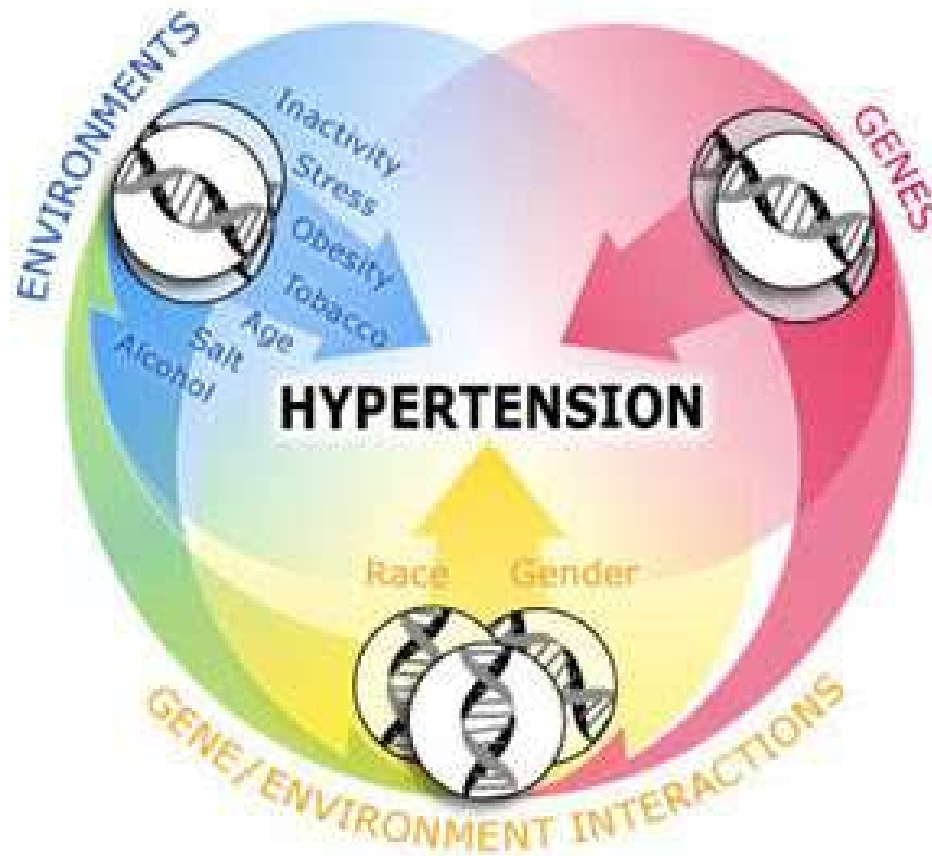


Diet and Hypertension



What is Blood Pressure?

- The force of blood against the wall of the arteries.
- Systolic- as the heart beats
- Diastolic - as the heart relaxes
- Written as systolic over diastolic.



Blood Pressure Classification

HYPERTENSION CLASSIFICATION (in mmHG)

NORMAL	< 130	<80
High-NORMAL	130-139	80 - 89

WARNING! Reference ONLY. In doubt, **ALWAYS** consult your doctor!

HIGH Grade ONE	140 - 159	90 - 99
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WARNING! Reference ONLY. In doubt, **ALWAYS** consult your doctor!

