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Where health care professionals go
for information



Heart Health

Heart Disease Is Important



- Since 1963, Congress has required the president to proclaim February as American Heart Month to urge Americans to prevent heart disease

Leading Causes of Death

- Where do you think heart disease falls?
 - 1st place
 - 2nd place
 - 3rd place
 - 4th place
 - 5th place

Leading Causes of Death

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Causes of Death

- **Heart disease:** 652,091
- **Cancer:** 559,312
- **Stroke:** 143,579
- Chronic lower respiratory diseases: 130,933
- Accidents: 117,809
- **Diabetes:** 75,119
- Alzheimer's disease: 71,599
- Influenza/pneumonia: 63,001
- Kidney disease: 43,901



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**Can Anyone Tell Me the
Difference Between a
Heart Attack and a Stroke?**

Stroke vs Heart Attack

- **Stroke—blocked blood flow to the brain**
- **Heart attack—blocked blood flow to the heart**
- **Risk factors are the same for both**

What Causes Heart Disease/Stroke?

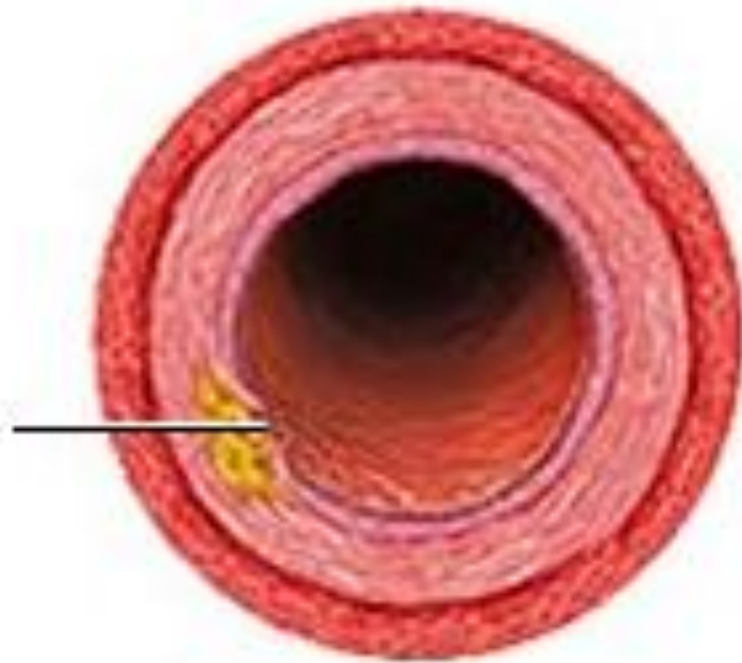
- **Arteries—blood vessels that carry blood away from the heart to the rest of the body**

