



Know **Diabetes** by **Heart**™

Understanding Your Medications

A practical medication
guide for managing
your type 2 diabetes.



Know **Diabetes** by **Heart**.org

FOUNDING SPONSOR



The Best Ways to Manage Type 2 Diabetes Is With:



Meal Planning



Weight Loss



Exercise



Medications



A1C Test



Blood Pressure Checks



Cholesterol Test



Smoking Cessation



Monitor Blood Glucose Level

Diabetes affects almost every part of your body, so it's important to manage it.

Managing your blood glucose (blood sugar), blood pressure and cholesterol helps lower your risk for and prevents health problems from diabetes that happen over time. Work with your health care team on a treatment plan that meets your needs and goals. Be sure to review it with them regularly to make sure it is meeting your needs or if you are having trouble reaching your health targets.

Work with your health care team to decide which medications may be right for you. This will be based on:



Lifestyle and treatment goals



Risk for complications



Weight management goals



Insurance/health coverage



Diabetes Medications and How They Work

There are different types of medications, called classes, that lower your blood glucose in different ways. Some classes of medications also add other benefits, like lowering your risk for diabetes-related problems or helping you lose weight.

Because of this, the medications you take to manage your diabetes and reach your blood glucose targets, also lower your risk for heart disease, stroke and kidney disease.

Your health care team is your best source to ask about your treatment plan. Talk to them about your medications and ask any questions you may have.

Never stop taking a medication or change your dose without talking with your health care team.

Important note: *The generic names and brand names are shown to help you understand what medications you may be taking. The American Heart Association® and the American Diabetes Association® do not recommend or endorse any specific medication.*



Make taking medications a part of your routine so you don't forget!



Set a reminder.



Make a chart.



Take at the same time every day.

| Drug class/How it works | Type | Generic name | Brand name |
|--|----------|----------------------------|------------------------------|
| Amylin mimetics slow the movement of food through the stomach. This prevents blood sugar from rising too high after a meal and may decrease appetite and cause weight loss. | Injected | pramlintide | Symlin |
| Alpha-glucosidase inhibitors help the body lower blood glucose levels by delaying the breakdown of starches and carbohydrates you eat. | Oral | meglitol | Glyset |
| | | acarbose | Precose |
| Bile acid sequestrants lower the amount of cholesterol and blood glucose levels. | Oral | colesevelarn | Welchol |
| Meglitinides help the cells in your pancreas release more insulin. | Oral | nateglinide | Starlix |
| | | repaglinide | Prandin |
| Metformin decreases the amount of glucose made by the liver and increases your body's response to insulin so blood glucose can be used for energy. | Oral | metformin | Glucophage |
| SGLT2 inhibitors keep your body from absorbing glucose back into the blood in your kidneys. Your body removes the glucose through your urine. | Oral | bexagliflozin | Brenzavvy |
| | | canagliflozin | Invokana |
| | | dapagliflozin | Farxiga |
| | | empagliflozin | Jardiance |
| GLP-1 receptor agonists help the body use the hormone GLP-1 that lowers blood glucose levels. | Injected | dulaglutide | Trulicity |
| | | exenatide | Byetta |
| | | exenatide extended release | Bydureon BCISE |
| | | liraglutide | Victoza |
| | | lixisenatide | Adlyxin |
| | | semaglutide | Ozempic |
| | Oral | semaglutide | Rybelsus |
| Glucose-Dependent Insulinotropic Polypeptide (GIP) agonist and GLP-1 agonist help the body use the hormones GLP-1 and GIP that lower blood glucose levels. | Injected | tirzepatide | Mounjaro |
| DPP-4 inhibitors prevent the breakdown of the hormones GLP-1 and GIP that lower blood glucose levels in the body. | Oral | alogliptin | Nesina |
| | | linagliptin | Tradjenta |
| | | saxagliptin | Onglyza |
| | | sitagliptin | Januvia |
| Thiazolidinedione (TZDs) help insulin work better in the muscles and lower the glucose produced in the liver. | Oral | pioglitazone | Actos |
| | | rosiglitazone | Avandia |
| Sulfonylureas help the cells in your pancreas release more insulin. | Oral | glyburide | Glynase/DiaBeta Micronase |
| | | glimepiride | Amaryl |
| | | glipizide | Glucotrol/Glucotrol XL |

Medications to Lower Heart Disease Risk

Your health care team may prescribe a combination of medications to lower your blood glucose and lower your risk for heart disease. You may also be given medication to manage high cholesterol or high blood pressure, which is common in people living with type 2 diabetes.