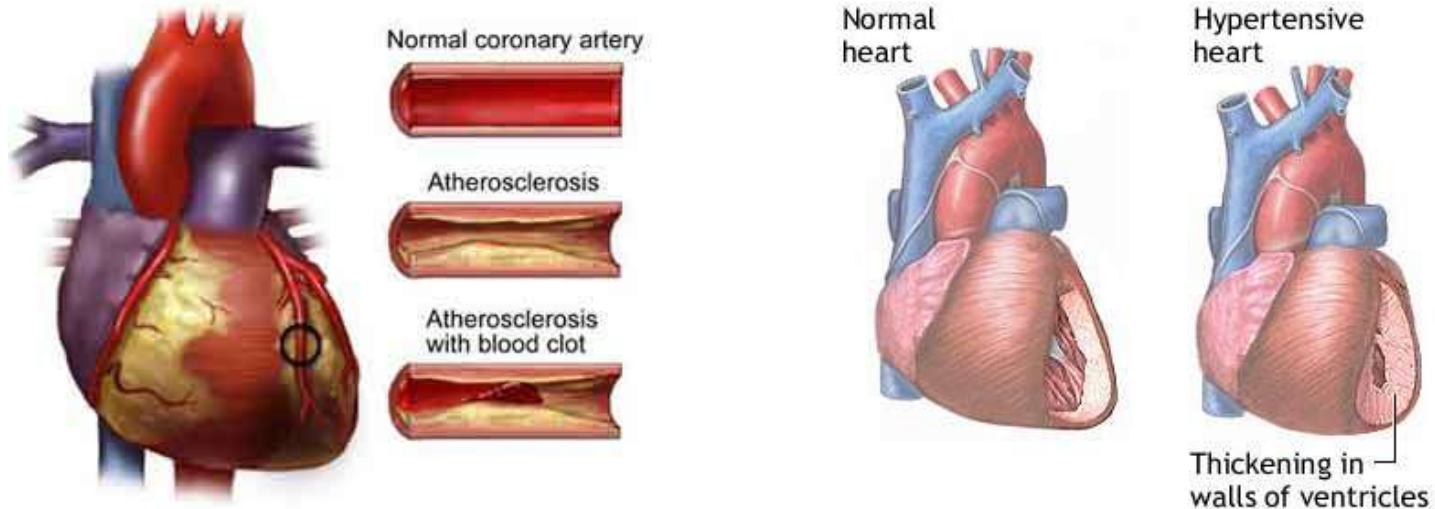
HIGH Grade TWO	>160	>100
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High Blood Pressure

- A consistent blood pressure of 140/90 mm Hg or higher is considered high blood pressure.
- It increases the risk for heart disease, kidney disease, and stroke.
- 1 out of 4 Americans have High BP.
- Has no warning signs or symptoms.

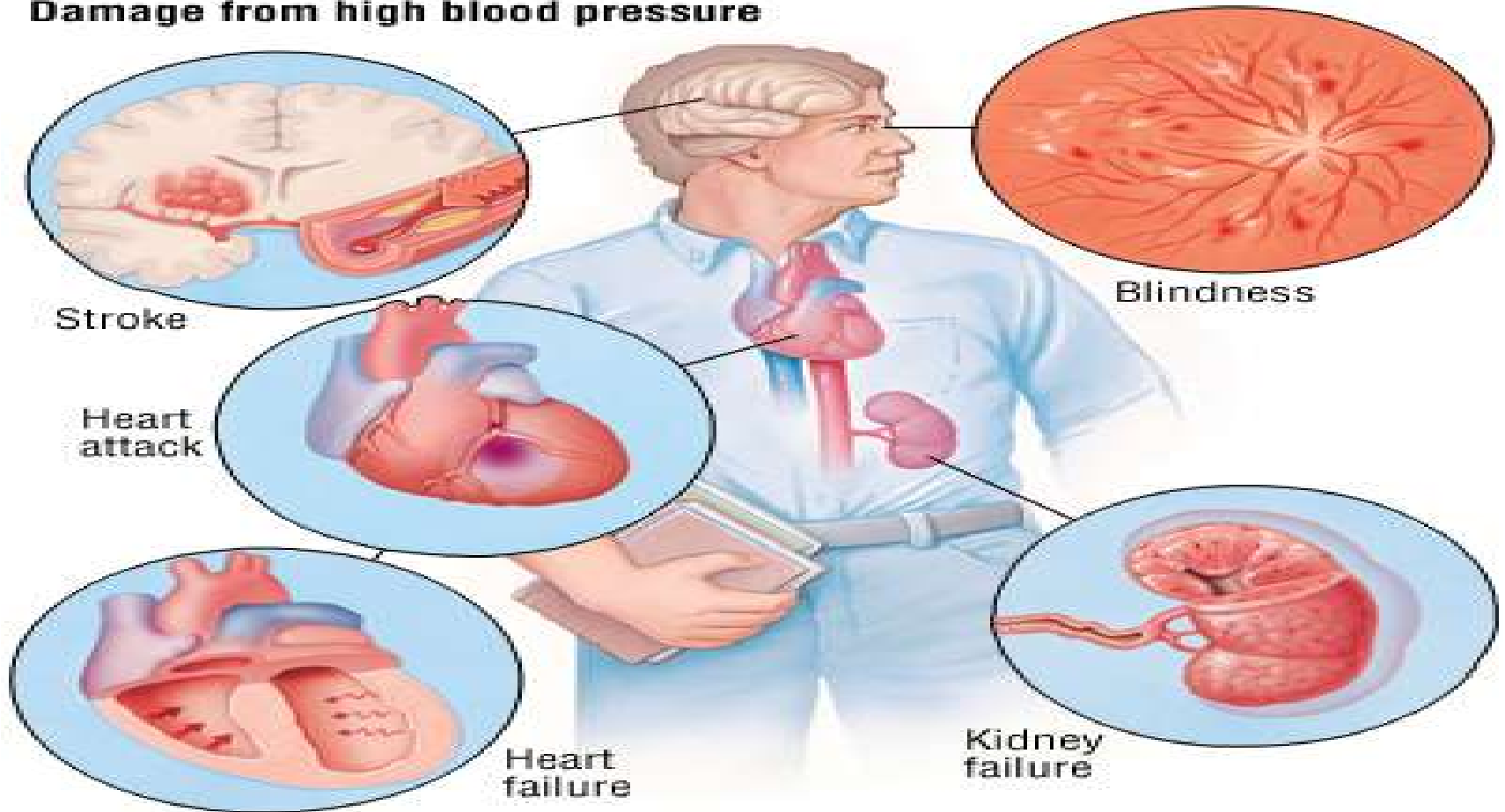
Why is High Blood Pressure Important?