Normal Artery



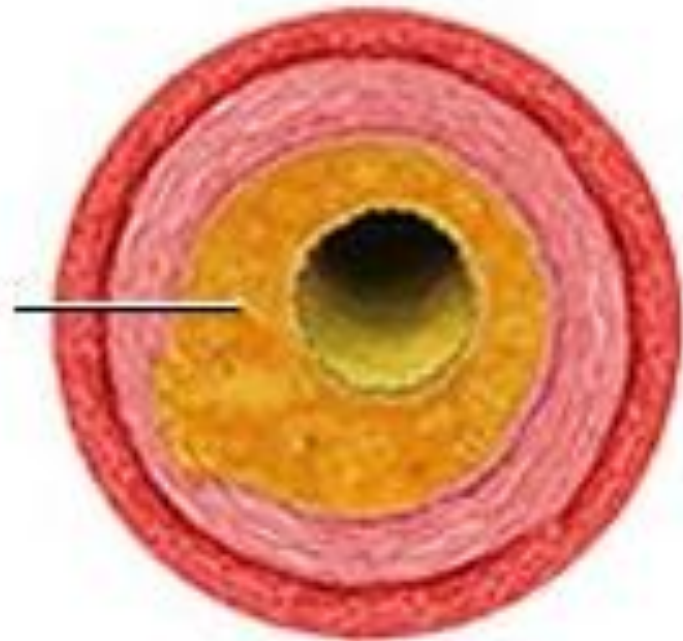
Plaque Starts to Build Up

**Tear in
Artery Wall**

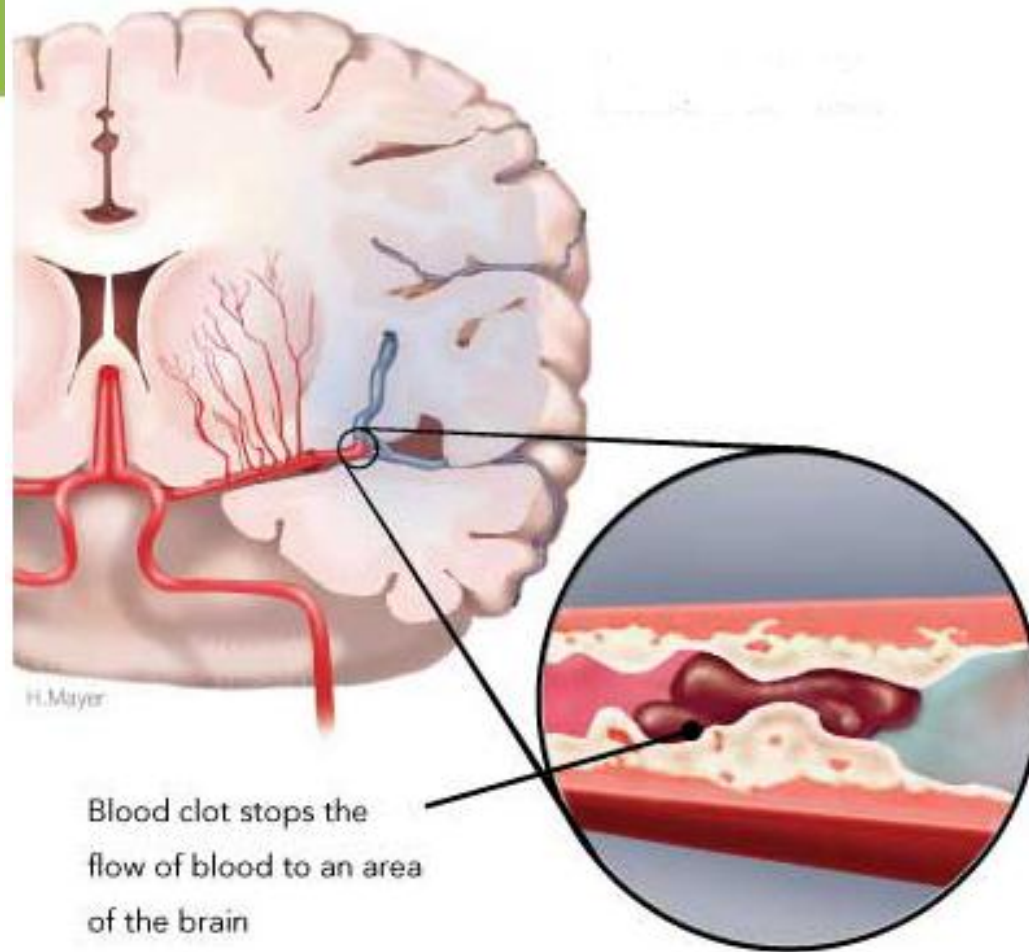


Plaque Can Grow and Harden and Obstruct the Artery

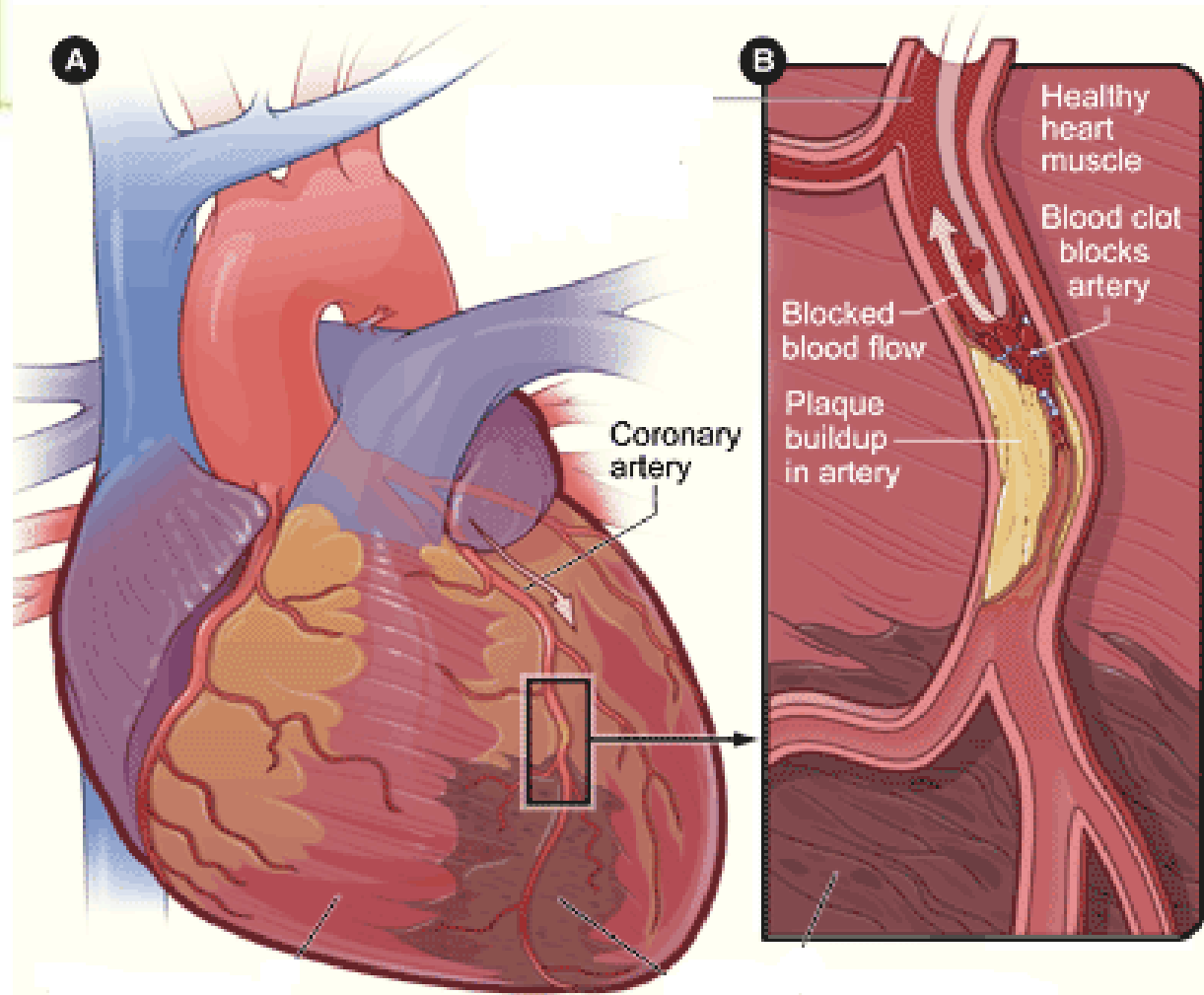
Atherosclerosis



Ischemic Stroke



Heart Attack



What Increases Risk?

You Can Not Help

- **Age**
 - Men: >45 years
 - Women: >55 years
- **Sex**
- **Race**
- **Family history**

You Can Help

- **Smoking**
- **Alcohol**
- **Poor diet**
- **Overweight/obesity**
- **Diabetes**
- **Physical inactivity**
- **High cholesterol**
- **High blood pressure**



