

Diabetes Medicines

Diabetes can make it hard to control how much sugar (called glucose) is in your blood.

There is hope!

Some people with diabetes can take medicines to help keep their blood sugar at a healthy level.

This booklet gives some basic facts about the medicines used to treat people with diabetes. Insulin is covered in a separate booklet.

Use this guide to help you talk to your doctor, nurse or pharmacist about the kind of medicine that is right for you.

Do not wait. Diabetes is a serious illness.

Diabetes can cause a heart attack, stroke, blindness, kidney disease, nerve damage, and other serious health problems. This is why it is so important for you to get treatment for your diabetes. Treatment can help prevent or slow some of these serious health problems.

Diabetes Tips

- Talk to your doctor before you change or stop taking your diabetes medicines.
- People with type 1 diabetes must use insulin.
- Ask your doctor about your target blood sugar level.
- Talk to your doctor or nurse about what you should do if your blood sugar gets too low or too high.
- Ask your doctor if your diabetes medicines will affect your other medicines including your birth control.

You can control your diabetes.

There are a few kinds of medicines used to treat diabetes. Each kind affects your body in a different way. Some diabetes medicines are taken as pills that you swallow. There are other medicines that you inject.

Some people with diabetes need to use medicines every day. What you need depends on your health and the type of diabetes you have. **Your healthcare provider can tell you if you need to use medicine to treat your diabetes.**

Check the FDA website to learn more about Women and Diabetes: www.fda.gov/womensdiabetes

Do I need to take diabetes medicines?

Type 1 Diabetes

Type 2 Diabetes

Gestational Diabetes

People with type 1 diabetes make very little or no insulin in their bodies. They must take insulin everyday to stay alive.

People with type 2 diabetes do not make enough insulin or do not use it well enough. Some people with type 2 diabetes can use pills or other medicines that are injected into the body. Other people with type 2 diabetes need insulin to help control their diabetes.

Some women develop diabetes for the first time when they become pregnant. This is called **gestational** (jes-Tay-shun-ul) diabetes. Some women with gestational diabetes need to use insulin to control their blood sugar.

What You Can Do About Side Effects

Diabetes medicines affect each person differently. These medicines can sometimes cause side effects. The side effects will depend on your body and the type of medicine you are taking. Follow these tips to help you learn how to handle the side effects.

- Get the facts. Ask your healthcare provider for the side effects, warnings, and other facts for the medicines you are taking. This booklet does not give all facts for each kind of diabetes medicine.
- **Speak up.** Tell someone about any problems you may be having with your medicines. Your doctor may change your medicine or give you tips to help you deal with the side effects.
- Check the FDA website. You can find up-to-date safety information about your medicine at: www.fda.gov

Report serious problems with your medicines. You or your doctor can tell the FDA about serious problems with your medicines. Report Online at: **www.fda.gov/medwatch** • Call **1-800-FDA-1088** to request a form.

Diabetes Medicines

The different kinds of diabetes medicines are listed on the next few pages. These medicines are most often used to treat type 2 diabetes. The brand names and other names are given for each drug. There are also some general tips about each kind of diabetes medicine. Ask your doctor, nurse, or pharmacist to tell you the side effects and warnings for the medicines you are taking. This guide does not give all of the side effects or warnings for each medicine.

Meglitinides

How do they work? These pills help your body make more insulin around mealtime.

Brand Name	Other Name
Prandin	Repaglinide
Starlix	Nateglinide

Some Things To Think About

Before you start taking these medicines, tell your healthcare provider if:

- you have liver or kidney problems.
- you are pregnant or breastfeeding.

Common Side Effects

Hypoglycemia (blood sugar that is too low)

Alpha-glucosidase Inhibitors

How do they work? These pills help your body digest sugar more slowly.

Brand Name	Other Name
Glyset	Miglitol
Precose	Acarbose

Some Things To Think About

Before you start taking these medicines, tell your healthcare provider if:

- you have heart, liver, or kidney problems.
- you are pregnant or breastfeeding.