- Makes the Heart work too hard.
- Makes the walls of arteries hard.
- Increases risk for heart disease and stroke.
- Can cause heart failure, kidney disease, and blindness.



How Does High BP Effect the Body?

Damage from high blood pressure

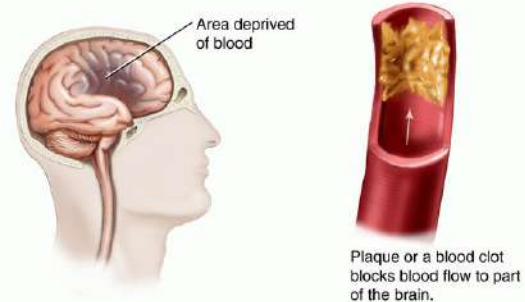


The Brain

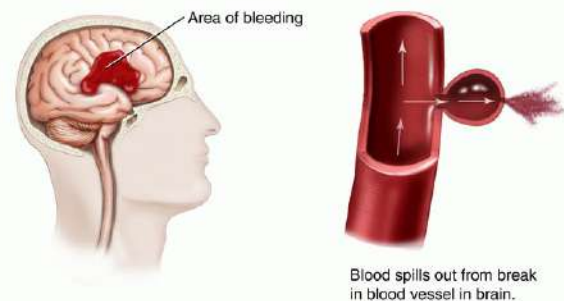
- High blood pressure is the most important risk factor for stroke.
- Can cause a break in a weakened blood vessel which then bleeds in the brain.