Blood Pressure Medications

If untreated, high blood pressure can damage blood vessels, the heart and other organs. Blood pressure medications that may be prescribed will depend on your blood pressure, medical history and other factors.

Common blood pressure medications

ACE inhibitors lower blood pressure by keeping your blood vessels relaxed. ACE inhibitors stop a hormone from forming in the body and narrowing your blood vessels. They also help protect the kidneys and lower your risk of heart attack and stroke.
Examples: benazepril, captopril, enalapril, fosinopril, lisinopril, moexipril, perindopril, quinapril, ramipril and trandolapril

ARBs keep the blood vessels open and relaxed to help lower blood pressure. They also help protect the kidneys.
Examples: azilsartan, candesartan, eprosartan, irbesartan, telmisartan, valsartan, losartan and olmesartan

Beta blockers help lower blood pressure and relax the heart by allowing it to beat slower and with less force. These can help prevent heart attack and stroke.
Examples: acebutolol, atenolol, betaxolol, bisoprolol, carvedilol, esmolol, labetalol, metoprolol, nadolol, nebivolol, penbutolol, pindolol, propranolol, sotalol and timolol

Calcium channel blockers stop calcium from entering the cells of the heart and arteries and this relaxes the blood vessels, which lowers blood pressure.
Examples: amlodipine, diltiazem, felodipine, isradipine, nicardipine, nifedipine, nisoldipine, verapamil, clevidipine and nimodipine

Diuretics help rid the body of extra water and sodium through urine. Sometimes called “water pills.”
Examples: chlorthalidone, hydrochlorothiazide (HCTZ), indapamide, metolazone, bumetanide, furosemide, amiloride and spironolactone

Cholesterol Medications

Most adults living with diabetes who are 40 years or older should take a statin. Cholesterol-lowering medications, including statins, help lower LDL levels and reduce your risk for heart attack or stroke. Ask your health care team about whether you should take a statin in addition to another cholesterol-lowering medication to lower your risk for heart attack or stroke.

Common cholesterol medications

Statins prevent the production of cholesterol in the liver.
Examples: atorvastatin, fluvastatin, lovastatin, pravastatin, simvastatin, pitavastatin and rosuvastatin

Ezetimibe is a cholesterol absorption inhibitor and prevents cholesterol from being absorbed by the liver.
Example: Zetia

PCSK9 inhibitors bind to and inactivate a protein in the liver to lower LDL cholesterol and block production of low density lipoprotein (LDL, also known as the bad cholesterol) in the body, which lowers the amount of cholesterol that may build up on the walls of arteries.
Examples: alirocumab, evolocumab and inclisiran

Bile acid sequestrants help remove cholesterol from the bloodstream by removing bile acids.
Examples: cholestyramine, colestipol and colesevelam

nMRA Medications

Mineralocorticoid Receptor Antagonists (also called Aldosterone Receptor Antagonists or potassium sparing diuretics) are drugs that bind to and block the activation of mineralocorticoid receptors by aldosterone. MRAs are diuretic drugs that work primarily on the kidneys. They decrease sodium reabsorption, which leads to increased water excretion by the kidneys and prevents potassium loss which occurs with aldosterone. This group of drugs is often used as adjunctive therapy, in combination with other drugs, such as diuretics, for the management of several chronic conditions, such as high blood pressure, heart failure, chronic kidney disease and edema.

