

Outpatient Nutrition Clinic Walter Reed National Military Medical Center (301) 295-4065



**Components of heart health** Cardiovascular disease **Risk Factors**  Cholesterol, HTN, Diabetes, Smoking, Weight Healthy eating Weight loss Exercise **Goal Setting** 

# What are components of Health & Wellness?



# What is the most important muscle in your body?



# What is Cardiovascular Disease or CVD?

Coronary artery disease (CAD), Atherosclerosis, Stroke, Hypertension (HTN), Congestive heart failure (CHF), Myocardial infarction (MI) aka heart attack, SOB, MVP, USA

70 million or 25-30% of the US population has some form of heart disease!

> 1,400 Americans will die today from heart disease

### **Risk Factors for Heart Disease**

#### <u>CANNOT</u> CONTROL

- Age
- Family History/Genetics
- Gender

#### Contributors

- Stress
- Alcohol
- Depression

#### <u>CAN</u> CONTROL

- Smoking
- Cholesterol
- Blood Pressure
- Inactivity
  - **Overweight & obesity**
- Diabetes & Prediabetes

## Cholesterol

## Cholesterol

#### Normal: <200 mg/dl

Waxy substance made by the liver
~1,000 mg a day

Produces hormones, vitamin D, bile acids

Can kids have high cholesterol? When should you start getting your cholesterol checked? Cholesterol is produced by the liver and we consume it from meat and dairy products



### **HDL Cholesterol**

Normal: >50 mg/dl 4 >40 mg/dl 3

- AKA "good" cholesterol
- Carries cholesterol and other lipids away from body cells for excretion
- Higher ratio of protein to cholesterol
- Made by the liver in response to physical activity and some foods

<u>High</u> HDL is a <u>negative</u> risk factor for heart disease



Normal: <130 mg/dl (2+ risk factors) <100 mg/dl (CHD or CHD equivalent)

# LDL Cholesterol

- AKA "bad" cholesterol
- May eventually stop blood flow to and from the heart or to the brain ———> heart attack/stroke
- Higher ratio of cholesterol to protein



Increased by eating lots of saturated and trans fats



# Triglycerides (TG)

- A form of fat made in your body and also comes from food
- Storage form of fat
- High TG make the blood thick and sticky
  - Makes it harder for heart to pump blood out
  - Increases blood pressure

Normal: <150 mg/dl

Increased by eating lots of simple sugars, alcohol, and dietary fat

# **NCEP ATP III Guidelines**

### **Normal Values**

Total Cholesterol	<200 mg/dl
HDL	>50 mg∕dl ♀
	>40 mg/dl ♂
LDL	<130 mg/dl (2+ risk factors) <100 mg/dl (CHD or
	CHD equivalent)
Triglycerides	<150 mg/dl
Blood Pressure	<120/80 mmHg

National Cholesterol Education Program Adult Treatment Panel

### **Hypertension (HTN)**

<u>Blood pressure:</u> the force of blood against artery walls naturally rises and falls during the day

<u>HTN</u>: when blood pressure stays consistently high

### **Definition of Hypertension**

Systolic/Diastolic

Optimal: 120/80 Normal: 120-129/80-84 High-Normal: 130-139/85-89 High: >140/90

# Why is HTN dangerous?

- "Silent Killer"
- Often has no signs or symptoms
- Heart works too hard, harming arteries and other organs
  - Brain stroke
  - Heart-hardening of arteries
  - Kidneys- kidney failure leading to dialysis

### **Diabetes**

### **Diabetes = <u>CVD Equivalent</u>**

- 24 million Americans have diabetes (9% US)
- 57 million Americans have pre-diabetes
- MOST don't know it...including Soldiers

#### Why is Diabetes a problem??

- 2-6x more likely to have a stroke
- 2-4x: heart disease
- 25x: retinopathy
- 17x: kidney failure
- 5x: foot/leg amputation

### **Risk Factors for Diabetes**

- Overweight...BMI >27
- Ethnicity: African, Asian, Mexican, Native American
- HTN,  $\uparrow$  Cholesterol,  $\uparrow$  Triglycerides,  $\downarrow$  HDL
- Family History
- GDM
- Had a baby weighing >9#
- >45 years of age



Normal non-fasting blood glucose
 < 140 mg/dL</li>

#### <u>Diabetes is preventable!</u> **Diabetes Prevention Program** 3 year study, 3234 participants Group 1 Intensive lifestyle intervention Goal of reducing weight by 7% 58% Low fat diet and exercise for 150 **Reduction!** min/wk Group 2 $\Theta$ Metformin (drug) Diet and exercise information Group 3 Placebo Diet and exercise information

# Smoking



## STOP SMOKING!

Smoking...