Types of Stroke

Ischemic Stroke

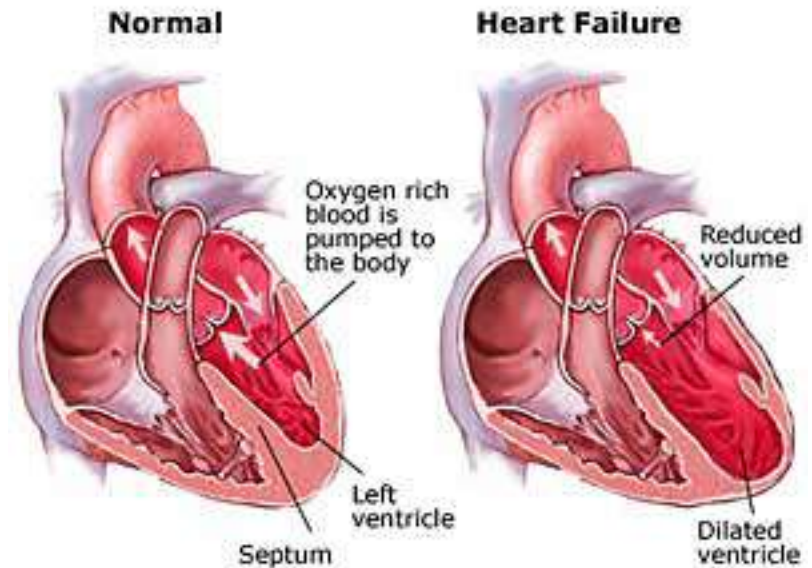
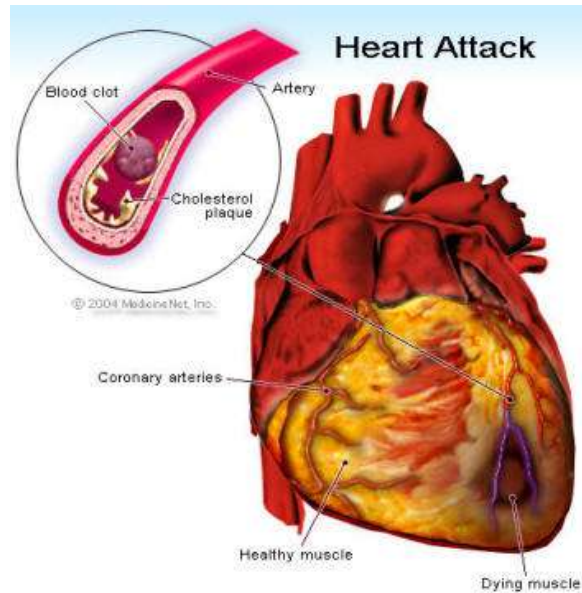


Hemorrhagic Stroke



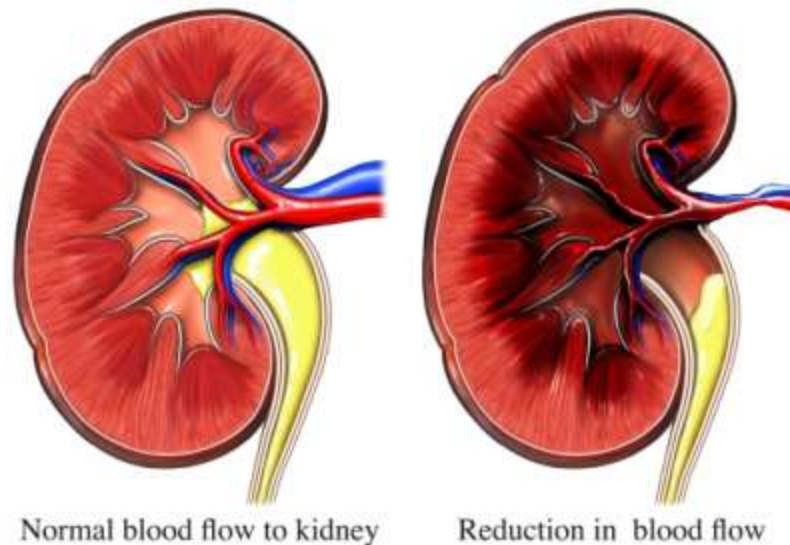
The Heart

- High Blood Pressure is a major risk factor for heart attack.
- Is the number one risk factor for Congestive Heart Failure.