**What Percentage of Heart
Disease Do You Think Is
Preventable?**

80% of All Heart Disease

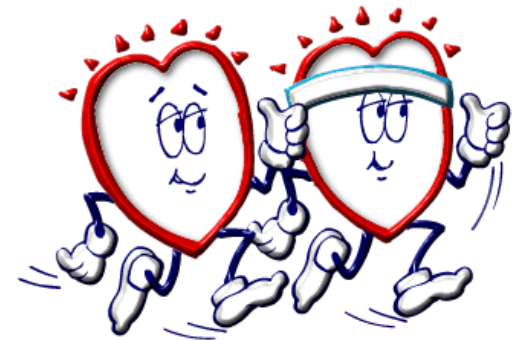


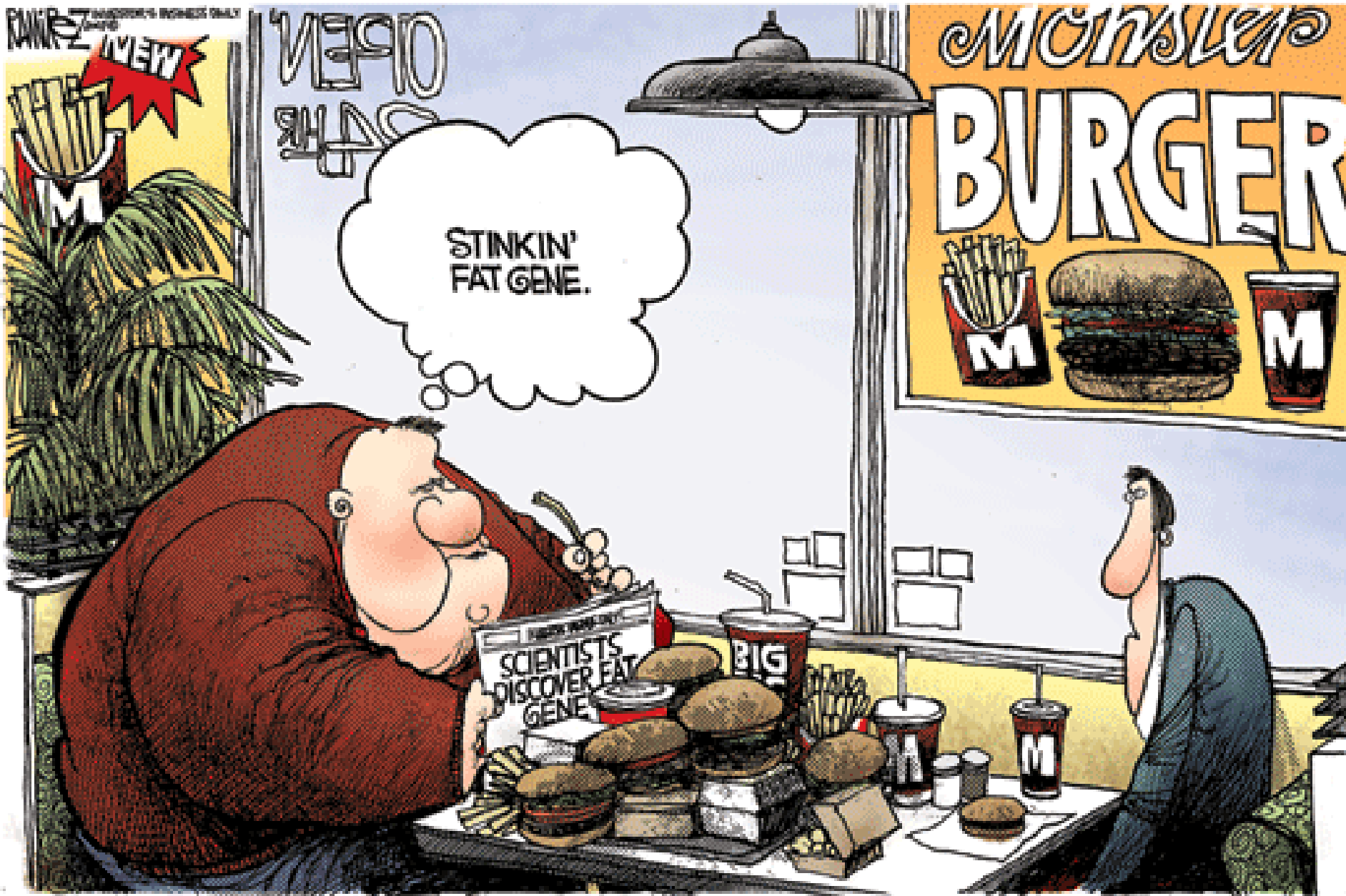
Glass Half Full or Half Empty



Stroke vs Heart Attack

- **3 out of every 10 people in the world die as a result of heart disease**
- **12 million people in the world die each year of heart disease**
- **Heart disease kills six times as many women as breast cancer**





