

Type 2 Diabetes Management

Of the over 29 million people in the United States currently suffering from type 2 diabetes, 7.2 million do not even know they have the condition. Becoming aware that you have diabetes is the first step in controlling your health and preventing the many serious complications that can result from poor management of Type 2 diabetes.

What is Type 2 diabetes?

When we eat, the body breaks down and converts the carbohydrates (starches and sugars) in our food into glucose, which is then converted to energy or stored as fat for later use. You have likely heard your physician talk about blood-sugar levels when discussing diabetes. This refers to the amount of glucose in the blood.

Normally, insulin facilitates the conversion of glucose by the body's cells. With type 2 diabetes (also known as adult-onset or non-insulin-dependent diabetes), the body's cells are resistant to insulin, causing an inability of glucose uptake by the cell, so higher-than-normal levels of sugar (glucose) remain in the blood (called hyperglycemia).

This excess glucose in the blood can damage organs and tissue, leading over time to the many serious complications associated with diabetes.

Type 2 diabetes differs from type 1 diabetes (juvenile-onset or insulin-dependent diabetes), where the pancreas produces little or no insulin at all. Type 2 diabetes usually develops in overweight and older persons. However, with the increase in childhood obesity, type 2 diabetes is being seen more in adolescents. Symptoms tend to appear gradually and include:

- Fatigue
- Extreme thirst and hunger
- Frequent urination
- Blurred vision
- Repeated infections
- Slow wound healing.

Besides obesity and age, other risk factors have been linked to the development of the disease, such as smoking, family history and ethnicity.

Control

The main goal of controlling diabetes is to keep glucose levels as near normal as possible. Several things can be done to help keep blood sugar under control:

- **Diet:** Generally, a diet low in fat and cholesterol that has a moderate amount of lean protein and complex carbohydrates (fruits, vegetables, whole-grain bread and cereal) can make a difference in controlling the blood glucose level. Concentrated sweets such as juice or candy bars should be avoided. It is important to know what foods contain carbohydrates and to keep track of those portions, as well as fats and protein. Since each person has different needs, a dietitian should be consulted. They can recommend the appropriate amounts of these food groups based on your activity levels, health history, diabetic medication and lifestyle. Some methods recommended by the American Diabetes Association for meal planning include carbohydrate counting, "create your plate" and glycemic index control.
- **Weight loss:** Since obesity is one of the leading causes of type 2 diabetes, some patients will benefit greatly by losing weight. Even a 10% reduction in body weight can bring diabetes under control. A physician and dietician can help create a healthy and attainable weight-loss program.
- **Exercise:** Exercise will not only help maintain healthy body weight and raise energy levels, but it will also increase the body's sensitivity to insulin. This is important because increased sensitivity will help keep blood glucose levels down. By exercising regularly, cholesterol and blood pressure can also be lowered, thereby reducing the risk for heart disease. Again, anyone with diabetes should consult with a physician to develop a proper exercise program.
- **Monitoring:** Regular monitoring of blood glucose levels provides a benchmark of how well diabetes is being controlled. The doctor will probably advise testing blood glucose levels once or twice a day and keeping a diary of the results for review. Patients can test blood glucose by placing a small drop of blood (usually from a finger stick) on a test strip, which is then placed in a meter that gives a reading. The American Diabetes Association suggests the following ranges: 70 mg to 130 mg/dl before meals and less than 180 mg/dl after meals. However, these ranges should be decided on between you and your physician. It is extremely important to test as often as the doctor instructs. Without these numbers, your doctor cannot monitor diabetes to decide if additional treatment is needed.
- **Medication:** For some type 2 diabetics, diet and exercise are not enough to keep blood glucose at a safe level. Your doctor may prescribe medications to increase a diabetic's sensitivity to glucose. When on medication, it is especially important to monitor and record glucose levels in order to judge how well the medication is working. Taking medication for diabetes does not mean patients can stop the rest of the treatment plan; diet and exercise are still just as important. To learn more about drugs for diabetes, visit the American Diabetes Association website (www.diabetes.org). The site also has a section for newly diagnosed individuals and tips on cooking and exercise. A small percentage of diabetics are unable to control their disease through all of the above methods. If this occurs, a diabetic must supplement his or her treatment with insulin injections. If you require insulin injections, your doctor will carefully review the procedure with you to ensure you are comfortable administering it yourself. Most diabetics who require insulin take two injections a day, generally before breakfast and dinner.
- **Hypoglycemia:** Even though one of the main treatment goals is to lower blood glucose, it can go too low (called hypoglycemia). This may happen when you have taken your diabetic medication and skip a meal or snack or exercise strenuously. If blood glucose levels are too low, you may begin to feel shaky, dizzy, hungry, sweaty or confused, or you may have a headache. If you feel these symptoms coming on, test blood glucose levels if possible. When glucose is 60 mg/dl or lower, eating or drinking

