# Blood Pressure Awareness Month

Issue 1 September 2010

## Morning Exercise Lowers Blood Pressure at Work!

We've known for some time that exercise is heart healthy, but now it looks like choosing to exercise in the morning may offer some protective benefits throughout the day at the workplace. Researchers in Brazil recently monitored blood pressures throughout a normal workday of 15 hypertensive volunteers. On different days they had their workers perform either 20 minutes of treadmill running or 20 minutes of circuit weight training at 9:30 AM. They discovered that the exercise sessions significantly lowered systolic pressures throughout a normal workday when compared to the normal (non-exercise) day. This effect persisted for up to 7 hours following the exercise.

Researchers have also found that exercise lowers systolic blood pressure for several hours in individuals with normal blood pressure. So, walking or biking to work may help all of us keep our blood pressures at bay throughout the day!

### What do the numbers mean?

Does your doctor actually learn something from squeezing your arm in that dreaded black cuff, or does he just like to watch you squirm? You've heard the numbers dramatically delivered on House and E.R., now it's time to decode that medical lingo.

You may recall the fraction 120/80. This is what most health care professionals would tell you is a standard for normal blood pressure. But what do the numbers mean?

- The top number of your blood pressure represents your systolic blood pressure. This is the pressure in your arteries when your heart muscle contracts, pumping blood into the body. This is always the higher of the two.
- The bottom number represents your diastolic blood pressure. This is the measure of pressure in your arteries as the heart rests between beats.

Both of these values are measured in millimeters of mercury.

The American Heart Association breaks blood pressure into the following categories:

- Normal: Systolic < 120 & Diastolic < 80
- Prehypertension: Systolic 120-139 OR Diastolic 80-89
- Hypertension Stage 1: Systolic 140-159 OR Diastolic 90-99
- **Hypertension Stage 2**: Systolic 160+ OR Diastolic 100+
- Hypertensive crisis: Systolic: 180+ OR Diastolic 110+

# Lifestyle and Hypertension

Are you ready to make some changes in your day-to-day life to control or prevent high blood pressure? According to the Mayo Clinic, the following lifestyle remedies may just do the

- Eat healthy foods (fruits, vegetables, whole grains, lowfat dairy, and plenty of potassium)
- Decrease your salt intake
- Maintain a healthy weight (drop those last 5 pounds for something more long-term than bikini season)
- Don't smoke
- Manage your stress (yes, this is a tough one on a college campus; try some relaxation or deep breathing exercises)
- Monitor your blood pressure at home so you are aware of any fluctuations

## The DASH Diet

Look up and find two people. Chances are, one out of the three of you has high blood pressure (1 in 3 adults age 18 and over have hypertension). But why should you care? Hypertension makes your heart work harder, pushing blood through your body with excessive force that can damage blood vessels, kidneys, eyes, the brain, and even the heart itself. There are no warning signs of hypertension. Fortunately, there are concrete and effective ways to lower your risk. The DASH diet, or Dietary Approaches to Stop Hypertension, is a plan to help people reduce blood pressure and can also help those looking to lose weight. Reductions in blood pressure can often be seen within 2 weeks of starting the plan.

#### Goals of the DASH diet include:

- Reducing sodium to less than 2300mg per day
- Increasing consumption of fruits, vegetables, and whole
- Remember: changes can be gradual! Try adding one extra vegetable at lunch and dinner, or replacing a large bagel (4-6 servings of grain) with a whole wheat English muffin (2 servings of grain). For snacks, try yogurt, graham crackers, or low-fat cheese.

For examples of a weekly menu with the DASH diet, see: http://www.nhlbi.nih.gov/health/public/heart/hbp/dash/new\_dash.pdf.

By Jackie VanArnsdale, 2010

http://www.mayoclinic.com/health/high-blood-pressure/DS00100; JSCR, 23(8), 2009, 2331-2338; http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/High-Blood-Pressure-ATH\_UCM\_002020\_SubHomePage.jsp