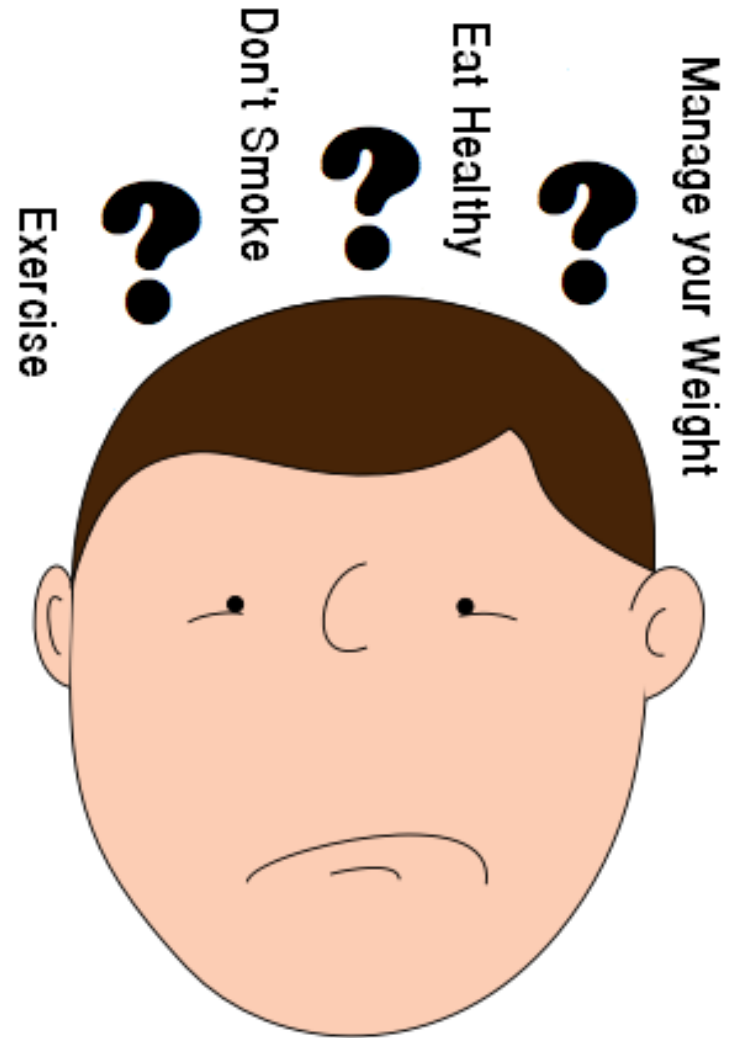


Randy Pausch

"We can't change the cards we're dealt, just how we play the hand."



How Can You Play the Cards?



7 Steps to a Healthier You!

- 1. Know your numbers**
 - Cholesterol (LDL=lousy, HDL=healthy)
 - Triglycerides
 - Blood pressure
 - Glucose
- 2. Maintain a healthy weight**
- 3. Stay physically active**
- 4. Manage stress**
- 5. Do not smoke**
- 6. Do not drink alcohol excessively**
- 7. Eat heart healthy**

HDL=high-density lipoprotein, LDL=low-density lipoprotein

7 Steps to a Healthier You!

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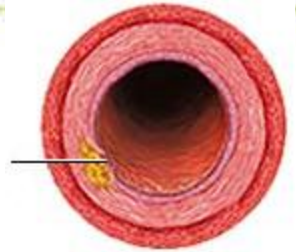
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Tear in
Artery Wall



Step 1: Know Your Numbers

Do You Know?

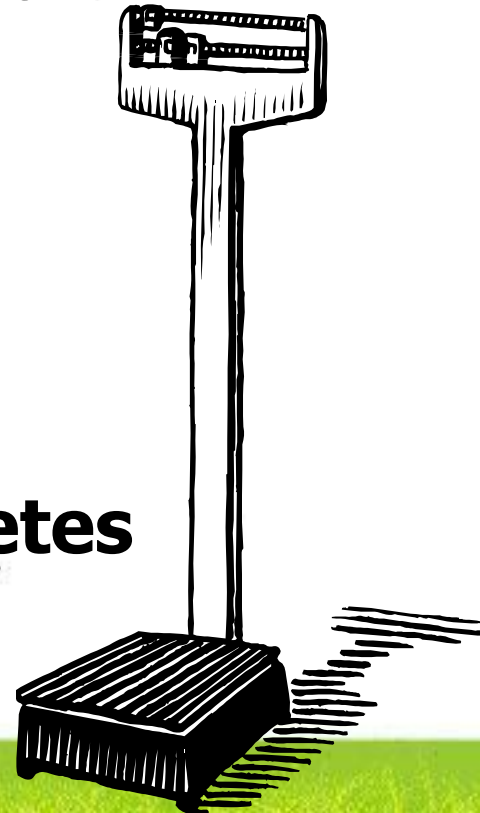
- **Your total cholesterol—under 200**
 - HDL—60 or higher (less than 40 milligrams (mg)/deciliter (dL) increases risk)
 - LDL—under 100 mg/dL
- **Your triglycerides—under 150**
- **Your blood pressure—Less than 120/80**
- **Fasting blood glucose—less than 100 mg/dL**

Knowledge Is Power, So Learn and Live!

