Eating Healthy for Your Heart

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Do You Know?

- According to the Centers for Disease Control and Prevention, 70% of all deaths in the United States are due to chronic diseases.
- Lack of physical activity, tobacco use, not consuming enough fruits and vegetables, and drinking too much alcohol are common causes of chronic disease.
- According to the CDC, heart disease, cancer and stroke are the most common types of chronic diseases. With the exception of genetic risk factors, these chronic diseases can be prevented.
The Statistics

- 85% rank diet/nutrition important personally
- 25% of Americans eat 5-7 servings of fruits and vegetables a day
- Average vegetable intake is 1.4 cups a day
- Average fruit intake is 8 servings a day
The Statistics

- 64.5% of adults over the age of 20 are overweight or obese
- Over 50% of meals are eaten out
- Half of the monies spent on food is spent on fast food or convenient foods
• How many hours of TV does the average American watch each day?
American Heart Association: “The Steps” For a Heart Healthy Lifestyle

• Balance the number of calories you eat and physical activity to maintain a healthy body weight (this means not eating more calories than you need).

• Make your diet rich in fruits and vegetables. A typical adult should try for 9-10 servings (4.5 cups) of fruits and vegetables every day.

• Choose whole grains and high-fiber foods (Three 1-oz. servings per day). Eat fish, especially oily fish like salmon or albacore tuna, twice a week to get omega-3 fatty acids.

• Limit saturated and trans fat and cholesterol
The Steps

- Limit the amount of added sugars you consume to no more than half of your daily discretionary calorie allowance.

- Limit sugar-sweetened beverages to no more than 450 calories (36 oz.) per week.

- Choose and prepare foods with little or no salt (sodium) to maintain a healthy blood pressure. Keep sodium intake to 1,500 mg per day or less.

- Limit processed meat (such as sandwich meat, sausage and hot dogs) to fewer than two servings per week.
The Steps

• Try to eat four servings per week of nuts, seeds or legumes (beans).
• If you choose to consume alcohol, do so in moderation. This means an average of one to two drinks per day for men and one drink per day for women.
• If you eat out, pay attention to portion size and the number of calories in your meal.
Macronutrients

• Fat
• Carbohydrate
• Protein
Lowering Cholesterol and LDL Levels

- Eat Less Fat
- Eat Less Saturated Fat
- Eat Less Cholesterol
- Avoid Trans Fats
What is Fat?

• Fats or lipids have many important roles
• They transport nutrients and help play a key role in normal development and growth
• Fat can be associated with certain health risks
Saturated Fat

- Found mainly in animal sources
- Meats, chicken, eggs, and pork with coconut and palm kernel oil
- Solid at room temperature
- 70% of the fat we eat is hidden in foods
Saturated Fat and Cholesterol

- Saturated fat may affect your cholesterol and increase your risk for heart disease
- LDL Cholesterol
- This may lead to high blood pressure, plaque build-up and other related problems
High Fat Food and Food Groups

• Meats and marbling of meats
• Poultry with skin
• High-fat dairy foods
• Butter, margarine
• Gravy
• Mayonnaise
• Baked goods
• Added fat to cooking
• Palm kern oil
Unsaturated Fat

- Two Types:
  - Monounsaturated
  - Polyunsaturated

- Good or healthy fats that may help lower bad (LDL) cholesterol and raise good cholesterol (HDL)

**Monounsaturated:**
- Olive, canola, peanut oils
- Avocado
- Nuts including almonds, cashews and pecans
- Natural peanut butter
- Sesame seeds

**Polyunsaturated:**
- Corn, safflower, soybean oil
- Walnuts and seeds
Unsaturated Fat

• Omega 3 (linoleic acid) and Omega 6 (linolenic acid) are polyunsaturated fats
• May have a valuable effect on decreasing your risk for cardiovascular disease
• Omega-3s (DHA & EPA)
  – 1,000 mg a day for those with heart disease
  – 3,000 mg a day to help lower TG
• Sources include: salmon, albacore tuna, mackerel, sardines, and herring
Eliminate Trans Fatty Acids

- Trans fatty acids are found in some foods naturally but most come from processed foods.
- Trans fats may increase your blood cholesterol level by raising your LDL and reducing your HDL cholesterol.