- Is the single most preventable cause of death
- Lowers HDL cholesterol levels
- Makes exercise more difficult

Smokers are 2-3 times more likely to die from heart disease than nonsmokers

# **Smoking Myths**

- "If I quit smoking I'll gain weight."
  - Not everyone who quits gains weight.
     Those who do gain an average of 10#...3 5# of which is from water retention.
- "If I gain weight that would be more unhealthy than smoking."
  - You would have to gain 100-150# after quitting to make your health risk as high as when you smoked.

#### THE GOOD NEWS

- Risk of heart disease is cut in ½ after one year without smoking, then continues to decline until risk equals a nonsmoker's (5-7yrs)
- Avoid exposure to secondhand smoke...even this increases the risk for heart disease for nonsmokers

# Weight

### **Body Mass Index (BMI)**

- Considered the best way to assess health risk related to overweight
- GOAL: 19-25
- BMI > 27 indicates overweight and potentially serious health risks
- 703 x weight (lbs) / (height x height)

BMI	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
60	102	107	112	118	123	128	133	138	143	148	153	158	163	168	174	179
61	106	111	116	122	127	132	137	143	148	153	158	164	169	174	180	185
62	109	115	120	126	131	136	142	147	153	158	164	169	175	180	186	191
63	113	118	124	130	135	141	146	152	158	163	169	175	180	186	191	197
64	116	122	128	134	140	145	151	157	163	169	174	180	186	192	197	204
65	120	126	132	138	144	150	156	162	168	174	180	186	192	198	204	210
66	124	130	136	142	148	155	161	167	173	179	186	192	198	204	210	216
67	127	134	140	146	153	159	166	172	178	185	191	198	204	211	217	223
68	131	138	144	151	158	164	171	177	184	190	197	203	210	216	223	230
69	135	142	149	155	162	169	176	182	189	196	203	209	216	223	230	236
70	139	146	153	160	167	174	181	188	195	202	209	216	222	229	236	243
71	143	150	157	165	172	179	186	193	200	208	215	222	229	236	243	250
72	147	154	162	169	177	184	191	199	206	213	221	228	235	242	250	258
73	151	159	166	174	182	189	197	204	212	219	227	235	242	250	257	265
74	155	163	171	179	186	194	202	210	218	225	233	241	249	256	264	272
75	160	168	176	184	192	200	208	216	224	232	240	248	256	264	272	279
76	164	172	180	189	197	205	213	221	230	238	246	254	263	271	279	287

# Reasons for Maintaining an Appropriate Weight

- Decrease risk of developing future health problems
  - HTN, CVD, High CHOL, Diabetes
- Improve physical performance and appearance
- Decreases stress on joints
- Improve overall wellness
- You'll feel better!

# Causes of Weight Gain

- Most Common:
  - Energy input > energy output
  - Too many calories and/or not enough aerobic exercise
- Less Common Causes:
  - Hypothyroidism
  - Genetics
  - Medications
    - Prescribed steroids
    - Some BCP
    - Antidepressants

Metabolic Syndrome "Yes" to 3 of 5 puts your health at risk				
Waist Circumference	>35 inches $\bigcirc$			
	>40 inches ♂			
Triglycerides	>150 mg/dl			
HDL	<50 mg/dl $^{\circ}$			
	<40 mg/dl ♂			
Blood Pressure	Systolic >130			
	Diastolic >85			
	Normal: 120/80			
Fasting Blood Sugar	>100 mg/dl			

# How do you improve your heart's health?

- 1. Stop smoking!!
- 2. Exercise
- 3. Healthy diet (Therapeutic Lifestyle Changes & DASH)
  - Weight Loss (if necessary)

### What are calories?

Unit of energy Provided by fat, protein and carbohydrates Burned with activity

### **Nutrition Basics**

#### • Energy Nutrients, provide calories:

- Carbohydrate (4): breads, cereals, rice, pasta, muffins, potatoes, fruits, etc...
- Protein (4): meats, eggs, cheese, milk, beans, etc.
- Fat(9): butter, margarine, oils, salad dressings, etc.

#### • Other Nutrients:

- Vitamins
- Minerals
- Water (8-10 glasses a day!)