Step 2: Maintain a Healthy Weight

If overweight, taking action to lose weight to improve your overall health and lower your:

- **Blood pressure**
- **Cholesterol level**
- **Triglyceride level**
- **Blood sugar levels**
- **Risk for developing type 2 diabetes**



Step 2: Maintain a Healthy Weight (cont'd)

Body Mass Index (BMI)

Underweight	<18.5
Normal Weight	18.5 – 24.9
Overweight	25 – 29.9
Obesity	30+

Step 2: Maintain a Healthy Weight (cont'd)

- **Go here to find your BMI:**
 - <http://www.nhlbisupport.com/bmi/>
 - <http://www.cdc.gov/healthyweight/assessing/bmi/index.html>
 - Includes child and teen BMI calculator, in addition to adult BMI calculator

Benefits of Weight Loss



“Okay, but each pound counts as a separate wish!”

Benefits of Weight Loss (cont'd)

- **Weight loss:**
 - Reduces risk for cardiovascular disease
 - Lowers blood pressure
 - Lowers blood sugar
 - Improves lipid levels

Step 3: Stay Physically Active

ACSM and AHA Recommendations:

- Do moderate-intense cardio 30 minutes/day, 5 days/week

OR

- Do vigorously intense cardio 20 minutes/day, 3 days/week

AND

- Do 8-10 strength-training exercises, 8-12 repetitions of each exercise, twice/week

Step 3: Stay Physically Active (cont'd)

Staying physically active can reduce your:

- **Blood pressure**
- **Cigarette smoking**
- **Diabetes**
- **Extra body weight in the overweight/obese**
- **Triglyceride level**



Step 3: Stay Physically Active (cont'd)

- **Can increase HDL and so much more!**
- **The 1996 Surgeon General's Report on Physical Activity: Active people have a lower risk for stroke**



Step 3: Stay Physically Active (cont'd)

The FITT formula:

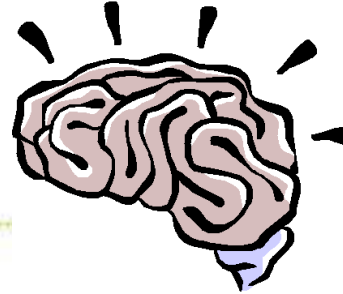
- **F**=frequency (days/week)
- **I**=intensity (how hard—easy, moderate)
- **T**=time
- **T**=type



Step 4: Manage Stress



Step 4: Manage Stress



- **If left unmanaged, stress can cause emotional, psychological, and physical problems (heart disease, high blood pressure, chest pain, and irregular heart beat)**
- **Stress also may cause you to overeat, exercise less, and possibly smoke more**
- **You can think yourself into clinical depression**

Stress: Common Warning Signs

Physical signs	Dizziness, general aches and pains, grinding teeth, clenched jaws, headaches, indigestion, muscle tension, difficulty sleeping, racing heart, ringing in the ears, stooped posture, sweaty palms, tiredness, exhaustion, trembling, weight gain or loss, upset stomach
Mental signs	Constant worry, difficulty making decisions, forgetfulness, inability to concentrate, lack of creativity, loss of sense of humor, poor memory
Emotional signs	Anger, anxiety, crying, depression, feeling powerless, frequent mood swings, irritability, loneliness, negative thinking, nervousness, sadness
Behavioral signs	Bossiness, compulsive eating, critical attitude of others, explosive actions, frequent job changes, impulsive actions, increased use of alcohol or drugs, withdrawal from relationships or social situations

Tips to Reduce Stress

- **Identify the stressor first**
- **Avoid hassles and minor irritation, if possible**
- **Try to continue doing the things that you enjoyed before the change that caused stress occurred in your life**
- **Learn how to manage your time efficiently**
- **Do one thing at a time**
- **Learn to take a break**
- **Ask for help when you need it**

