## High Blood Pressure (Hypertension)



## What is High Blood Pressure?

Another name for high blood pressure is **Hypertension**.

High blood pressure means the pressure in your arteries is elevated. Blood pressure is the force of blood pushing against blood vessel walls. It is written in two numbers, such as 112/78 mm Hg.

The top number = systolic number = pressure when the heart beats

The bottom number =diastolic number =pressure when the heart rests between beats

#### Normal blood pressure is below 120/80.

"Pre-hypertension" is systolic 120-139 or diastolic 80-89 (or both). High blood pressure is >140/90 mm Hg that **stays high over time**.

Stress, pain or physical activity can cause the blood pressure to rise. A person with high blood pressure has a high blood pressure at rest.

## Controlling your blood pressure can

- Improve your quality of life
- Help you live a healthy life without health complications
- Increase the amount of time you have with your friends and family
- Live longer
- Encourage others in your home and community to do the same



#### Causes of high blood pressure

- No one knows exactly what causes most cases of high blood pressure
- Increase weight
- Tobacco use
- Increase salt and fat or alcohol intake
- Chronic kidney disease
- Narrowing of the arteries
- Disorders of some endocrine glands
- Hardening of the arteries



#### Who is at Risk?

- People with a family history who have high blood pressure or heart disease
- People over age 35
- Overweight people
- People who are not physically active
- People with high cholesterol levels
- People who eat too much salt
- People who drink too much alcohol
- People with diabetes, gout, and kidney disease
- Pregnant women
- Women on birth control pills



### **Signs and Symptoms**

- Usually no signs or symptoms at all, often called the "Silent killer" because it has not symptoms until the later stages.
  - If the blood pressure is very high: people may have blurred vision, headaches, drowsiness, confusion, numbness and tingling in the hands and feet, nosebleeds, coughing blood, or severe shortness of breath.
    - The only way to know if your blood pressure is high is to get it checked

#### **Untreated high blood pressure can cause:**

- The heart to work harder to push blood through the arteries
- Thickens the blood vessel wall and narrows the vessel
- Increase build up of fat and cholesterol in the damaged arteries
- Risk of vessel damage creating leaks or clots to break off, blocking blood flow
- Stroke, blockage of blood flow to the brain
- Heart attack, blockage of blood flow to the heart
- Heart failure
- Kidney failure
- Damage to the blood vessels behind the eye, causing bleeding
- Death



## What can I do about high blood pressure?

- Lose weight if you are overweight
- Eat healthy meals low in saturated fat and SALT
- Limit alcohol to no more than one drink per day for women and two per day for men.
- Be more physically active
- Take medicine as instructed
- Avoid use of tobacco products
- Find ways to reduce stress
- Know what your blood pressure should be
- Learn to take your own blood pressure and monitor it daily

## How can medication help?



- Some medicines, such as vasodilators, help relax and open up your blood vessels so blood can flow through better.
- A diuretic can help keep your body from holding too much water and salt.
- An ace-inhibitor or receptor blockers (arbs), relaxes the arteries and decreases the amount of oxygen the heart requires.
- Take your medication at the same time each day
- Find out if you should take your medication with meals
- Do not stop taking your medication unless your doctor tells you to. Stopping too quickly can be harmful.
- Avoid running out of medications
- If you experience side effects, talk to your doctor. There are many different kinds of blood pressure medications.
- Some people must take one, two, three or four blood pressure medications to control their high blood pressure.

## **Nutrition**

People with high blood pressure should limit sodium to 2,400mg per day

- One teaspoon salt = 2,300mg of sodium
- Learn to read food labels to become more familiar with the amount of salt in certain foods you enjoy eating.
  - Avoid setting a salt shaker on the table
  - Always taste food before adding additional seasonings

#### Foods high in Salt

- Salt from the salt shaker
- Canned or frozen foods
- Fast foods, restaurant foods
- Processed foods, such as lunch meat, rice/noodle mixes, pickled vegetables, dry soup mixes, bouillon, smoked or dried fish, bacon, sausage, hot dogs, ham, salted nuts, cheese spreads, salt seasonings (garlic salt), soy sauce, teriyaki sauce, olives, salted popcorn, pretzels and crackers, tomato/vegetable juice, baking powder, baking soda, and meat tenderizers.
- Read food labels and check out the ingredients and amount of salt.