# **Calorie Needs**

#### MEN WEIGHT X 11

#### WOMEN WEIGHT X 10

- No exercise = x 1.1
- Exercise 3 days a week = x 1.3
- Exercise 5-7 days a week = x 1.5
- Athlete = x 1.7
- 500-1000 to lose weight
- + 500-1000 to gain weight
- Men: don't go below 1600 calories
- Women: don't go below 1400 calories
| WEIGHT | WOMEN |      |      | MEN  |      |      |      |      |
|--------|-------|------|------|------|------|------|------|------|
|        | 10    | 1.2  | 1.3  | 1.5  | 11   | 1.2  | 1.3  | 1.5  |
| 150    | 1500  | 1800 | 1950 | 2250 | 1650 | 1980 | 2145 | 2475 |
| 160    | 1600  | 1920 | 2080 | 2400 | 1760 | 2112 | 2288 | 2640 |
| 170    | 1700  | 2040 | 2210 | 2550 | 1870 | 2244 | 2431 | 2805 |
| 180    | 1800  | 2160 | 2340 | 2700 | 1980 | 2376 | 2574 | 2970 |
| 190    | 1900  | 2280 | 2470 | 2850 | 2090 | 2508 | 2717 | 3135 |
| 200    | 2000  | 2400 | 2600 | 3000 | 2200 | 2640 | 2860 | 3300 |
| 210    | 2100  | 2520 | 2730 | 3150 | 2310 | 2772 | 3003 | 3465 |
| 220    | 2200  | 2640 | 2860 | 3300 | 2420 | 2904 | 3146 | 3630 |
| 230    | 2300  | 2760 | 2990 | 3450 | 2530 | 3036 | 3289 | 3795 |
| 240    | 2400  | 2880 | 3120 | 3600 | 2640 | 3168 | 3432 | 3960 |
| 250    | 2500  | 3000 | 3250 | 3750 | 2750 | 3300 | 3575 | 4125 |
| 260    | 2600  | 3120 | 3380 | 3900 | 2860 | 3432 | 3718 | 4290 |
| 270    | 2700  | 3240 | 3510 | 4050 | 2970 | 3564 | 3861 | 4455 |
| 280    | 2800  | 3360 | 3640 | 4200 | 3080 | 3696 | 4004 | 4620 |
| 290    | 2900  | 3480 | 3770 | 4350 | 3190 | 3828 | 4147 | 4785 |
| 300    | 3000  | 3600 | 3900 | 4500 | 3300 | 3960 | 4290 | 4950 |

## Principles of Weight Loss

#### Calories in vs. calories out

- Eat more than you burn gain weight
- Burn more than you eat lose weight
- Eat and burn the same about- maintain weight

#### How to lose weight?

- Decrease calorie/energy intake and burn more by increasing physical activity
  - Eat 250+ kcal less
  - Burn 250 + more
  - Total 500-1000 kcal less per day
  - Should aim for 1-2 pounds weight loss per week
- Only 10% will decrease risk of disease and improve overall health
- Appropriate wt loss

3500 kcal = 1 pound

### **Meal Plan**

- How many calories do you need to eat to lose weight?
- How many calories per meal and snack?
- Calorie needs / 3 or 4
- Budget your intake

Breakfast	500	500	400
Lunch	500	500	600
Dinner	500	600	600
Snack(s)	200x2	300	300
TOTAL	1900	1900	1900

### How to Read a Food Label

7	
4	

#### 1) SERVING SIZE

# 2) No more than 3 grams fat per 100 calories

**Nutrition Facts** Serving Size 1 cup (228g) Servings Per Container 2

Amount Per	Ser	ving		
Calories 2	60	Calo	ries fro	m Fat 120
			% Da	ily Value*
Total Fat 1	I3g			20%
Saturated	I Fa	t 5g		25%
Cholester	<b>bl</b> 3	Omg		10%
Sodium 66	iOm	g		28%
<b>Total Cart</b>	oh	ydrat	e 31g	10%
Dietary F	iber	0g		0%
Sugars 5	g			
Protein 5g		-////-/////////////////////////////////		
Vitamin A 4	%	•	Vita	min C 2%
Calcium 15	%	•	Iron	4%
* Percent Daily calorie diet. Y or lower depe	Valu our c	ies are daily va g on yo	based on lues may ur calorie	a 2,000 be higher needs:
	Calc	ories:	2,000	2,500
Total Fat	Les	s than	65g	80g

