tips about fitness and nutrition, and information about community programs and local events.

Juvenile Diabetes Research Foundation International, www.jdrf.org. The JDRF supports and funds research for Type 1 diabetes. The friendly, accessible website offers guidance on living daily with diabetes, addressing such topics as dealing with diabetes at home, at school and on the road. The site is segmented by age, so kids, teens and adults can find information specifically targeted to them. The site helps patients of all age levels connect with others who have the disease.

Getting a move on

Physical activity can play a leading role in managing your diabetes. Of course, it's important to check with your health-care provider about the right choice of exercise for you, but here are some ways to get your body moving throughout the day, every day.

- Walk around or do light housekeeping while talking on the phone.
- Put your dog on a leash and walk around the block.
- At work, take the stairs instead of the elevator.
- Walk to a co-worker's desk instead of phoning or e-mailing.
- Park at the far end of the parking lot to give yourself a few extra steps.
- During a coffee break, head outdoors for a quick five-minute walk.
- Walk to the store, the gym or your neighbor's house instead of using the car.

Source: National Diabetes Information Clearinghouse, *What I need to know about Physical Activity and Diabetes* (March 2008): http://diabetes.niddk.nih.gov/dm/pubs/physical_ez/.

Everyday diabetes care

You and your health care provider will develop a plan of care specifically suited to your situation. But there are some everyday habits that you can adopt to prevent complications and stay in charge of your health.

- Eat a healthy diet.
- Get in 30 minutes of activity most days.
- Take prescribed medications.
- Check your blood glucose.
- Brush and floss your teeth every day.
- Watch your blood pressure and cholesterol levels.
- Don't smoke.
- Check your feet for cuts, blisters, sores and swelling.

Source: National Diabetes Information Clearinghouse, *Prevent diabetes problems: Keep your diabetes under control* (February 2008): http://diabetes.niddk.nih.gov/dm/pubs/complications_control/.

