

All About Hypertension

Blood pressure is the measure of the force generated by the heart as it pumps blood through the arterial system. This force is expressed as two numbers, such as 110 over 80 mm Hg (millimeters of mercury). The first number, the "systolic" blood pressure, represents the amount of force used by the heart to initially fill the blood vessel circuit; the second number, the "diastolic" blood pressure, is a measure of the resistance to that force. Combined, these numbers give your healthcare provider a picture of how hard your heart is working to get blood to the tissues in your body.

High blood pressure or hypertension, is blood pressure that consistently reads above 130 over 85 mm Hg. High blood pressure causes undue stress to the circulation of key organs, particularly the brain, heart and kidneys. This leads to increased risk of stroke, heart attack and kidney failure. High blood pressure also can cause an aneurysm, a small balloon-like weakening of the artery wall, which can be life-threatening.

Hypertension can be especially hard to manage when combined with other disorders, such as diabetes or obesity.

Managing Hypertension

If you have been diagnosed with high blood pressure, your healthcare provider will work with you to develop a treatment plan that is right for you. Depending on the cause of your high blood pressure, your treatment plan may include lifestyle changes, medication or a combination of both.

Lifestyle Changes

When high blood pressure is caused by lifestyle factors, the most effective way to control it can be to change your behavior. If you have been diagnosed with hypertension, your healthcare provider may suggest the following:

- **Achieve ideal body weight.** Losing weight is the most effective non-clinical way of lowering your blood pressure. Ask your doctor what your ideal weight should be. He or she may recommend a diet and exercise plan to help you achieve this weight.
- **Restrict salt intake.** The American Heart Association recommends that healthy adults have no more than 2400 mg of sodium or 1 1/4 teaspoons of salt per day. You can track your sodium intake by reading nutrition labels and limiting the amount of table salt you use. If you have high blood pressure, your doctor may recommend a low-sodium diet.
- **Limit alcohol intake.** Generally, you should have no more than three drinks a day. However, depending on your situation, your doctor may recommend that you have fewer than three drinks or that you avoid alcohol completely.

- **Quit smoking.** Talk to your doctor about the best ways to quit smoking. Keep a journal and record each time you have a cigarette, how you are feeling when you have that cigarette and if the urge to smoke was brought on by stress, hunger or boredom. Share the journal with your doctor and ask for suggested programs or methods that can help you quit.
- **Exercise.** Regular aerobic exercise and daily physical activity play a major role in the prevention of high blood pressure, obesity, diabetes and heart disease. Aerobic exercise involves continuous movement of the large muscle groups in your arms and legs. These exercises benefit the heart by making it beat faster and more efficiently. If performed daily, even moderate activities, such as gardening and housework, can have long-term health benefits.

Blood Pressure Medication

Although there are a multitude of blood pressure medications, they fall into five basic categories. Each type acts in a different way to lower your blood pressure.

- **Diuretics** -- Medicines that increase the elimination of sodium through the kidneys.
- **Angiotensin converting enzyme (ACE) inhibitors and angiotensin receptor blockers** -- Medicines that inhibit blood pressure-raising hormones.
- **Alpha blockers, beta blockers, or combined alpha and beta blockers** -- Medicines that work through the involuntary nervous system to decrease relax the arterities and decrease pressure.
- **Calcium channel blockers** -- Medicines that reduce blood vessel constriction by interfering with the effects of calcium in the blood vessel wall. These medications do not affect blood calcium levels.
- **Vasodilators** -- Medicines that lower blood pressure by dilating arteries to decrease overall pressure in the circulatory system.

It is often possible to control blood pressure with one or two medicines, but patients with complex hypertension may require more than two medications. Remembering to take your medicine, knowing which medications and dosages to take, and writing this information down are important aspects of your treatment. Also, be sure to ask your doctor the following questions:

- When should I take the medicine?
- What should I eat or drink with the drug, or how long should I wait before or after a meal to take it?
- What are the drug interaction precautions? With prescription medicines? With over-the-counter medicines?
- What should I do if I run out of the medicine?

- What should I do if I forget to take a dose?
- Are there any other special instructions?

Pay attention to how you feel while taking your blood pressure medication. Call your doctor immediately if you notice any side effects or if you think you are having a reaction to your medicine.

Symptoms

High blood pressure has been described as "the silent killer" because it often occurs without symptoms. Headaches, blurred vision or dizziness may occur, but these symptoms are not specific to high blood pressure.

Unrecognized high blood pressure can cause heart disease, hardening of the arteries and kidney damage. Some people may not know they have high blood pressure until they have a heart attack, stroke or kidney failure.

The best way to tell if you have high blood pressure is to have your blood pressure measured by a doctor. Tell your doctor about any factors that may put you at risk for high blood pressure, such as a family history of hypertension.