No.	Calones:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carboh	lydrate	300g	375g
Dietary Fiber		25g	30g

http://www.fda.gov/food/labelingnutrition/ConsumerInformation/ucm114022.htm

### Where do calories come from?

# Everything you put in your mouth

Meals
Condiments
Beverages
Alcohol



Snacks Gum "Here, taste this." Desserts

#### What should I eat? How much? Fruit **Vegetables** 4-5/d 4-5/d **Meats and** Grains Beans 6-8/d 2-3/d Milk, Yogurt, & Cheese 2-3/d

## **Healthy Meat Choices**

# Choose lean meats and proteins that are low in saturated fat

- White meat chicken and turkey (breast)
- Fish (tuna, salmon, etc.) at least 2x/week
- Red meat: choose loin, round, flank, 90%+ lean

# Portion size should be the size of the palm of your hand

Try substituting beans, soy products, or low fat cottage cheese for meat

- $\frac{1}{2}$  cup cooked dried beans
- $\frac{1}{2}$  cup tofu
- <sup>1</sup>/<sub>4</sub> cup cottage cheese

1 serving = ~7 g protein

#### Milk and Eggs

- l cup Skim or 1% milk
  - 90 vs 150 calories (whole)
- Low or fat free cheese (1 oz, ¼ cup shredded), yogurt (1 cup), ice cream (1/2 cup)

• 40-100 vs 100-250 calories

#### Eggs

- $\frac{1}{4}$  cup egg beater = 1 egg
- 30 calories vs 70

#### Eat less of or avoid these items:

Anything fried Bacon **Cream sauces** Ribs, chuck, brisket Sausage Desserts... Butter Alcohol Full fat dairy, salad dressing, or mayo **Bakery** items





WHOLE



### **Carb Counting**

Helps to control carbohydrate intake and forces you to measure out food

15 grams carb = 1 carb choice

- Women: 2-3 carbs/meal (30-45g)
- Men: 3-4 carbs/meal (45-60g)
- 1-2 carbs/snack (15-30g)

Increase 1-2 carb choices if you are very active

#### Your Carbohydrates each serving = 15 g carbohydrate

Grain	Milk/Yogurt	Fruit
<sup>1</sup> / <sub>2</sub> cup pasta, rice, cereal,	1 cup milk or yogurt	1 medium apple, orange, pear
oatmeal 1 oz bread	Starchy	<sup>1</sup> / <sub>2</sub> each banana, mango, grapefruit
14 hup		34 aug malan
72 DUN	peas, potatoes,	berries
1/4 bagel	beans	Juice: 1/2 cup

Non-starchy vegetables (broccoli, cauliflower) = 5g carbs per serving;  $\frac{1}{2}$  cup cooked or 1 cup raw

### **Healthy Plate**



#### **Don't drink your calories!**

Soda 12 oz	150	Diet Soda	0
Beer 12 oz	150	Light Beer 12 oz	90
Whole Milk 8 oz	150	Skim Milk 8 oz	90
Fruit Juice 8 oz	120	Crystal Light	0
Sweet Tea	120	Unsweet Tea	0
Gatorade	50	G2	25

# Healthy Cooking Methods

Grill Bake Broil Poach Boil Simmer Remove skin from poultry

#### **Heart Healthy Fats**

Monounsaturated Fats Polyunsaturated Fats Omega 3 Fatty Acids

Say NO to trans fats! (Aka hydrogenated fats)

Limit saturated fats (red meat, dairy, cheese)

## **Fats That Help Your Heart**

Mono-	Poly-	Omega 3	
Unsaturated	Unsaturated		
↓TC,LDL,TG	↓TC,LDL,TG	↓TC,TG	
↑HDL	↓HDL		
Olive & canola	Corn, safflower,	Fish, nuts, soy,	
	soybean,	canola,	
	sesame,	flaxseed	
	sunflower oil		

### **Omega-3 Fatty Acids**

Three types of omega-3 fatty acids
 Alpha linolenic acid: nuts, seeds, soy
 EPA & DHA: fatty fish

 EPA & DHA: best for heart health
 Add flaxseed oil, walnuts, 2 4-ounces fish weekly i.e. salmon, albacore tuna, mackeral or sardines

