

High blood pressure in adults (The Basics)

View in [Spanish](#)

[Written by the doctors and editors at UpToDate](#)

Please do not copy or distribute these materials.

What is high blood pressure? — High blood pressure is a condition that puts you at risk for heart attack, stroke, and kidney disease. It does not usually cause symptoms. But it can be serious.

When your doctor or nurse tells you your blood pressure, he or she will say 2 numbers. For instance, your doctor or nurse might say that your blood pressure is "140 over 90." The top number is the pressure inside your arteries when your heart is contracting. The bottom number is the pressure inside your arteries when your heart is relaxed.

The table shows how doctors and nurses define high and normal blood pressure ([table 1](#)). "Elevated blood pressure" is a term doctors or nurses use as a warning. People with elevated blood pressure do not yet have high blood pressure. But their blood pressure is not as low as it should be for good health.

How can I lower my blood pressure? — If your doctor or nurse has prescribed blood pressure medicine, the most important thing you can do is to take it. If it causes side effects, do not just stop taking it. Instead, talk to your doctor or nurse about the problems it causes. He or she might be able to lower your dose or switch you to another medicine. If cost is a problem, mention that too. He or she might be able to put you on a less expensive medicine. Taking your blood pressure medicine can keep you from having a heart attack or stroke, and it can save your life!

Can I do anything on my own? — You have a lot of control over your blood pressure. To lower it:

- Lose weight (if you are overweight)
- Choose a diet low in fat and rich in fruits, vegetables, and low-fat dairy products
- Reduce the amount of salt you eat
- Do something active for at least 30 minutes a day on most days of the week
- Cut down on alcohol (if you drink more than 2 alcoholic drinks per day)

It's also a good idea to get a home blood pressure meter. People who check their own blood pressure at home do better at keeping it low and can sometimes even reduce the amount of medicine they take.

Medicines for high blood pressure

View in [Spanish](#)

[Written by the doctors and editors at UpToDate](#)

Why do I need medicines to treat high blood pressure? — Having high blood pressure puts you at risk for heart attack, stroke, kidney damage, and other serious problems. The medicines your doctor or nurse prescribes to treat high blood pressure can help reduce the risk of these problems and even help you live longer.

It's very important that you take your blood pressure medicines every day as directed. High blood pressure doesn't usually cause symptoms, so people sometimes don't take it seriously. Plus, blood pressure medicines can cause side effects and be expensive, so it's easy to understand why people don't like to take them. But if you are tempted to skip your medicines, remember, they can save your life!

If your medicines cause unpleasant side effects, or if you can't afford your medicines, talk to your doctor or nurse. There are often ways to deal with these problems. The first step is to let your doctor or nurse know.

Which medicines might I need? — There are lots of different medicines to treat high blood pressure. But some of the medicines have other health benefits besides lowering blood pressure.

Your doctor or nurse will decide which medicine is best for you depending on:

- How high your blood pressure is
- Your other health problems, if you have any
- How well you do on the medicines you try

Your doctor or nurse might need to change your medicine or its dose a couple of times to find the medicine and dose that work best and cause the fewest side effects. Plus, you might need to take more than 1 medicine to get your blood pressure under control. Whatever your doctor or

nurse prescribes, it's important to take your medicines exactly as prescribed ([table 1](#)). But always let your doctor or nurse know if you have any problems with the medicines. That way he or she can make changes so that you are as comfortable as possible and also get the most benefit. Never stop or make changes to the way you take your medicines without talking to your doctor or nurse first.

Below is a list of the most common types of medicine given to people with high blood pressure:

- Medicines called "diuretics"
- Medicines called "angiotensin-converting enzyme inhibitors" ("ACE inhibitors") or "angiotensin receptor blockers" ("ARBs")
- Medicines called "calcium channel blockers"
- Medicines called "beta blockers"

This article has only some basic information on these medicines. For more detailed information about your medicines, ask your doctor or nurse for the patient hand-out from Lexicomp, available through UpToDate. It explains how to use each medicine, describes its possible side effects, and lists other medicines or foods that can affect how it works.

Diuretics — Diuretics are sometimes called "water pills," because they make you urinate more than usual. Some examples of diuretics include [chlorthalidone](#), [indapamide](#), [hydrochlorothiazide](#) (also known as HCTZ), and [furosemide](#) (brand name: Lasix).

ACE inhibitors and ARBs — ACE inhibitors and ARBs are often grouped together, because they work in similar ways. These medicines can help prevent kidney disease. Doctors often prescribe them for people with diabetes, because people with diabetes have a higher-than-average risk of kidney disease.

Some examples of ACE inhibitors include [enalapril](#), [captopril](#), and [lisinopril](#). Some examples of ARBs include [candesartan](#) (brand name: Atacand) and [valsartan](#) (brand name: Diovan).

Calcium channel blockers — Some examples of calcium channel blockers include [amlodipine](#) (brand name: Norvasc), [felodipine](#) (brand name: Plendil), and [diltiazem](#) (brand name: Cardizem). These medicines also help prevent chest pain caused by heart disease.

Beta blockers — Besides lowering blood pressure, beta blockers help reduce the amount of work the heart has to do. Studies show that people who take a beta blocker after a heart attack

are less likely to have another heart attack or die than people who don't take a beta blocker. Studies also show that people with heart failure who take beta blockers live longer than people with heart failure who don't.

When people first start taking beta-blockers, they sometimes feel tired. That is just while the body gets used to the medicine. But once the body gets used to beta blockers, the medicines can really help. If your doctor prescribes a beta blocker, give it a little time to start working.