something with about 15 grams of sugar will help. Half of a glass of orange juice works well, or try a few spoons of table sugar. Soda or a candy bar will do in a pinch, as well. If you cannot test your blood glucose but feel a problem coming on, you should eat anyway, just to be safe. Keep small supplies of juice or snacks containing sugar readily available (such as in your desk drawer, your purse or the glove compartment of your car) in case blood glucose levels become too low. Not eating when glucose levels are low can lead to a seizure, unconsciousness, and eventually coma, so take the symptoms of low glucose levels seriously, and act promptly. Also, let friends and family know what to do when your levels are low in case you become too confused to help yourself.

Complications

If a person with diabetes does not follow treatment guidelines, he or she runs a high risk of serious health complications. These result from the uncontrolled high level of glucose in the blood, which over time damages organs and tissue. Complications of type 2 diabetes can include the following:

- **Eye disease (diabetic retinopathy):** This occurs when blood vessels in the eye begin to leak, putting pressure on the retina and deteriorating vision. If left untreated, this can lead to blindness. Generally, patients do not notice symptoms until it is too late, so diabetics should get their eyes checked once a year.
- **Nerve damage (diabetic neuropathy):** Damaged nerves can lead to loss of feeling, a tingling or burning sensation, sexual dysfunction, and weakened muscles. This typically happens in the hands, lower legs and feet. The numbness associated with nerve damage makes it difficult for a diabetic to know his or her foot has been cut or injured.
- **Kidney damage (diabetic nephropathy):** Diabetes can cause the kidneys' filtering function to diminish as small blood vessels become damaged. As a result, toxic impurities can build up in the blood, and proteins spill over into the urine. Since symptoms from kidney dysfunction only appear once the damage is severe, an annual physical that includes urine testing is strongly recommended.
- **Extremities (circulatory problems):** In addition to nerve damage, poorly controlled diabetes also results in loss of circulation. This combination can lead to severe leg and foot problems. Poor circulation makes healing a difficult and lengthy process. People generally do not pay very much attention to their feet, so a problem may be very advanced by the time it is noticed. This is why infection and gangrene linked with diabetes make up more than 90 percent of non-traumatic lower leg amputations. Not only should diabetics never go barefoot, but they should also examine their feet every day, clean and bandage any wounds found, and notify a physician immediately if any are not healing properly.

While the above complications may seem frightening and overwhelming, much can be done to prevent them. This means taking charge of annual medical check-ups, testing and recording blood glucose levels, and following the proper diet and exercise.

Following these steps will not only improve physical well-being, but it will also give peace of mind that everything possible has been done to minimize future complications.

Resources

- American Diabetes Association: www.diabetes.org/diabetes-basics/type-2
- National Diabetes Information Clearinghouse: <https://www.niddk.nih.gov/health-information/diabetes>
- HealthCare.gov: www.healthcare.gov

Here when you need us.

Call: 844-207-5465

Online: guidanceresources.com

App: GuidanceNowSM

Web ID: LivingME

©2025 ComPsych[®] Corporation. All rights reserved. This information is for educational purposes only. It is always important to consult with the appropriate professional on financial, medical, legal, behavioral or other issues. As you read this information, it is your responsibility to make sure that the facts and ideas apply to your situation.