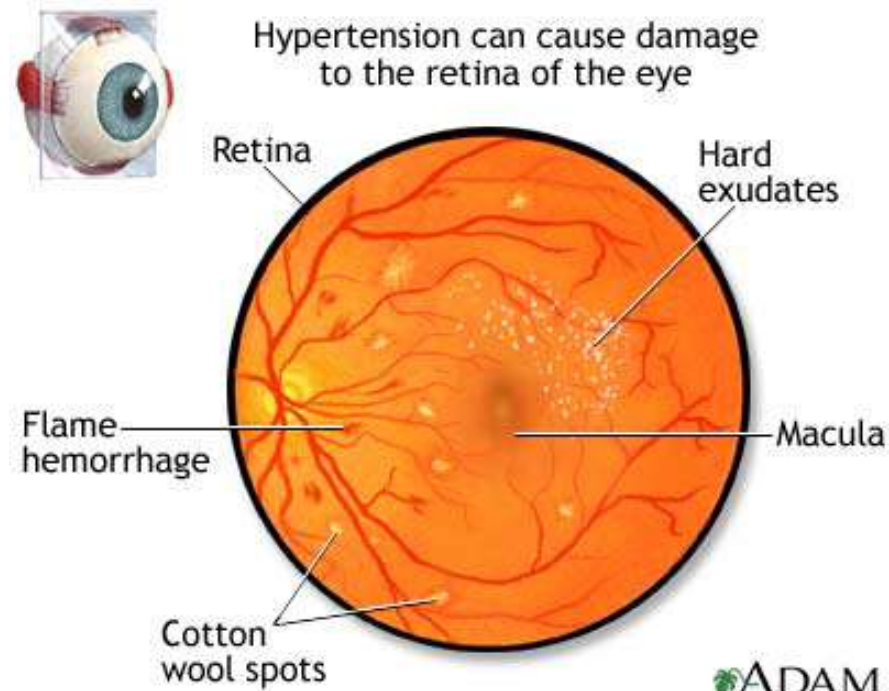
The Kidneys

- Kidneys act as filters to rid the body of wastes.
- High blood pressure can narrow and thicken the blood vessels.
- Waste builds up in the blood, can result in kidney damage.



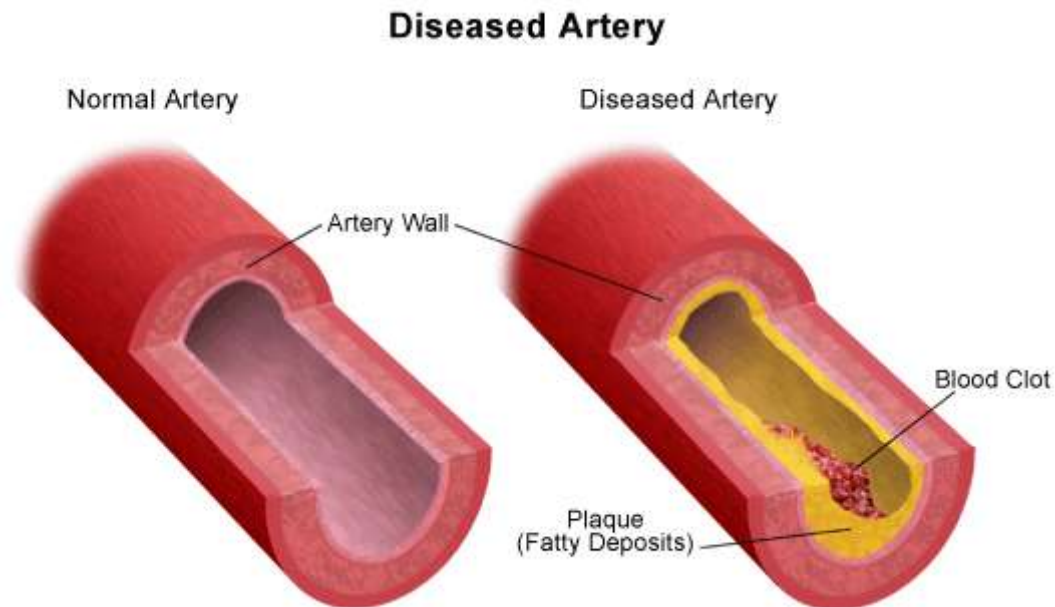
The Eyes

- Can eventually cause blood vessels to break and bleed in the eye.
- Can result in blurred vision or even blindness.