Step 5: Do Not Smoke



- If you do smoke, stop
- Support is available:
 - 800-ACS-2345 (American Cancer Society) or http://www.cancer.org/docroot/ESN/content/ESN_3_1X_ACS_National_Cancer_Information_Center.asp
 - 800-QUIT-NOW (US Dept of Health and Human Services) or <http://1800quitnow.cancer.gov>
 - 877-448-7848 (National Cancer Institute) or www.cancer.gov/cancertopics/smoking

Step 6: Do Not Drink Alcohol Excessively

- **But I heard alcohol is good for the heart!**
 - Doctors do not recommend it
- **Moderate drinking is defined as:**
 - No more than one drink/day for women
 - No more than two drinks/day for men
- **On the other hand, drinking more than three drinks/day has a detrimental effect on the heart**

Step 6: Do Not Drink Alcohol Excessively (cont'd)

- **One drink is equal to:**
 - **12 fluid ounces (fl oz) of beer or wine cooler**
 - **5 fl oz of wine**
 - **1.5 fl oz of 80-proof liquor**





Who Benefits From Eating Heart Healthy?

Step 7: Eat Heart Healthy

The Entire Family!



Step 7: Eat Heart Healthy (cont'd)

- **Learn to read food labels**

**Knowledge Is Power!
What Should I Look For?**



Start Here

Limit these
Nutrients

Get Enough
of these
Nutrients

Nutrition Facts	
Serving Size 1 cup (228g)	
Servings Per Container 2	
Amount Per Serving	
Calories 250	Calories from Fat 110
% Daily Value*	
Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 1.5g	
Cholesterol 30mg	10%
Sodium 470mg	20%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	
Vitamin A	4%
Vitamin C	2%
Calcium	20%
Iron	4%

Quick Guide
to % DV

5% or less
is low
20% or more
is high

Why Reduce Calories?

- **Reduce your calories if you are overweight and want to lose weight**
- **Calories are the energy in food that contribute to weight loss and weight gain**
- **1 pound of fat=3500 calories**



Ways to Reduce Calories

- **Eat breakfast**
- **Keep regular mealtimes**
- **Look for lower-fat alternatives**
- **Drink enough fluids (water)**
- **Focus on fruits and vegetables**
- **Choose lean meats and skim dairy products**
- **Limit extra sugars to 40 grams (g)/day or 10 teaspoons (tsp)/day**
- **Eat slowly**
- **Practice portion control**

Why Reduce Fats?

- **Eating more fat than your body needs raises your blood cholesterol levels**
- **This increases your risk for heart disease**

Types of Fat

- **Cholesterol**
- **Saturated fat**
 - *Trans* fat
- **Unsaturated fat**
 - Monounsaturated fat
 - Polyunsaturated fat
- **Triglyceride**

To Reduce Your Blood Cholesterol

Pay Attention to These Limits

Calorie Level	Total Grams of Fat	Saturated Fat Grams	Trans Fat Grams
1200	33 - 40 grams	< 9 grams	< 2 grams
1400	39 - 47 grams	< 11 grams	< 2 grams
1600	44 - 53 grams	<12.5 grams	< 2 grams
1800	50 - 60 grams	< 14 grams	< 2 grams
2000	55 - 67 grams	< 15.5 grams	< 2 grams
2200	61 - 73 grams	< 17 grams	< 2 grams

***Trans* Fat vs Saturated Fat**

- **Saturated fat increases your LDL**
- ***Trans* fat increases your LDL and decreases your HDL**
- ***Trans* fat forms when liquid oils are made into solid fats, a process called hydrogenation**

***Trans* Fat vs Saturated Fat (cont'd)**

***Trans* fats are in:**

- **Packaged cookies**
- **Packaged baked goods**
- **Packaged crackers**
- **Commercially prepared fried foods**
- **Chips**
- **Doughnuts**
- **Some margarines**
- **Most shortening**

What Is the Difference Really?