• Choose eggs high in omega-3 fatty acids



Food (serving size)	O-3 (g)	O-6 (g)
Oils		
Flax seed, 1 T	6.6	1.6
Canola, 1 T	1.6	3.2
Walnut, 1 T	1.4	7.6
Soy, 1 T	1	7
Nuts and Seeds		
Flax seeds, ground, 2 T	3.2	0.8
Walnuts (English), 2 T	1	5.4
Vegetables, Fruits, Legumes		
Soybeans, cooked, 1 C	1.1	7.8
Tofu, firm, 1/2 C	0.7	5
Tofu, medium, 1/2 C	0.4	2.9
Soy milk, 1 C	0.4	2.9
Berries, 1 C	0.2	0.2
Peas, 1/2 C	0.2	0.2
Legumes, 1/2 C	0.05	0.05
Green leafy vegetables (broccoli,		
kale, Chinese greens, salad greens),	0.1	0.03
1 C rawor 1/2 C cooked		
Grains		
Oat germ, 2 T	0.2	1.6
Wheat germ, 2 T	0.1	0.8





## Fats that hurt your heart

Saturated Fat	Trans
↑TC,LDL	↑TC,LDL <u>AND</u> ↓HDL
Animal fat, butter, lard, coconut oil, red meat, dairy, pastries	"partially hydrogenated" Pastries, croissant, frosting, stick margarine
<20 g/day	<2 g/day

\*Read the ingredients on your food label

## TLC...Therapeutic Lifestyle Changes

#### Used to lower cholesterol

• Dietary changes:

- $\leq$  25-35 % of the day's total calories from fat
- <7% of the day's total calories from saturated fat
- <200 mg of dietary cholesterol a day</li>
- Limit sodium intake to 2400 mg a day
- Increase soluble fiber intake
- Adjust total caloric intake to maintain desirable body weight/prevent weight gain
- Increase exercise and daily physical activity

### Dietary Approach to Stop Hypertension

- Goal is to reduce blood pressure
- Focus on what to eat rather than what to not eat
- Anyone can follow regardless of HTN
- Increase intake of potassium, magnesium, calcium, healthy fats, and fiber
- Eat more fruits and vegetables, low fat dairy, whole grains, fish and poultry
- Eat less sodium, red meat, and saturated fat

See DASH Handout

### Sodium Intake

- What is salt?
- We need a minimum of 500 mg/day
- Usual American intake 4,000-6,000 mg/day
- Recommended intake: 2400 mg/day
  - To lower BP, best results seen with 1500 mg/day

## **High Sodium Foods to Avoid**

- Pickles or pickled food
- Commercial soups
- Boxed rice dishes
- Canned vegetables
- Convenience items
- Frozen entrees

### How can I reduce my salt intake?

- Put away the salt shaker!
- Reduce the amount of salt you use in recipes
- Use fresh or frozen veggies
- Do not add salt to boiling water
- Try seasonings such as lemon juice, Ms. Dash, paprika, garlic powder, basil, cumin

## Foods that help your heart

Fruits and Vegetables	5-10 servings/day
Fish (Omega 3 fatty acids) 😳	2 servings/week
Fiber/Whole grains	30 g fiber/day
<u>Phytosterols</u> ("Take Control" or "Benecol" spread, Yoplait Healthy Heart)	800 mg/day or 2 servings a day
<u>Unsaturated fat</u> (Olive, canola, peanut oils, nuts, salad dressing, mayonnaise)	In place of saturated fats
<u>Potassium</u> Fruits, vegetables, fish, milk	4,700 mg/day

#### **Plant Sterols/Stanols/Esters**

- Naturally occurring substances in plant foods that block the absorption of dietary cholesterol
- Research indicates that consumption of 2-3g daily of plant sterols can help to lower cholesterol levels
  - Can reduce total cholesterol by 4-11% and reduce LDL by 7-15%
- Fortified spreads, juices, yogurt, supplement chews
  - 0.4g per serving 2x/d



#### **Eat More Fiber**

How Much? Aim for 25-35g/day with at least 10g of soluble fiber

## **2 Types of Fiber**

#### Soluble

- Bind fatty acids, lower cholesterol, helps regulate blood glucose in people with diabetes
- Oats, rice bran, barley, dried peas, beans, flax seed, oranges, apples, carrots

#### Insoluble

- 'Keeps the colon rollin', remove toxins from the intestines, prevents colon cancer & constipation
- Whole grains, nuts, seeds, fruit skins, green vegetables

## How Soluble Fiber Works



SOLUBLE FIBER
CHOLESTEROL

- 1. Food goes into the stomach
- 2. The liver picks up cholesterol from the blood, repackages it, and releases it into the small intestine
- 3. Cholesterol comes to the small intestine from the diet and the liver
- 4. Soluble fiber forms a gel which binds cholesterol in the small intestines and takes it out of the body

