

## What is diabetes?

**Diabetes** means that the amount of sugar (glucose) in your blood is too high. Glucose comes from the food you eat and is used by your body as fuel. Your pancreas makes a hormone called **insulin**, which normally helps move glucose from food into your body's cells. Insulin controls blood glucose levels.

When you have diabetes, your pancreas either makes too little insulin or your body does not use insulin well. As a result, glucose builds up in your blood because your body cannot use it properly.

## Why is diabetes important?

Persistently high blood sugar levels can damage your blood vessels, kidneys, and nerves. This can lead to circulation problems, eye damage, blindness, kidney failure, problems with digestion, foot injuries, and impotence. It can also increase your risk of stroke and heart attack. That is why controlling your blood sugar is so important.

## What are the types of diabetes?

**Pre-diabetes** develops in people whose glucose levels are higher than normal, but not so high that they have diabetes. These patients have a greater chance of developing type 2 diabetes.

**Type 2 diabetes** occurs when your body does not use insulin properly ("insulin resistance"). To make up for this, your pancreas produces extra insulin, but may eventually wear out and stop working.

**Type 1 diabetes** occurs when the pancreas does not produce enough insulin. This type usually occurs in people under age 30. Patients with type 1 diabetes must take insulin every day to help their bodies use glucose.

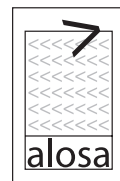
**Gestational diabetes** occurs when a woman has high blood glucose levels while pregnant.

## When are prescription drugs needed?

If you have diabetes, you may need a medication to help keep your blood glucose levels normal. It is important to take your medicine as prescribed, even if you feel well. If you stop taking your medicine for any reason, please call your doctor to talk about it.

Your doctor may choose metformin as a first choice. This drug helps people stay at a healthy weight and does not cause hypoglycemia. Metformin is also affordable, as are generic sulfonylureas. The table below lists different diabetes medicines and how they work.

TYPE:	ACTION:
Metformin	Decrease glucose made by liver
Sulfonylureas	Increase insulin production
Insulin	Move glucose into cells
Meglitinides	Increase insulin production
Incretin mimetics	Increase insulin production
Alpha-glucosidase inhibitors	Slow food absorption
D-phenylalanine derivatives	Increase insulin production
Glitazones	Increase insulin sensitivity



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Remember that diabetes medicines do not take the place of weight loss, healthy eating, exercise, and self-monitoring. Many patients will eventually need insulin to control their blood sugar levels. While insulin treatment requires a daily injection, it is simple to use and is very effective for controlling blood sugar levels.

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**These are general recommendations only; specific clinical decisions should be made by the treating physician based on an individual patient's clinical condition.**

*Balanced data about medications*

visit our website: [www.RxFacts.org](http://www.RxFacts.org)



## Managing Type 2 Diabetes

Diabetes requires a long-term partnership between the patient and the health care team. Careful control of blood sugar levels can reduce the risk of heart attack, stroke, and kidney and eye damage. There are many things you can do to keep your diabetes in check. This brochure will show you how.



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*Balanced data about medications*

## How is diabetes controlled?

You and your doctor can do several things to monitor your diabetes and keep your blood sugar levels in control. See your doctor regularly (at least every three months) to talk about how you are doing. Your doctor may also test your:

- ✓ **A1c (A-one-C):** This blood test shows your average blood glucose levels over the past few months. A good A1c level is below 7%.
- ✓ **Blood glucose levels:** You can measure your own blood glucose levels with a glucose meter. A normal range for most people is 80 to 120 before meals.
- ✓ **Blood pressure:** This can be measured easily in your doctor's office or with a home monitor or machines at stores. Blood pressure for most people with diabetes should be 130/80 or lower.
- ✓ **Cholesterol:** A blood test will show the level of LDL (bad cholesterol) and HDL (good cholesterol). LDL should be below 100, and HDL above 40.
- ✓ **Body weight and body mass index (BMI):** Being overweight can increase problems with diabetes. Ask your doctor about a healthy weight and BMI for you.
- ✓ **Urinary protein (albumin):** Your doctor will check your urine to make sure there is no protein. This can be a sign of kidney damage.

## What is hypoglycemia?

Hypoglycemia occurs when your blood glucose levels are too low. This can happen if you don't eat enough or as often as needed. Hypoglycemia can also occur if you drink alcohol, take too much medicine, or exercise more than normal. Talk with your doctor about hypoglycemia. Call right away if you feel **dizzy, tired, hungry, shaky, or confused.**

## What can you do to manage your diabetes?

You can prevent problems related to diabetes if you lose weight, exercise, and eat right. It is also important to monitor your blood sugar levels at least once per day, more often if advised by your doctor. Talk with your doctor about what you can do to manage your diabetes.

Some useful information for patients is provided by the American Diabetes Association and the National Institutes of Health. Visit [www.RxFacts.org](http://www.RxFacts.org) for links to these and other helpful websites.

### Diet

You can help manage your diabetes by:

- Choosing healthy portion sizes.
- Limiting salt and fat when cooking or dining out.
- Eating a healthy diet:

HIGH IN:	LOW IN:
fruits and vegetables	sugars, sweets
poultry, fish & lean meat	salt
low fat dairy	alcohol
whole grains	saturated fats

### Exercise

Regular, moderate activity can help you manage your diabetes, control weight, and reduce your risk of heart disease, high blood pressure, high cholesterol, and stroke.

YOUR GOAL: Be physically active...
• at least 30-60 minutes a day
• most, if not all days of the week

Ask your doctor if you should have any limits on activity. Begin slowly, and move up as you can. Set goals for yourself and plan an exercise schedule. Choose a time of day that works for you, and do a variety of activities you like.

## Stop smoking

If you smoke, you must quit. Smoking increases your risk of having a heart attack or stroke (in addition to many kinds of cancer). Smoking is especially dangerous in people with diabetes.

## Work with your health care team

YOU are the most important person on your health care team. It is important that you talk with your doctor regularly and take responsibility to stay healthy. Your checklist should include:

- ✓ Eat right, stay active, and maintain a healthy weight.
- ✓ Check your blood glucose levels at least once per day, more often if advised by your doctor.
- ✓ Check your feet for sores, swelling and redness, and see a foot specialist regularly.
- ✓ Check your cholesterol and blood pressure levels often.
- ✓ Know your A1c level and visit your doctor to have it checked.
- ✓ Brush your teeth and gums every day to prevent damage. Visit your dentist regularly.
- ✓ Tell your doctor if you have trouble seeing. Have regular check-ups with your eye doctor.
- ✓ Talk to someone if you feel stressed, worried, or depressed.
- ✓ Tell all your health care providers that you have diabetes.
- ✓ Follow your doctor's diabetes management plan.

