

# Healthy Living Newsletter

MAY 2010

TAKE CONTROL OF YOUR HEALTH

VOLUME 5, NUMBER 5



## Health & Wellness Events

May 12-13: Free Health Screenings

May 13: Corporate Campus Health Fair

## America's High Blood Pressure Burden

- At least 25% of American adults have pre-hypertension—blood pressure numbers that are higher than normal, but not yet in the high blood pressure range.
- In 2010, high blood pressure will cost the United States \$76.6 billion in missed work days, health care services, and medications.
- More than one in five people who have high blood pressure don't know that they have it.
- More than two-thirds of Americans who have been diagnosed with high blood pressure use medications to treat the condition.

Source: [www.cdc.gov](http://www.cdc.gov)

## High Blood Pressure Damage

Chronic high blood pressure can lead to an enlarged heart, kidney failure, brain or neurological damage, and changes in the back of the eyes.

People with high blood pressure have an increased stiffness or resistance in the peripheral arteries throughout the body. This increased resistance causes the heart muscle to work harder to pump blood throughout the tissues of the body. The increased work load can put a strain on the heart, which can lead to abnormalities that are usually first seen as enlarged heart muscles.

Source: [www.medicinenet.com](http://www.medicinenet.com)

## High Blood Pressure

Blood pressure is recorded as two numbers – the systolic pressure (as the heart beats) and the diastolic pressure (as the heart relaxes between beats). The measurement is written—in millimeters of mercury (mmHg)—as one value before or above the other, with the systolic number first (on top) and the diastolic second (on the bottom). For example, a blood pressure measurement of 120/80 mmHg is expressed verbally as “120 over 80.” Normal blood pressure is less than 120 mmHg systolic and less than 80 mmHg diastolic.

High blood pressure (also called hypertension) is 140/90 or higher. High blood pressure is dangerous because it makes the heart work too hard and contributes to hardening of the arteries. It increases the risk of heart disease and stroke, which are the first and third leading causes of death, respectively, among Americans. High blood pressure can also result in other conditions such as congestive heart failure, kidney disease, and blindness.

## Tips for an Accurate Blood Pressure Reading

- Don't drink coffee or smoke 30 minutes before having your blood pressure taken.
- Before the test, sit for five minutes with your back supported and your feet flat on the ground. Rest your arm on a table at the level of your heart.
- Go to the bathroom prior to the reading. A full bladder can change your blood pressure reading.
- Get two readings, taken at least two minutes apart, and average the results.



## Tips to Control Your Blood Pressure

Lifestyle changes may help you control your blood pressure.

- Lose weight, if necessary, to bring your body mass index (BMI) within the healthy range of 18-25.
- Have seven to eight servings per day of whole grains and grain products.
- If you drink at all, limit yourself to two drinks per day.
- Eat plenty of fruits and vegetables. Having at least eight to 10 servings of a variety of colorful fruits and vegetables will ensure you get all the healthy antioxidants, vitamins, minerals, and fiber you need.
- Consume two to three servings daily of low-fat or nonfat dairy foods.
- Limit meat, fish, and poultry to two servings a day. Move the meat off the center of your plate.
- Incorporate four to five servings a week of nuts, seeds, and legumes.
- Limit your salt (sodium) intake to 2,400 milligrams a day. Eat fewer canned and processed foods and more fresh foods.
- Get off the couch and exercise for at least 30 minutes each day.
- Avoid smoking.
- If you have diabetes, keep your blood sugar under control.
- Try to manage your stress.

Sources: [www.nhlbi.nih](http://www.nhlbi.nih), [www.mayoclinic.com](http://www.mayoclinic.com); UPS Road Map to Health

## Questions To Ask Your Doctor If You Have High Blood Pressure

- What is my blood pressure reading in numbers? (Ask your healthcare provider to write it down for you.)
- Is my systolic pressure too high (over 140)?
- What is my blood pressure goal?
- Is my blood pressure under adequate control?
- What would be a healthy weight for me?
- Is it safe for me to start regular physical activity?
- What is the name of my blood pressure medication? Is that the brand name or the generic name?
- What are the possible side effects of my medication?
- What time of day should I take my blood pressure medication?
- Are there any foods, beverages, or dietary supplements that I should avoid when taking this medication?

Source: [www.nhlbi.nih.gov](http://www.nhlbi.nih.gov)

## Home Blood Pressure Monitors

Here are some features to consider when choosing a monitor:

- **Cuff size.** Having a properly fitting cuff is the most important to consider. Poor fitting cuffs will not give accurate blood pressure readings.
- **Display.** The display that shows your blood pressure measurement should be clear and easy to read.
- **Accuracy.** Check with your doctor or the manufacturer to be sure that the monitor has been validated, meaning that its readings are accurate and repeatable.
- **Cost.** Your health insurance may not cover the cost of a home blood pressure monitor. Prices can vary from as little as \$25 for a manual model to over \$100 for an automatic device.

Source: [www.mayoclinic.com](http://www.mayoclinic.com)

## High Blood Pressure Medications

### Types of medications

- **ACE inhibitors** stop the production of a hormone called angiotensin II, which makes the blood vessels narrow. As a result, the vessels expand, improving blood flow. Tension in the circulation is also lowered by the kidneys filtering more fluid from the blood vessels into the urine.
- **Angiotensin II receptor antagonists** work in a similar way to ACE inhibitors. But instead of stopping the production of angiotensin II, they block its action. This allows the blood vessels to expand, improving blood flow and reducing blood pressure.
- **Beta-blockers** block the effect of the hormone adrenaline and the sympathetic nervous system on the body. This relaxes the heart so that it beats more slowly, lowering the blood pressure.
- **Alpha-blockers** cause the blood vessels to relax and widen. Combining them with beta-blockers has a greater effect on the resistance in the circulation.
- **Calcium-channel blockers** reduce muscle tension in the arteries, expanding them and creating more room for the blood flow. In addition, they slightly relax the heart muscle so it beats more slowly, relaxing blood pressure.
- **Diuretics** help the body get rid of excess salt and fluids via the kidneys. In certain cases, they relax blood vessels, reducing the strain on your circulation.

### Tips to Help You Remember to Take Your Blood Pressure Medications

- Take your drugs at the same time every day.
- Try using a special pillbox that helps you keep your pills organized.

Sources: [www.netdoctor.co.uk](http://www.netdoctor.co.uk) & [www.nhlbi.nih.gov](http://www.nhlbi.nih.gov)

## High Blood Pressure Effectors

Potassium is a mineral that helps to regulate fluids and mineral balance in the body and maintain a healthy blood pressure. Here are some other examples of things that can affect blood pressure:



**Coffee.** It is possible that caffeine can cause a short but dramatic increase in your blood pressure, even if you don't have high blood pressure. The amount of caffeine in two to three cups of coffee can raise systolic pressure (the top number in your blood pressure reading) up to 14 millimeters of mercury (mmHg). Your diastolic pressure (the bottom number) can be increased four to 13 mmHg.



**Bananas.** Bananas are one of our best sources of potassium, an essential mineral for maintaining normal blood pressure and heart function. Since the average banana contains 467 milligram of potassium, one milligram of sodium, and 108 calories, a banana a day may help to prevent high blood pressure and protect against atherosclerosis.



**Dairy.** Research shows that following a balanced eating program that includes two to three servings may help lower blood pressure. A trio of minerals—calcium, potassium, and magnesium—all found in dairy foods play an important role in maintaining blood pressure.

Source: *UPS Road Map to Health*