### **Fiber sources**

- Cereal should have 3-5 grams per serving
   Or mix your "fun" cereal with ¼ cup fiber one
- Bread should have 2-3 grams per slice
- Eat beans a couple times a week
- Mix oatmeal in casseroles and baked foods
- Eat the skin as much as possible
- Have 3 each fruits and vegetables daily



#### **Exercise**

## **Exercise your heart**

- Exercise is a medication with positive side effects
  - Increases HDL
  - Lowers Blood Pressure & TG
  - Improves insulin resistance in diabetes
  - Reduces stress: acts as a natural antidepressant
  - Aids in weight control

NOT exercising is an independent risk factor for heart disease

### F-I-T-T

- <u>Frequency</u>: Do something every day
  - For wt loss: 5-7 days per week
- <u>Intensity</u>: enough to get your heart rate up
- <u>Time</u>: 30-90 minutes
  - 30 min of moderate intensity daily (heart health)
  - 60-90 min if you are trying to lose weight
  - Can break it up into bouts of 10-15 minutes

#### • <u>Type</u>:

- Aerobic walk, swim, bike, run, elliptical
- Anaerobic strength training, sit ups, push ups, planks



#### **Heart Rate Goals for Exercise**

Age	20	30	40	50	60	70	
MAX	200	190	180	170	160	150	
Vigorous	130-	124-	117-	111-	104-	98-	
65-85%	170	162	153	145	136	128	
Moderate	Resting heart rate + 40-60 bpm						
Light	Resting heart rate + 20-40 bpm						

What is your resting heart rate? Should be 60-100 bpm
**Brisk** walking Jogging Running Cycling Stair stepping Rope skipping

- In-line skating
- Elliptical training
- Kickboxing
- Aerobic
  - dance
  - **Step aerobics**
- Rowing

• Swimming

**Sample Activities** 

- Kayaking
- Ice skating
- X-country skiing
- Slide
   boarding
- Spinning

Try using a pedometer: aim for 10,000 steps every day Note: Sports are okay if you limit the rest periods

## Make a Schedule

	Mon	Tue	Wed	Thu	Fri	Sat	Sun			
Level 1	Monitoring steps with pedometer Starting goal is 2000 steps MOST days of the week									
Level 2	15 min x 2		15 min x 2		15 min x 2					
Level 3	30 min x 1		30 min x 1		30 min x 1	30 min x 1				
Level 4	30 min x 1	30 min x 1	30 min x 1	30 min x 1	30 min x 1	30 min x 1				
	If using a pedometer, 5000 steps MOST days of the week									

### Make a Schedule

	Mon	Tue	Wed	Thu	Fri	Sat	Sun			
Level 5	30 min Moderate	30 min Moderate	45 min Moderate Vigorous	30 min Moderate	30 min Moderate	45 min Moderate Vigorous				
Level 6	45 min Moderate Vigorous	30 min <sup>Moderate</sup>	45 min Moderate Vigorous	30 min Moderate	30 min Moderate	45 min Moderate Vigorous				
Level 7	60 min Moderate	30 min Moderate	45 min Moderate Vigorous	30 min Moderate	30 min Moderate	45 min Moderate Vigorous				
Level 8	60 min Moderate	30 min Moderate	60 min Moderate	45 min Moderate Vigorous	30 min Moderate	45 min Moderate Vigorous				
	If using a pedometer, 10,000 steps MOST days of the week!!									

## **Exercise Summary**

- Activity is up to you
- Gradually increase intensity starting with 40-60 bpm above resting HR
- Stay at each level no more than 2 weeks
- Follow the 3 up 1 down principle:
  - 3 challenging weeks followed by 1 recovery week.
  - Example, 3 weeks at level 6, 1 week at level 4.



# **Other Tips**

#### • Know why you eat

- Hunger, boredom, depression, stress, social, procrastination, etc.
- Don't eat if you are not hungry-find something else to do
- Make a food log/journal
   Identify poor habits and make goals to change them
  - Attainable
  - Realistic



## Time for action...

- Avoid extremes...diets, supplements, etc Set achievable goals in a reasonable timeframe
- Build in rewards
- Expect roadblocks and plan how to get around them

What are your roadblocks???

## For More Information

www.americanheart.org
www.cspinet.org
www.fitday.com
www.diabetes.org
www.choosemyplate.gov
www.dietfacts.com