These medicines are not likely to cause low blood sugar or weight gain.

Common Side Effects

- Stomach Pain
- Diarrhea
- Gas
- Abnormal Liver Tests

Thiazolidinediones

How do they work? These pills help the cells in your body use glucose.

Brand Name	Other Name
Actos	Pioglitazone
Avandia	Rosiglitazone

Some Things To Think About

- Before you start taking these drugs, tell your doctor if you have heart failure.
- Before you take Actos, tell your doctor if you are a premenopausal woman (before the "change of life") who does not have periods regularly or at all. ACTOS may increase your chance of becoming pregnant. Talk to your doctor about birth control choices while taking ACTOS.
- These medicines may raise your chance of having a broken bone (fracture).

Common Side Effects

- Fluid Retention
- Weight Gain
- Heart Failure (heart cannot pump blood well)
- Anemia (low red blood cell counts)
- Upper Respiratory Tract Infection

DPP-4 Inhibitors

How do they work? These pills help your body release more insulin.

Brand Name	Other Name
Januvia	Sitagliptin
Onglyza	Saxagliptin
Nesina	Alogliptin
Tradjenta	Linagliptin

Some Things To Think About

• Call your doctor right away if you have severe stomach pain or vomiting. This may be a sign of a serious side effect.

Common Side Effects

- Upper Respiratory Infection
- Headache

Sulfonylureas

How do they work? These pills help your body make more insulin.

Brand Name	Other Name
Amaryl	Glimepiride
Diabeta Glynase	Glyburide
Diabinese	Chlorpropamide

Sulfonylureas continued

Brand Name	Other Name
Glucotrol Glucotrol XL (extended release)	Glipizide
No brand name	Tolbutamide
No brand name	Tolazamide

Some Things To Think About

- Before you start taking these drugs, tell your doctor if you have heart, liver, or kidney problems.
- Older adults and people with kidney or liver problems may be more likely to have low blood sugar when taking these medicines.

Common Side Effects

- Hypoglycemia (blood sugar that is too low)
- Weight Gain
- Headache
- Dizziness

Biguanides

How do they work? These pills stop your liver from making too much sugar (glucose). They also help the sugar get into your cells.

Brand Name	Other Name
Fortamet	Metformin
Glucophage	Metformin
Glucophage XR (long-lasting extended release)	Metformin

Biguanides continued

Brand Name	Other Name
Glumetza	Metformin
Riomet	Metformin

Some Things To Think About

- Talk to your doctor about your kidney health before you start and while you are taking this type of medicine.
- These medicines are not likely to cause low blood sugar or weight gain.
- People who drink a lot of alcohol and people with kidney problems may have a rare side effect called lactic acidosis (acid build up in the blood).

Common Side Effects

- Diarrhea
- Indigestion

- Nausea and Vomiting
- Gas
- Feeling Weak
- Headache

Dopamine Receptor Agonists

How do they work? This pill affects a chemical called dopamine in your cells. It is not clear how this pill works for diabetes.

Brand Name	Other Name
Cycloset	Bromocriptine

Some Things To Think About

• Do not take this medicine if you are breastfeeding.

Common Side Effects

- Nausea
- Headache
- Feel Very Tired
- Feel Dizzy
- Vomiting

Bile Acid Sequestrants

How do they work? It is not clear how this pill works for diabetes.

Brand Name	Other Name
Welchol	Colesevelam

Some Things To Think About

- This medicine is also used to treat high cholesterol.
- Tell your doctor if you are taking other cholesterol medicines.

Common Side Effects

- Constipation
- Dyspepsia (Upset Stomach/ Indigestion)
- Nausea

SGLT2 Inhibitors

How do they work? These pills affect the kidney to increase the amount of sugar that goes out in the urine.

Brand Name	Other Name
Farxiga	Dapagliflozin
Invokana	Canagliflozin
Jardiance	Empagliflozin

Some Things To Think About

- Do not take these drugs if you have severe kidney problems or are on dialysis.
- Before you take these drugs, tell your doctor if you have kidney or liver problems.

