

High Blood Pressure

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High blood pressure is known by a couple of different names: hypertension. "The silent killer." It's called silent because without a blood pressure measurement, you usually do not know you have it. It's called a killer because that's what it can do if left alone.

How blood pressure is regulated

With each beat of your heart, blood is forced throughout your body to supply cells with oxygen and energy. Your circulatory system is a wonder, regulating itself by widening or tightening small blood vessels to control pressure. This system lets your body give each part just what it needs, when it needs it.

For reasons that aren't clear, this system doesn't work well for some people. The blood vessels stay tight and so, blood pressure stays high. The heart has to work harder, and the brain, kidneys, eyes and circulatory system may be damaged.

When the reason for high blood pressure is not known, it is called "essential" hypertension. This is the most common in young adults.

When the reason for high blood pressure is known, it is called "secondary" hypertension, and it's caused by another health problem. Problems with the kidneys, liver or adrenal glands may be the root cause; for some women, use of oral contraceptives or pregnancy can cause high blood pressure.

Who is at risk for high blood pressure?

Anyone, no matter how healthy his or her lifestyle, can develop it. There are certain groups who do have a slightly higher risk of high blood pressure. They include:

- Those with a family history of high blood pressure
- African-Americans
- Those who consume a lot of alcohol and/or sodium
- Overweight people
- People who are physically inactive

Deciding what is too high

Some people think that, if you have high blood pressure, you must be nervous, anxious or angry. That isn't true. Calm people may have it. The only way to find out if you have high blood pressure is to have regular blood pressure checks.

Blood pressure is measured with a device called a sphygmomanometer. Two numbers are recorded:

- **Systolic pressure**, the higher number, represents the pressure that occurs each time your heart beats.
- **Diastolic pressure**, the lower number, represents the pressure between the beats.

If your blood pressure is always higher than average for your age, you need to work to bring it down. Your health care provider may take a few readings over a period of time to arrive at a consistent reading. This is because your blood pressure can change at different times.

The following table defines a range of blood pressure readings based on what is average for 16 year olds, and recommended actions:

Blood pressure	Assessment	Recommended action
Less than 122/ 82	Optimal	Recheck every two years
122-125/ 82-86	High/normal	Lifestyle changes; recheck in one year
over 125/ 86	Hypertension	Begin lifestyle changes, check in 2 months

Lifestyle changes that can help rein in high blood pressure

If you have high blood pressure, there are many things you can do to bring it down on your own.

- **Maintain a healthy weight** -- If you're overweight, work with your health care provider to get a diet and exercise program that will bring your weight down to a healthy level.
- **Reduce salt in your diet** -- Try to keep your sodium intake to 2,400 mg daily. Salt makes your body keep water on; the more water in your bloodstream, the higher your pressure will be. Avoid salty foods, don't cook with salt, avoid fast food, and read food labels carefully to avoid other sodium-laden substances such as monosodium glutamate (MSG), baking soda and sodium chloride.
- **Exercise** -- If you don't exercise regularly, get started! This will lower your blood pressure and improve your overall cardiovascular health.
- **Don't smoke** -- It's one more nasty thing smoking does: raise your blood pressure. Aside from the temporary boost in blood pressure nicotine causes, smoking also contributes to something called atherosclerosis, a buildup of deposits in your blood vessels that reduce the flow of blood and hence cause pressure to rise.
- **Pour on the fruits, vegetables, grains and low-fat dairy foods** -- Cut down on high-fat foods and empty, high-sugar snacks.