Some examples of beta blockers include [atenolol](#) (brand name: Tenormin), [metoprolol](#) (brand names: Lopressor, Toprol-XL), and [propranolol](#) (brand name: Inderal LA).

Lifestyle Treatment

Patient education: Controlling your blood pressure through lifestyle (The Basics)

View in [Spanish](#)

[Written by the doctors and editors at UpToDate](#)

What does my lifestyle have to do with my blood pressure? — The things you do and the foods you eat have a big effect on your blood pressure and your overall health. Following the right lifestyle can:

- Lower your blood pressure or keep you from getting high blood pressure in the first place
- Reduce your need for blood pressure medicines
- Make medicines for high blood pressure work better, if you do take them
- Lower the chances that you'll have a heart attack or stroke, or develop kidney disease

Which lifestyle choices will help lower my blood pressure? — Here's what you can do:

- Lose weight (if you are overweight)
- Choose a diet rich in fruits, vegetables, and low-fat dairy products, and low in meats, sweets, and refined grains
- Eat less salt (sodium)

- Do something active for at least 30 minutes a day on most days of the week
- Limit the amount of alcohol you drink

If you have high blood pressure, it's also very important to quit smoking (if you smoke). Quitting smoking might not bring your blood pressure down. But it will lower the chances that you'll have a heart attack or stroke, and it will help you feel better and live longer.

Start low and go slow — The changes listed above might sound like a lot, but don't worry. You don't have to change everything all at once. The key to improving your lifestyle is to "start low and go slow." Choose 1 small, specific thing to change and try doing it for a while. If it works for you, keep doing it until it becomes a habit. If it doesn't, don't give up. Choose something else to change and see how that goes.

Let's say, for example, that you would like to improve your diet. If you're the type of person who eats cheeseburgers and French fries all the time, you can't switch to eating just salads from 1 day to the next. When people try to make changes like that, they often fail. Then they feel frustrated and tend to give up. So instead of trying to change everything about your diet in 1 day, change 1 or 2 small things about your diet and give yourself time to get used to those changes. For instance, keep the cheeseburger but give up the French fries. Or eat the same things but cut your portions in half.

As you find things that you are able to change and stick with, keep adding new changes. In time, you will see that you can actually change a lot. You just have to get used to the changes slowly.

Lose weight — When people think about losing weight, they sometimes make it more complicated than it really is. To lose weight, you have to either eat less or move more. If you do both of those things, it's even better. But there is no single weight-loss diet or activity that's better than any other. When it comes to weight loss, the most effective plan is the one that you'll stick with.

Improve your diet — There is no single diet that is right for everyone. But in general, a healthy diet can include:

- Lots of fruits, vegetables, and whole grains
- Some beans, peas, lentils, chickpeas, and similar foods

- Some nuts, such as walnuts, almonds, and peanuts
- Fat-free or low-fat milk and milk products
- Some fish

To have a healthy diet, it's also important to limit or avoid sugar, sweets, meats, and refined grains. (Refined grains are found in white bread, white rice, most forms of pasta, and most packaged "snack" foods.)

Reduce salt — Many people think that eating a low-sodium diet means avoiding the salt shaker and not adding salt when cooking. The truth is, not adding salt at the table or when you cook will only help a little. Almost all of the sodium you eat is already in the food you buy at the grocery store or at restaurants ([figure 1](#)).

The most important thing you can do to cut down on sodium is to eat less processed food. That means that you should avoid most foods that are sold in cans, boxes, jars, and bags. You should also eat in restaurants less often.

To reduce the amount of sodium you get, buy fresh or fresh-frozen fruits, vegetables, and meats. (Fresh-frozen foods have had nothing added to them before freezing.) Then you can make meals at home, from scratch, with these ingredients.

As with the other changes, don't try to cut out salt all at once. Instead, choose 1 or 2 foods that have a lot of sodium and try to replace them with low-sodium choices. When you get used to those low-sodium options, find another food or 2 to change. Then keep going, until all the foods you eat are sodium-free or low in sodium.

Become more active — If you want to be more active, you don't have to go to the gym or get all sweaty. It is possible to increase your activity level while doing everyday things you enjoy. Walking, gardening, and dancing are just a few of the things that you might try. As with all the other changes, the key is not to do too much too fast. If you don't do any activity now, start by walking for just a few minutes every other day. Do that for a few weeks. If you stick with it, try doing it for longer. But if you find that you don't like walking, try a different activity.

Drink less alcohol — If you are a woman, do not have more than 1 "standard drink" of alcohol a day. If you are a man, do not have more than 2. A "standard drink" is:

- A can or bottle that has 12 ounces of beer

- A glass that has 5 ounces of wine
- A shot that has 1.5 ounces of whiskey

Where should I start? — If you want to improve your lifestyle, start by making the changes that you think would be easiest for you. If you used to exercise and just got out of the habit, maybe it would be easy for you to start exercising again. Or if you actually like cooking meals from scratch, maybe the first thing you should focus on is eating home-cooked meals that are low in sodium.

Whatever you tackle first, choose specific, realistic goals, and give yourself a deadline. For example, do not decide that you are going to "exercise more." Instead, decide that you are going to walk for 10 minutes on Monday, Wednesday, and Friday, and that you are going to do this for the next 2 weeks.

When lifestyle changes are too general, people have a hard time following through.

Now go. You can do it!

Please do not copy or distribute these materials.