Trans Fatty Foods:
- Margarine
- Cookies
- Crackers
- Shortening
- Some fast food items
What is Healthier?

- Polyunsaturated and monounsaturated fats have beneficial heart healthy effects.
- However, it is important to follow how much fat is consumed in your diet; all types of have the same number of calories.
- 20-35% of your diet should be fat, <7% saturated fat.
Cholesterol

• Cholesterol can be found in some of the foods we eat
• It is found in animal products such as meat, chicken, fish, seafood, eggs, and organ meats
• Saturated and trans fatty acids may increase your blood cholesterol level
• Is a cholesterol free product always a good choice?
Lower Triglycerides

• **Avoid Alcohol**
  – Beer, wine, or hard liquor

• **Avoid Sugar**
  – Candy and regular soda

• **Eat Fewer Carbohydrates**
  – Breads, cereals, rice, pasta, fruits and dairy products
Carbohydrates
Carbohydrates and Glucose Control

- Eating a carbohydrate controlled diet can help to control diabetes and lower your HgbA1C
- Controlling your diabetes lowers risk for heart attack and stroke
  - 65% of people with diabetes die from heart attack or stroke
  - Adults with diabetes are 2 to 4 times more likely to have heart disease or stroke
Various Sources of Carbohydrates

- Milk/alternative products
- Fruits
- Vegetables
- Starches
- Sweets/Candy
- Legumes
Functions in the Body

• Several roles that are critical to optimal sports performance
• Most important source of energy in the body
• Must be present to metabolize fats at the rapid rate needed for exercise
• Only macronutrient that can provide energy for anaerobic activities
Functions in the Body

- Adequate carbohydrate intake can help spare muscle tissue
- Primary energy source for the nervous system
- Nerve cells do not store carbohydrates, main energy source is the blood stream
- Low blood glucose levels will ultimately affect nerve function
- Brain is the only carbohydrate dependent organ
Daily Amounts of Carbohydrates

• Simple vs Complex 45-65% of total caloric intake
• RDA for carbohydrates is at least 130 grams per day for people with diabetes
• Half of your grains should be whole grains
Natural vs. Added Sugar

• We eat 4 times as much sugar as we should!!
• In 2009, the American Heart Association (AHA) reported Americans were ingesting an average of 111 grams of sugar per day which is the equivalent of about 450 calories per day!
• The AHA recommends 30 grams per day
What is a Whole Grain?

• Include the entire grain seed or kernel
• Consists of the bran, germ, endosperm
• Consumed as a single food item like popcorn or rice or as an ingredient such as buckwheat, quinoa, rolled oats
• Good sources of: iron, magnesium, selenium, B vitamins, and dietary fiber
• < 5% of Americans consume the minimum amount of 3 oz. a day
Fiber

• Complex carbohydrate the body does not digest or absorb
• Cannot be broken down by human digestive enzymes or absorbed
• Produces bulk by attracting water
• Greater bulk increases peristaltic actions
• Soluble vs. insoluble
Fiber

• Soluble fiber:
  – Helps to lower blood cholesterol, especially LDL
  – Reduces the risk of heart disease
  – Slows the absorption of blood glucose and helps to stabilize sugar levels

• Insoluble fiber:
  – Promotes regularity
  – Reduces the risk of diverticular disease; prevents constipation

• 25 to 30 grams of fiber per day
Sources of Fiber

- Insoluble Fiber
  - Wheat products
  - Wheat bran
  - Green beans
  - Potatoes
  - Broccoli

