

High Blood Pressure

Things you can do to help lower yours

What is high blood pressure?

Imagine that your arteries are pipes that carry blood from your heart to the rest of your body. High blood pressure (*hypertension*) occurs when your blood moves through your arteries at a higher pressure than normal.

High blood pressure that can be linked to a specific cause, such as a disease or drug, is called *secondary hypertension*. But often the exact cause isn't known. When the cause isn't known, the high blood pressure is called *primary* or *essential hypertension*.

What do the numbers for high blood pressure mean?

Blood pressure is really two measurements, separated by a slash when written down, such as 120/80. You may also hear someone say a blood pressure is “120 *over* 80.”

The first number is the *systolic* blood pressure. This is the peak blood pressure when your heart is squeezing blood out. The second number is the *diastolic* blood pressure. It's the pressure when your heart is filling with blood—relaxing between beats.

A normal blood pressure is less than 130/85. High blood pressure is when your blood pressure is 140/90 or higher.

How is high blood pressure diagnosed?

Blood pressure is measured by putting a blood pressure cuff around your arm, inflating the cuff and listening for the flow of blood. Your doctor will measure your blood pressure at more than one visit to see if you have high blood pressure. If your blood pressure is high on several occasions, you probably have high blood pressure.

How often should I have my blood pressure checked?

Even in childhood, blood pressure should be checked occasionally, beginning at about age two. Have your blood pressure checked at least once every two years after age 18. Do it more often if you have had high blood pressure in the past. Ask your family doctor how often your blood pressure should be checked.

Why is high blood pressure bad?

High blood pressure damages your blood vessels. This in turn raises your risk of stroke, kidney failure, heart disease and heart attack.

Does it have any symptoms?

Not usually. This is why it's so important to have your blood pressure measured regularly.

How is it treated?

Treatment begins with changes you can make in your lifestyle to help lower your blood pressure and reduce your risk of heart disease (see the box below). These things alone may work. If these changes don't work, you may also need to take medicine.

Even if you must take medicine, making some changes in your lifestyle can help lower how much medicine you must take to control your blood pressure and help reduce your risk of heart disease. High blood pressure increases your risk of heart problems, so watching any other risk factors for heart disease can help your health.

Lifestyle changes

- Don't smoke cigarettes or use any tobacco product.
- Lose weight if you're overweight.
- Exercise regularly.
- Limit how much sodium you eat.
- Limit how much alcohol you drink.
- Eat enough potassium, calcium and magnesium.
- Eat less fat and cholesterol.
- Try relaxation techniques or biofeedback.

How do tobacco products affect blood pressure?

The nicotine in cigarettes and other tobacco products makes your body release adrenaline. Adrenaline causes your blood vessels to constrict and your heart to beat faster, which raises your blood pressure. If you quit smoking or using other tobacco products, you can significantly lower your risk of heart disease and heart attack, as well as help lower your blood pressure.

What about losing weight and exercising?

Losing weight if you're overweight helps lower blood pressure in most people. Regular exercise is a good way to lose weight. It also seems to lower high blood pressure by itself, in addition to helping with weight loss.

Is sodium really off limits?

Not everyone is affected by sodium, but sodium can increase blood pressure in some people. Most people who have high blood pressure should limit the sodium they eat each day to less than 2,300 mg.

While some foods obviously have a lot of sodium in them, such as potato chips and cured meats like ham, you may not realize how much sodium is in things like bread and cultured dairy products, such as cheese.

Read labels! Don't add salt to your food. And remember that using a *diuretic* (pill that helps your body get rid of fluids) doesn't reduce your need to cut back on sodium.

Do I need to quit drinking alcohol altogether?

In some people, alcohol causes the blood pressure to rise quite a lot. In other people, it doesn't. If you drink alcohol, limit it to no more than two drinks per day. One drink is a can of beer (12 ounces), a 4-ounce glass of wine or one jigger (1 ounce) of liquor. If your blood pressure increases with alcohol, it's best not to drink any alcohol.

What other things do I need to do about diet?

Increasing how much potassium you eat may help lower your blood pressure, as may increasing the amount of calcium and magnesium in your diet. Talk to your family doctor about whether these changes would be good for you to make.

Potassium can be found in potatoes, bananas, squash, spinach, bran cereal, tomatoes, prunes, raisins, cantaloupe, apricots and navy beans. **Magnesium** can be found in green vegetables, nuts, whole grains and shellfish. Good sources of **calcium** include dairy products (such as milk and cheese), greens and sardines.

Does stress affect my blood pressure?

Stress probably affects blood pressure. To help combat the effect of stress, try relaxation techniques or biofeedback. These things work best when used at least once a day. Ask your family doctor for advice.

What about medicine?

Many different types of medicines can be used to treat high blood pressure (see the box below). These are called *antihypertensive* medicines. Within each group of medicines, there are many different brands.

The goal of treatment is to reduce your blood pressure to normal levels with medicine that's easy to take and doesn't have side effects. This goal can almost always be met.

If your blood pressure can only be controlled with medicine, you'll need to take the medicine for the rest of your life. Don't stop taking the medicine without talking with your family doctor. If you do, you raise your risk of having a stroke or heart attack.

Types of antihypertensive drugs

- **Diuretics**—These drugs help your body get rid of extra sodium and fluid so that your blood vessels don't have to hold so much fluid.
- **Beta blockers**—These drugs block the effects of adrenaline.
- **Alpha blockers**—These drugs work by helping your blood vessels stay open.
- **Angiotensin-converting enzyme (ACE) inhibitors**—These drugs prevent your blood vessels from constricting by blocking your body from making angiotensin II. Angiotensin II is a chemical that constricts blood vessels.
- **Calcium channel blockers**—These drugs help prevent your blood vessels from constricting by blocking calcium from entering your cells.

What are the possible side effects of medicine?

Different drugs have different side effects for different people. Side effects of antihypertensive drugs can include feeling dizzy when you stand up after lying down or sitting, lowered levels of potassium in your blood, problems sleeping, drowsiness, dry mouth, headaches, bloating, constipation and depression. In men, some antihypertensive drugs can cause problems with having an erection.

Talk to your family doctor about any changes you notice. If one medicine doesn't work for you or causes side effects, you have other options. Let your doctor help you find the best medicine for you.

This handout provides a general overview on this topic and may not apply to everyone. To find out if this handout applies to you and to get more information on this subject, talk to your family doctor.



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