#### **Foods low in Salt**

- *Fresh fruits and vegetables*, low sodium canned vegetables, low sodium vegetable/tomato juice
- Dry beans, fresh/frozen meats, lean meats, poultry and fish, eggs, low sodium peanut butter, unsalted nuts
- Herbs and spices such as parsley, garlic powder, pepper, onion powder, lemon juice, low sodium soy sauce (limit to 1 Tbsp per day)
- Unsalted popcorn
- Homemade soups
- Drink water instead of caffeinated drinks











#### Foods high in Saturated Fats to avoid or limit

- Meat with fat, organ meat
- Whole milk
- Cream, cheese
- Butter, sour cream
- Egg yolk
- Ice cream
- Fast foods
- Poultry with skin
- Palm oil, coconut oil, cocoa butter, hydrogenated vegetable oil

#### **Foods lower in Saturated Fats**

- Lean meat
- Beans, such as lentils, kidney beans, pinto beans, black beans, split peas...
- Skinless chicken or turkey prior to cooking
- Skim milk, 1% milk
- Low fat or fat free products such as fat free sour cream
- Non fat cheese, or mozzarella cheese made of skim milk
- Light ice cream, sherbet
- Egg whites or egg substitute (Egg Beaters)
- Margarine or other spreads with no Tran's fatty acid, such as "I can't believe it's not butter".
- Homemade foods using low fat ingredients

# **Unsaturated fat food choices Polyunsaturated**

- Corn oil, sunflower oil, safflower oil, sesame oil, seal oil
- Walnuts, sesame seeds

#### **Monounsaturated (choose more often)**

- Olive oil, canola oil,
- Olives, avocados
- Almonds, peanuts, pecans and cashew







## **Exercise/Increase Activity/Increase Moving**



- Lowers Blood Pressure
  - Strengthen the heart
    - Reduces stress
- Increase energy level
- Increase circulation
  - Improves sleep
- Improves strength, flexibility, balance, coordination and posture
  - Decrease weight/maintain weight
  - Lower cholesterol and Triglyceride levels
  - Reduce risk for diabetes, heart disease and having a stroke

#### Types of activity

Any type of activity that increases your heart rate such as, casual walking; functional walking; aerobic walking; distance walking; power walking; treadmill; berry picking; chopping wood; playing basketball; softball; cross country skiing; aerobics; yoga; Tai'Chi; exercise videos; playing with the kids; walking up and down the steps; walking to and from school, the Post Office, work, to the grocery store; jump roping, weight lifting;

#### How to get started

- Check with your physician first to determine what type of exercises you can or can not do. Depending on your health, there may be exercises that you should avoid.
- Your activity should include a warm up, aerobic and cool down.
- Stretching will loosen your muscles and joints to increase flexibility.
- Start slow and gradually increase the frequency, intensity and time.
  - 1. Frequency is how often you exercise?
  - 2. Intensity is how hard you exercise (how hard is the heart working)?
  - 3. Time is how long or how many minutes are you exercising?
- Set a goal that is realistic, measurable and achievable.
- Keep a log or journal to track your success.
- Drink fluids throughout the day. At least 8 (8 ounce) glasses of water a day.
- Wear proper socks and supportive shoes
- Be safe...choose a safe place to walk, monitor your heart rate, listen to your body, let your family know of your walking route, walk with someone at night or in the dark, walk facing traffic...
- Celebrate your success!!







### Warning signs to know:

#### **Heart Attack**

- Chest discomfort that last more than a few minutes, or that goes away and comes back. It can feel like uncomfortable pressure, squeezing, fullness or pain.
- Can include pain or discomfort in one or both arms, the back, neck, jaw or stomach.
- Shortness of breath
- Cold sweat, nausea, or lightheadedness



#### Stroke

- Sudden numbness or weakness of the face, arm or leg, especially on one side of the body.
- Sudden confusion, trouble speaking or understanding
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance, or coordination
- Sudden, severe headache with no known cause

## Cardiac Arrest (stopping of the heart)

- Sudden loss of responsiveness. No response to gentle shaking.
- No normal breathing.
- No signs of circulation, no pulse. No movement or coughing.

Heart attack and strokes are truly life and death emergencies requiring immediate attention by health care professionals. Medications are available to treat both heart attacks and strokes, but the medications must be given right away to be effective. Know the signs and symptoms of a heart attack and stroke. If you or someone has these symptoms, seek health care attention right away, don't wait!

## Knowledge is power, so Learn and Live!

#### More information:

- Talk with your health care provider
- BBAHC, Diabetes Prevention/Lifestyle Change Program 1-800-478-5201 or 907-842-9293. Program Registered Dietitian: 907-842-9579.
- Call 1-800-242-8721 or americanheart.org
- 1-888-478-7653 or strokeassociation.org
- 1-800-575-9355 or www.nhlbi.nih.gov -National Heart, Lung, and Blood Institute