Steroidal

Generic: sprinolactone, eplerenone

Brand: Aladactone, CaroSpir, Inspira

Non-Steroidal

Generic: finerenone

Brand: Kerendia

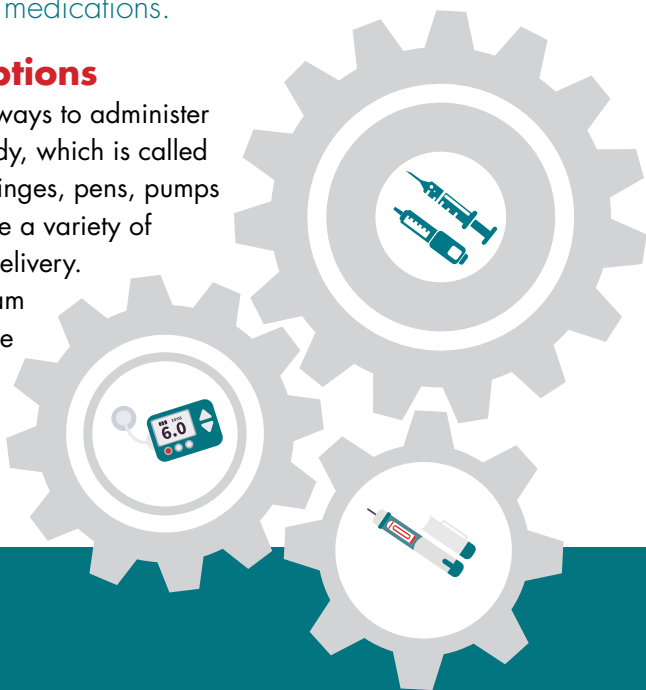
Do I Need Insulin?

Our bodies make insulin, but if you have type 2 diabetes, your body doesn't produce enough to manage your blood glucose. If you have type 2 diabetes, cells don't respond normally to insulin; this is called insulin resistance. Your health care team may prescribe insulin in addition to other blood glucose-lowering medications.

You Have Options

There are different ways to administer insulin into your body, which is called insulin delivery. Syringes, pens, pumps and inhalers provide a variety of options for insulin delivery.

Your health care team will help you find the easiest and best option for you.



Some types of insulin work quickly and are taken with meals. Others are long-acting and are used just once or twice a day. Follow your health care team's instructions on dosage and frequency.

Types of Insulin

The types of insulin vary on how they lower your blood glucose levels. Your health care team will help you decide which option is best for you.

| Insulin type | Generic name | Brand name |
|--|--|------------------------|
| Rapid-acting Onset: about 15 minutes Peak: about 1 or 2 hours Duration: about 2–4 hours | aspart | Fiasp NovoLog |
| | glulisine | Apidra |
| | lispro | Admelog |
| | | Humalog |
| | | Lyumjev |
| Regular or short-acting Onset: about 30 minutes Peak: about 2–3 hours Duration: about 3–6 hours Concentrated regular insulin (U-500) Onset: less than 15 minutes Peak: 4–8 hours Duration: 13–24 hours Humulin R (u-500) is a concentrated human regular insulin product (five times more concentrated than U-100) that has been used for people requiring consistently high daily doses of insulin (usually >200U/day). | regular | Humulin R Novolin R |
| | regular U-500 | Humulin R U-500 |
| | | |
| Intermediate-acting Onset: about 2–4 hours Peak: 4–12 hours Duration: about 12–18 hours | NPH | Humulin N |
| | | Novolin N |
| Long- and ultra-long-acting basal insulins Onset: 2–6 hours Peak: continuous “peakless” action that acts the way your body normally releases insulin Duration: 24–36 hours or longer | degludec | Tresiba |
| | detemir | Levemir |
| | glargine | Basaglar |
| | | Lantus |
| | | Semglee |
| glargine u-300 | Toujeo | |
| Inhaled insulin Onset: about 12–15 minutes Peak: about 30 minutes Duration: about 1.5–3 hours. Use with injectable long-acting insulin for people with type 1 or type 2 diabetes. | technosphere insulin-inhalation system | Afrezza |



Talk to your health care team to get on the right treatment plan to minimize risks.

You're not in this alone.

Find answers to more of your questions and join the Know Diabetes by Heart™ initiative at:

knowdiabetesbyheart.org/enewsletter-signup