

Healthy Blood Pressure



Blood pressure (BP) measures the force of blood flowing through blood vessels. High blood pressure (or hypertension) is when the force is always too high.

Nearly half of American adults have high BP and many don't know. There are usually no obvious symptoms.

Systolic BP (the top number)

- The pressure of blood against artery walls when the heart beats.
- Normal is below 120 mm Hg.
- Over time and left untreated the risk of death from heart disease and stroke doubles with each increase of 20 mm Hg above normal in those 40-89 years old.

Diastolic BP (the bottom number)

- The pressure of blood against artery walls while the heart is resting between beats.
- Normal is below 80 mm Hg.
- Over time and left untreated, the risk of death from heart disease and stroke doubles with each increase of 10 mm Hg above normal in those 40-89 years old.

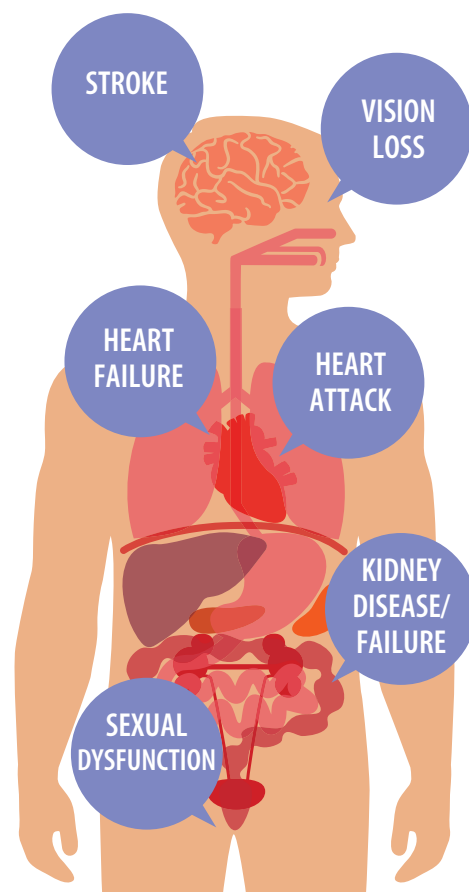
Know Your Numbers

Blood Pressure Category	Systolic mm Hg (upper number)		Diastolic mm Hg (lower number)
Normal	Less than 120	and	Less than 80
Elevated	120 – 129	and	Less than 80
High Blood Pressure (Hypertention Stage 1)	130-139	or	80-89
High Blood Pressure (Hypertention Stage 2)	140 or higher	or	90 or higher
Hypertensive Crisis (Consult your doctor immediately)	Higher than 180	and/or	Higher than 120

- Your health care provider may recommend monitoring your blood pressure at home; ask for clear instructions on how to do it yourself.
- Lifestyle changes are an important part of improving BP and may be recommended.
- Medication may be part of your treatment plan for high BP. If your healthcare provider prescribes medication, begin taking it immediately and follow the directions.

Metabolic syndrome is a group of risk factors that raises the risk of heart disease, diabetes, stroke and other health problems. It affects about 23% of adults and is when three of these risk factors occur: blood pressure 130/85 or greater, high blood sugar, low HDL cholesterol, high triglycerides, and elevated waist circumference.

High blood pressure can damage the blood vessels and increase the risk for developing conditions such as:



TARGET
120/80

Factors that influence blood pressure:

We cannot change these things that may increase blood pressure:

- **Family history:** Greater risk if parents or other close blood relatives have high BP.
- **Age:** Blood vessels lose elasticity with age.
- **Ethnicity:** African-Americans tend to develop high BP more often than people of any other racial background in the US. It also tends to occur at younger ages and to be more severe.
- **Gender:**
 - Under 45 years, men more likely
 - 45 to 64, men and women: similar rates
 - 65 years and older, women more likely

We can change our habits and lower blood pressure by:

- **Improving eating habits.**
- **Being more physically active.**
 - Start with 10 minutes at a time.
 - Work up to at least 2.5 hours a week.
 - Do muscle-strengthening exercises at least twice a week.
 - Add in flexibility and stretching.
- **Achieving a healthy weight.**
- **Limiting alcohol intake:**
 - No more than 1 a day for most women
 - No more than 2 a day for most men
- **Avoiding all tobacco use**, as it causes a temporary increase in blood pressure.
- **Managing stress**, as it may directly contribute to high BP or may encourage unhealthy habits.



How can nutrition improve blood pressure?

The following statements are part of the DASH diet, which has been shown to reduce blood pressure.

Generally, the higher someone's salt intake, the higher their blood pressure. Follow these tips to start reducing sodium by 1,000mg/day with the goal of limiting to 1,500-2,300mg/day:

- Prepare meals when possible. About 75% of the salt we eat is from processed foods.
- Flavor foods with pepper, herbs, spices, lemon, lime, vinegar, garlic, or onions.
- Compare brands and read labels. Limit processed meat and foods with these words on the package: cured, smoked, brine, broth, or saline.
- Rinse canned beans and vegetables or look for "no salt added" or low-sodium products.
- Aim for 600-800mg of sodium per meal and less than 200mg for snacks.
- Limit all salt shakers: sea salt and table salt have the same percentage of sodium.

Potassium helps reduce tension in the blood vessel walls and can help the body get rid of some sodium through urine. Follow these tips to increase potassium:

- Eat 5-9 servings of fruits and vegetables each day.
- Enjoy low-fat dairy products; many are high in potassium and calcium.
- Include legumes, beans, nuts, seeds, and fish.

Consume fiber and healthy fats while reducing sugar:

- Choose whole grains like oatmeal, quinoa, and brown rice instead of refined grains like white flour and white rice.
- Limit sugary drinks and sweets.
- Cook with non-tropical vegetable oils like olive, peanut, avocado, and canola oil.