Common Side Effects

- Vaginal Yeast Infections
- Urinary Tract Infections
- Changes in Urination

Combination Medicines

These combinations are made up of two kinds of medicines. Ask your doctor for the facts about the combination drug you are taking.

Brand Name	Other Name
ActoPlus Met	Pioglitazone and Metformin

Combination Medicines continued

Brand Name	Other Name
ActoPlus Met XR (extended release)	Pioglitazone and Metformin
Avandamet	Rosiglitazone and Metformin
Avandaryl	Rosiglitazone and Glimepiride
Duetact	Pioglitazone and Glimepiride
Glucovance	Glyburide and Metformin
Invokamet	Canagliflozin and Metformin
Janumet	Sitagliptin and Metformin
Janumet XR (extended release)	Sitagliptin and Metformin

Combination Medicines continued

Brand Name	Other Name
Jentadueto	Linagliptin and Metformin
Kazano	Alogliptin and Metformin
Kombiglyze	Saxagliptin and Metformin
Kombiglyze XR (extended release)	Saxagliptin and Metformin
Metaglip	Glipizide and Metformin
Oseni	Alogliptin and Pioglitazone
PrandiMet	Repaglinide and Metformin
Xigduo XR	Dapagliflozin and Metformin

GLP-1 Receptor Agonists

These are medicines that you inject under your skin. These medicines should not be used instead of insulin.

Brand Name	Other Name
Byetta	Exenatide
Bydureon	Exenatide
Tanzeum	Albiglutide
Trulicity	Dulagludtide
Victoza	Liraglutide

Some Things To Think About

- These medicines are not the same as insulin.
- Some people feel nauseous when they first start taking these medicines.

Amylin Analog

This is a medicine that you inject under your skin. This medicine should not be used instead of insulin.

Brand Name	Other Name
Symlin	Pramlintide Acetate

Some Things To Think About

- People who use insulin can also use Symlin.
- People with type 1 diabetes can use Symlin.
- Symlin should be taken in a separate injection. Do not mix Symlin and insulin in the same injection.
- This medicine is usually taken before meals.
- Some people feel nauseous when they first start taking this medicine.

Write down the facts about your diabetes medicines the next time you talk to your doctor, nurse, or diabetes educator.

- How will my medicines affect my blood sugar?
- Will it affect my other medicines?
- What are the side effects?
- What do I do if I start having side effects?
- What should I do if I am pregnant, planning to get pregnant, or breastfeeding?
- What else should I know about my diabetes medicines?



Sign Up for a Pregnancy Registry

Pregnancy Exposure Registries are research studies that collect information from women who take prescription medicines or vaccines during pregnancy.

Pregnancy registries can help women and their doctors learn more about how diabetes medicines affect women during pregnancy.

The FDA does not run pregnancy studies, but it keeps a list of registries. **Check to see if there is a registry for your diabetes medicine or other medicines at:** www.fda.gov/pregnancyregistries

You Can Control Your Diabetes

- Make a plan. Work with your doctor, nurse, or diabetes educator to plan how you will manage your diabetes.
- Check your blood sugar. Use your glucose meter to test your blood glucose (sugar) level.
- Watch what you eat. Work with your health care team to come up with a meal plan just for you.
- Use medicines wisely. Ask your health care provider when and how to safely use your diabetes medicines.
- **Be active and get exercise.** Dance, take a walk, or join an exercise class. Check with your doctor about safe ways to be more active.
- Monitor your overall mental and physical health. Work with your health care team to keep your feet, eyes, heart, and teeth healthy.

This booklet should not be used in place of talking to your doctor or reading the label on your medicine. This booklet does not list all of the benefits or risks of taking these medicines. The drug and risk information in this booklet may change. Check the FDA website for the latest facts on each medicine.

www.accessdata.fda.gov/scripts/cder/drugsatfda/



This booklet was developed by the U.S. Food and Drug Administration (FDA) Office of Women's Health. To download free copies of this booklet and other diabetes materials visit: **www.fda.gov/womens**