KFC®



Help Your Health, Save Your Life

Chicken Breast (Fried)	Calories	Total Fat	Saturated Fat	Cholesterol	Sodium
With skin and breading	370	21 g	5 g	120 mg	1050 mg
Without skin or breading	140	2 g	0 g	65 mg	510 mg
SAVE	230	19 g	5 g	55 mg	540 mg

Fat on the Food Label



Fat free:

- **Less than 1/2 g of fat/serving**

Low fat:

- **3 g of fat or less/serving**



Reduced fat:

- **25% less/serving**

Ways to Reduce Fat

- **Choose low-fat and skim dairy products**
- **Eat lean meat (trim fat and remove skin)**
- **Bake, roast, braise, broil, grill, or poach food**
- **Avoid fried foods**
- **Watch for hidden fats in salad dressing, gravy, and processed foods**
- **Read labels to avoid hydrogenated oils—*trans* fats**
- **Limit oils to 1-2 tsp at a meal or less**
- **Look for healthy fats**

Ways to Look for Healthy Fats

- **Oils with a higher percentage of monounsaturated fat:**
 - Canola oil
 - Olive oil
- **Omega-3 fatty acids:**
 - Decrease risk of arrhythmias
 - Decrease triglyceride levels
 - Decrease growth of atherosclerotic plaque
 - Lower blood pressure (slightly)

Where Do I Find Omega-3 Fatty Acids?

World's Healthiest Foods rich in Omega 3 Fatty Acids

Calories

% Daily Value

0 5 10 15 20 25 30 35 40 45 50

Flaxseeds	95	146.3%
Walnuts	164	94.6%
Salmon, chinook	262	87.1%
Soybeans, cooked	298	
Halibut, baked/broiled	159	
Shrimp, steamed/boiled	112	
Snapper, baked/broiled	145	
Tofu, raw	86	
Scallops, baked/broiled	152	
Winter squash, baked	80	

Ways to Look for Healthier Fats

- **The American Heart Association recommends eating fish at least twice a week**
 - **One serving is 5 oz (3 oz is the size of a deck of cards)**



Triglycerides

- **Limit/avoid alcohol**
 - Beer, wine, or hard liquor
- **Limit sugar**
 - Candy and regular soda
 - 40 g (10 tsp) of extras/day
- **Eat fewer carbohydrates**
 - Breads
 - Cereals
 - Rice and pasta
 - Fruit juice
 - Etc

Why Reduce Sodium?

- **For a healthier blood pressure**
- **Extra sodium increases calcium losses**



Ways to Decrease Sodium

- **Do not add salt**
- **Use more fresh fruits, vegetables, and meat**
- **Season food with herbs rather than salt-based seasonings**
- **Try out the lower-sodium products**
- **Watch out for condiments**
- **Rinse canned foods with water (use strainer)**

Sodium on the Food Label



Sodium free:

- Less than 5 mg of sodium/serving

Very low sodium:

- 35 mg or less/serving

Low sodium:

- 140 mg or less/serving



Reduced sodium:

- 25% less than original

Why Increase Fiber?

- **Lower blood cholesterol, especially LDL**
- **Satiety**
- **Good for digestive system health**
- **Often associated with other beneficial compounds**
- **Decreased risk for heart attack (Harvard study: Men with 29 g fiber=40% decrease)***

***Source: Rimm EB, Ascherio A, Giovannucci E, Spiegelman D, Stampfer MJ, Willett WX. Vegetable, fruit, and cereal fiber intake and risk of coronary heart disease among men. *JAMA*. 1996;275:447-451.**

Fiber Sources

- **Legumes**
- **Fruits and vegetables**
- **Oats**
- **Whole-grain breads**
- **Some cereals**
- **Whole-wheat pasta**
- **Barley**
- **Brown rice**
- **Seeds and nuts**
- **Popcorn**

Fiber on the Food Label



High fiber:

- 5 g or more of fiber/serving

Medium fiber:

- 2-4 g of fiber/serving



Low fiber:

- Less than 2 g/serving

Step 7: Heart Healthy Eating (cont'd)

Nutrient	Recommended Daily Intake
Total Fat	30% of total calories or less
Saturated Fat	Less than 10% of total calories
<i>Trans</i> Fat	2 g or less
Monounsaturated Fat	Up to 15% of total calories
Cholesterol	Less than 300 mg
Sodium	2400 mg or less/day
Fiber	25-35 g

Remember...

**It Is Never Too Early to Build a Strong
and Healthy Heart!**



The Choice Is Yours



Questions?