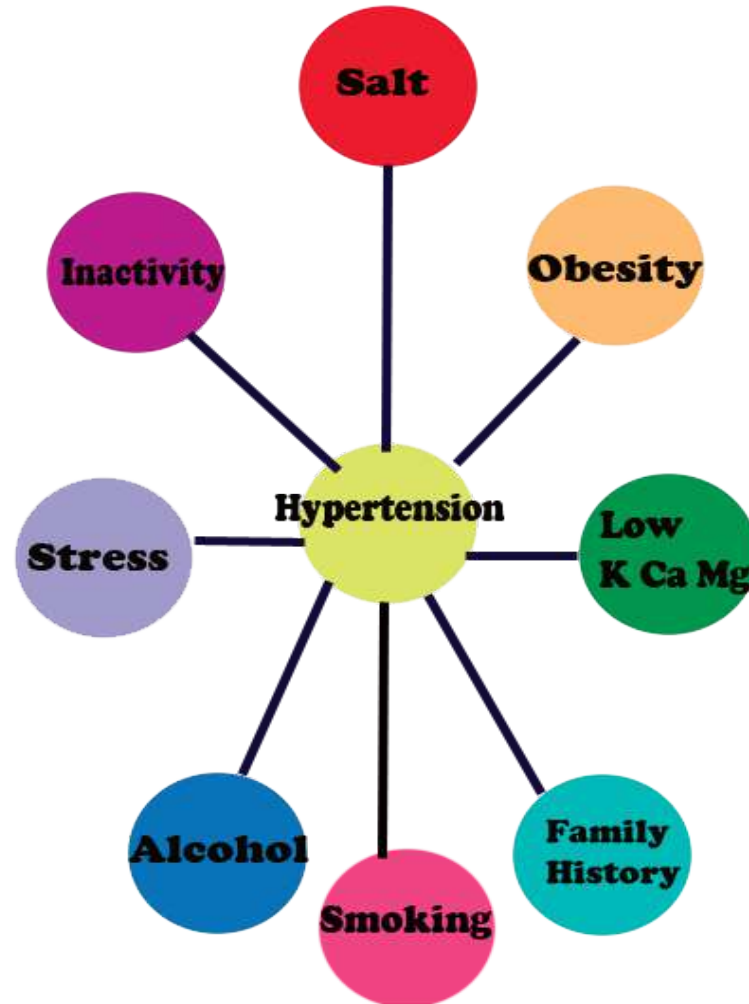
The Arteries

- Causes arteries to harden.
- This in turn causes the kidneys and heart to work harder.
- Contributes to a number of problems.



Risk Factors for High Blood Pressure

- Age
- Race
- Family history
- Obesity
- Inactivity
- Tobacco use
- Sodium intake
- Alcohol intake



Risk Factors for High Blood Pressure

- Poor diet
- High cholesterol
- Diabetes
- Kidney disease
- Insufficient sleep
- Sleep apnea
- Excessive working: > 40hrs/week



High Blood Pressure Detection

- Measured using a sphygmomanometer.
- 2 or more readings of 140/90mm Hg or higher taken on more than one occasion.



Tips for Ensuring Accurate BP Readings

- Don't drink coffee or smoke cigarettes for 30 minutes before.
- Before test sit for five minutes with back supported and feet flat on the ground.
- Test your arm on a table even with your heart.
- Wear short sleeves so your arm is exposed.

Tips for having blood pressure taken.

- Go to the bathroom before test. A full bladder can affect BP readings.
- Get 2 readings and average the two of them.
- Ask the doctor or nurse to tell you the result in numbers and make a note of it.

Calculate Your Risk

- [American Heart Association High Blood Pressure Risk Calculator](#)

HIGH BLOOD PRESSURE
HEALTH RISK CALCULATOR

American Heart
Association



Learn and Live.



Preventing Hypertension

Adopt a healthy lifestyle by:

- Following a healthy eating pattern.
- Maintaining a healthy weight.
- Being Physically Active.
- Limiting Alcohol.
- Quitting Smoking.

DASH diet

- Dietary Approaches to Stop Hypertension.
- Increase of 1 daily serving of veggies.
- Increase of 1-2 servings of fruit.
- Inclusion of 4-5 servings of nuts, seeds, and beans.

