

# HEALTH WISE

## FOR MORE INFORMATION

These websites can provide you with more information about diabetes.

American Diabetes Association  
[www.diabetes.org](http://www.diabetes.org)

American Association of  
 Diabetes Educators  
[www.diabeteseducator.org](http://www.diabeteseducator.org)

Go Insulin  
[www.goinsulin.com](http://www.goinsulin.com)

Taking Control of Your Diabetes  
[www.tcoyd.org](http://www.tcoyd.org)

There are two other types of diabetes. Type 1 (juvenile) diabetes occurs when the body cannot make insulin. Gestational diabetes is diagnosed during pregnancy.

## Type 2 Diabetes and How to Manage It

Type 2 diabetes occurs when the body cannot use insulin or does not make enough insulin; it is the most common form of diabetes. Type 2 Diabetes has a variety of causes that range from family history to poor diet, lack of exercise, or being overweight. It can also have physiological causes.

### What is Type 2 Diabetes?

Type 2 diabetes is a disease that occurs when there is a problem with the way your body moves, stores and uses glucose. Glucose is found in your bloodstream and transported to various parts of the body such as your muscles, liver, and other tissues to be used as a major source of energy. It is very important that your body have insulin to move glucose from the blood into the tissues. Insulin is made by the pancreas.

Type 2 diabetes can be caused by one or two reasons:

- Your pancreas does not make enough insulin to move glucose from the blood into your tissues.
- Your tissues cannot use the insulin your pancreas has made.

When either of these things happen, glucose ends up staying in your blood instead of moving to your tissues and other parts of your body that need glucose for energy. This increases glucose levels in your blood and can lead to serious health problems.

### What are the Signs and Symptoms of Type 2 Diabetes?

Many people can have Type 2 diabetes without knowing or suffering from any signs or symptoms typical of the disease. Others may experience some of the signs and symptoms below. It is important to talk to your doctor or pharmacist if you have experienced one or more of the following signs and symptoms for no known reason.

- Frequent urination
- Significant unplanned weight loss
- Increased infections
- Increased thirst &/or appetite
- Tiredness
- Vision problems

Your doctor can diagnose diabetes by doing a simple blood test checking for high glucose levels in your blood. Type 2 diabetes usually occurs around age 40. However, it can occur at a younger age if you are overweight.

### How is Type 2 Diabetes Treated?

Lifestyle changes such as diet and exercise are the best ways to prevent and manage diabetes. There are many medications that can be used to treat type 2 diabetes, but they work better alongside positive lifestyle changes such as these.

#### Diet

- Reduce the amount of sugar you eat. Foods rich in sugars include: grains, pasta, rice, breads, crackers, cereals, potatoes, corn, sweets and desserts.
- Reduce the amount of salt in your food to avoid elevated blood pressure.
- Reduce the amount of fatty foods you eat to avoid high cholesterol.

#### Exercise

Aerobic exercise like running, walking, biking, and swimming help control your glucose by increasing the demand for glucose in your muscles. Exercise also helps control blood pressure and weight.

#### Weight loss

Diet changes and exercise can help you lose weight. Take your time and lose the weight slowly.

#### Stop smoking

This will reduce infections, your risk of heart attack or stroke, and reduce your blood pressure.

#### Prescription medication

There are many different medications, oral and injectable, that can be used to treat type 2 diabetes (see page 2).

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[www.ipc-inc.com](http://www.ipc-inc.com)

## Common Oral Diabetes Medications

Class & Brand Name of Medication	How Does it Work?	Side Effects
<b>Biguanide</b> Glucophage® (metformin)*	Helps your body to use glucose, slows your liver from making glucose	Stomach pain, diarrhea, gas, nausea
<b>Sulfonylurea</b> Amaryl® (glimepiride)* Glucovance® (glyburide)* Glucotrol® (glipizide)*	Helps your body make more insulin	Low blood sugar, weight gain, nausea
<b>Thiazolidinediones</b> Avandia® (rosiglitazone) Actos® (pioglitazone)	Helps your body to use glucose	Headache, swelling, weight gain, chest pain
<b>Meglitinides</b> Prandin® (repaglinide) Starlix® (nateglinide)	Helps your body to make insulin	Low blood sugar, headache, diarrhea, back pain, constipation
<b>Alpha-glucosidase inhibitor</b> Precose® (acarbose) Glyset® (miglitol)	Slows the amount of sugar that enters your blood	Stomach pain, diarrhea, nausea, liver pain
<b>DPP-4 inhibitors</b> Januvia® (sitagliptin) Onglyza® (saxagliptin)	Helps your body to make insulin	Headache, diarrhea, upper respiratory tract infection
<b>Combined Medications</b>	Glucovance® (metformin + glyburide) Actoplus® (metformin + pioglitazone) Avandaryl® (rosiglitazone + glimepiride)	

\*Generics Available

## Possible Complications from Diabetes

Diabetes can lead to problems in many other parts of the body.

**EYES** - glaucoma, cataracts, retinopathy, or loss of vision. *Control your blood glucose and see an eye doctor every year.*

**FEET** - nerve damage, skin changes, calluses, ulcers, poor blood flow, or amputation. *Wear proper fitting shoes, check your feet daily for wounds or sores; see your doctor immediately about any problems.*

**HEART DISEASE** - risk for high blood pressure which can lead to stroke, heart attack. *Take all medications prescribed by your doctor to keep your blood pressure, cholesterol and blood glucose on target. Adopt positive diet and lifestyle changes.*

**KIDNEYS** - risk for kidney failure resulting in dialysis and eventually transplant. *Control your blood glucose and take all medications your doctor prescribes.*

**NERVES** - numbness, tingling, weakness, or pain in your feet and hands. May also affect your bladder, stomach, and sexual function among other things. *Control your blood glucose closely to prevent or delay nerve damage.*

## Common Injection Medications (Insulins)

Type of Insulin	Name of the Insulin	When does it start	How long does it work?
<b>Rapid-acting</b>	Humalog Novolog Apidra	15-30 minutes	4-5 hours 5-6 hours 5-6 hours
<b>Short-acting</b>	Humulin R Novolin R	30-60 minutes	6-8 hours
<b>Intermediate-acting</b>	Humulin N Novolin N	2-4 hours	14-18 hours
<b>Long-acting</b>	Lantus Levemir	4-5 hours 2 hours	24 hours
<b>Other types of Injections</b>	Byetta Symlin		
<b>Combined insulins</b>	Humalog Mix 75/25 Novolog Mix 70/30 Humulin 50/50		

## How Do I Know if My Blood Glucose is Controlled?

You can check your blood sugar every day by finger stick as directed by your doctor. This will let you know if your sugars are running high or low. Your doctor may request a lab test called Hemoglobin A1c every 3 to 6 months to see if your diabetes is well controlled.

### Can my blood glucose get too low?

Low blood glucose or hypoglycemia can happen from time to time. Symptoms can include sweating, hunger, dizziness, shakiness, headache, difficulty focusing, or seizure. The fastest way to treat this is by raising your blood glucose. Glucose tablets, fruit juice or hard candy are possible ways to treat this. If your blood glucose is still low after 15 minutes, repeat the treatment. Talk to a health care professional about strategies for dealing with low blood glucose.