- Soluble Fiber
  - Peas
  - Beans
  - Oats
  - Barley
  - Apples
  - Strawberries
  - Carrots
  - Broccoli
Tips on Fiber

• Increase your intake of beverages to 9 to 12 cups of water per day
• Select foods that contain at least 3-5 grams of fiber per serving
• Choose high fiber cereals and fruits/vegetables
Plant Sterols/Stanols & Soy

- Naturally occurring in plants
- Block absorption of cholesterol in the small intestine
- Shown to lower LDL by 6-15%
- 2-3 grams per day
- Found in spreads like Benecol

- Soy has been proven to lower the risk of heart disease
- Tofu, soynuts, soymilk, or other whole soy products
- Don’t count on powdered soy drinks as a good source of soy protein
Proteins

• Proteins must be replaced on a daily basis
• Athletes who engage in endurance, strength/power or team sports have higher protein requirements
• People recovering from surgery, illness or hemodialysis may need more protein
Non-Animal Protein Sources

- Legumes
- Soy
- Nuts
- Seeds
- Grains
Recommendations

• 10-35% of daily calories
• On average most people need between 50-75 grams per day
Sodium

- Eating a diet high in sodium (salt) can increase blood pressure
- Canned foods, dried meats or fish, packaged foods, frozen meals, lunch meats, salad dressings, marinades, and any salted food item (i.e. pretzels)
- Having a normal blood pressure reduces the risk of heart disease and stroke
# Nutrition Facts

Serving Size 1 potato (148g/5.3oz)

<table>
<thead>
<tr>
<th>Amount Per Serving</th>
<th>% Daily Value*</th>
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</thead>
<tbody>
<tr>
<td>Calories 100</td>
<td>0%</td>
</tr>
<tr>
<td>Calories from Fat 0</td>
<td>0%</td>
</tr>
</tbody>
</table>

- **Total Fat**: 0g 0%
  - Saturated Fat: 0g 0%
- **Cholesterol**: 0mg 0%
- **Sodium**: 0mg 0%
- **Potassium**: 720mg 21%
- **Total Carbohydrate**: 26g 9%
  - Dietary Fiber: 3g 12%
  - Sugars: 3g
- **Protein**: 4g

**Vitamins and Minerals**

- **Vitamin A**: 0% • **Vitamin C**: 45%
- **Calcium**: 2% • **Iron**: 6%
- **Thiamin**: 8% • **Riboflavin**: 2%
- **Niacin**: 8% • **Vitamin B₆**: 10%
- **Folate**: 6% • **Phosphorous**: 6%
- **Zinc**: 2% • **Magnesium**: 6%

*Percent Daily Values are based on a 2,000 calorie diet.
Diets for Heart Disease

- ATP III
- DASH
- Mediterranean
- Dean Ornish
- China Study
- Paleo
Mediterranean Diet Pyramid*

* Adapled from Consumer Reports, Nov'94

**Daily**
- Bread, pasta, rice, couscous, polenta, bulgur, other grains, and potatoes

**Weekly**
- Vegetables
- Beans, legumes, nuts
- Fruits
- Cheese and yogurt
- Fish
- Eggs, poultry
- Sweets

**Monthly**
- Red meat - a few times per month in very small amounts
Other Factors

• Vitamin D levels
• Fasting
• Vitamins A, C and E
Supermarket Saavy

• Spend 40% of your food budget on fruits and vegetables
• Buy whole grains only, fiber is key
• When you spend more on healthier snacks make sure to make them last, practice portion control
• Buy in bulk, and then measure out and fill snack bags at home
• Shop the perimeter first
Heart Healthy Superfoods

- Flax
- Nuts (almonds and walnuts)
- Yogurt
- Foods Fortified with Sterols
- Salmon
- Avocado

- Swiss Chard
- Black Beans
- Chocolate
- Tomato sauce and sundried
- Sweet potato
- Oatmeal
Questions?
Sources