Tips for Reducing Sodium

- Buy fresh, plain frozen or canned “no added salt” veggies.
- Use fresh poultry, lean meat, and fish.
- Use herbs, spices, and salt-free seasonings at the table and while cooking.
- Choose convenience foods low in salt.
- Rinse canned foods to reduce sodium.

Maintain Healthy Weight

- Blood pressure rises as weight rises.
- Obesity is also a risk factor for heart disease.
- Even a few pounds of weight loss can reduce blood pressure.

Range of Healthy Weight for Height		
Height	Female	Male
	Frame Size Small • Medium • Large	Frame Size Small • Medium • Large
5' 0"	90 • 100 • 110	95 • 106 • 117
5' 1"	95 • 105 • 116	101 • 112 • 123
5' 2"	99 • 110 • 121	106 • 118 • 130
5' 3"	104 • 115 • 127	112 • 124 • 136
5' 4"	108 • 120 • 132	117 • 130 • 143
5' 5"	113 • 125 • 138	122 • 136 • 150
5' 6"	117 • 130 • 143	128 • 142 • 156
5' 7"	122 • 135 • 149	133 • 148 • 163
5' 8"	126 • 140 • 154	139 • 154 • 169
5' 9"	131 • 145 • 160	144 • 160 • 176
5' 10"	135 • 150 • 165	149 • 166 • 183
5' 11"	140 • 155 • 171	155 • 172 • 189
6' 0"	144 • 160 • 176	160 • 178 • 196
6' 1"	149 • 165 • 182	166 • 184 • 202
6' 2"	153 • 170 • 187	171 • 190 • 209
6' 3"	158 • 175 • 193	176 • 196 • 216
6' 4"	162 • 180 • 198	182 • 202 • 222
6' 5"	167 • 185 • 204	187 • 208 • 229

Be Physically Active

- Weight loss/healthy weight maintenance.
- Lowers blood pressure.
- 30 minutes daily of moderate level activity.
- Join a family oriented gym or activity.
- Use stairs instead of the elevator.
- Park your car further away and walk.
- Start a walking club.
- Home fitness videos and web-streams.

Limit Alcohol Intake

Alcohol raises blood pressure and can harm liver, brain, and heart.

- What counts as a drink?
 - 12 oz beer
 - 5 oz of wine
 - 1.5 oz of 80 proof whiskey
- Drink in moderation:
 - For men: no more than 2 drinks per day
 - For women: no more than one drink per day

Quit Smoking

- Injures blood vessel walls
- Speeds up process of hardening of the arteries.
- Damages lungs
- Smoking cessation classes/resources (CDC.gov)

The Benefits OF QUITTING

COMPARED TO SMOKERS, YOUR...

- Stroke risk is reduced to that of a person who never smoked after 5 to 15 years of not smoking.
- Cancers of the mouth, throat, and esophagus risks are halved 5 years after quitting.
- Cancer of the larynx risk is reduced after quitting.
- Coronary heart disease risk is cut by half 1 year after quitting and is nearly the same as someone who never smoked 15 years after quitting.
- Chronic obstructive pulmonary disease risk of death is reduced after you quit.
- Lung cancer risk drops by as much as half 10 years after quitting.
- Ulcer risk drops after quitting.
- Bladder cancer risk is halved a few years after quitting.
- Cervical cancer risk is reduced a few years after quitting.
- Low birth weight baby risk drops to normal if you quit before pregnancy or during your first trimester.
- Peripheral artery disease goes down after quitting.

1-800-QUIT NOW

Source: Centers for Disease Control and Prevention.
Tobacco Information and Prevention Source
http://www.cdc.gov/tobacco/sgr/sgr_2004/posters/benefits.htm

North Carolina Health Smart

North Carolina Health Wellness TRUST FUND

IPC

Conclusion

- Hypertension is preventable and reversible.
- If left uncontrolled, will lead to chronic disease.
- Resources:
 - www.nhlbi.nih.gov/
 - www.cdc.gov
 - www.heart.org/HEARTORG/
 - www.usda.gov