The New Pyramid - Nutrition

What are nutrients?

- Essential substances that your body needs in order to grow and stay healthy
- Six categories of nutrients:
  - Carbohydrates
  - Proteins
  - Minerals
  - Vitamins
  - Fats
  - Water

- Pass Out work from the box
- Label a clean sheet of paper:
  Chapter 6 Corrections
- Write the question and the entire CORRECT answer to the ones that you missed.
- Staple and turn in to the box
- Beginning Reading Ch. 8 on Nutrition

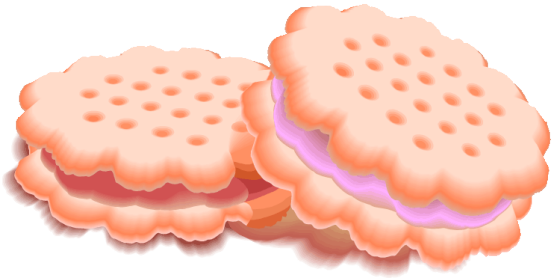
Carbohydrates

Carbohydrates

- Structure and function: Carbohydrates are sugars and starches that the body uses for ENERGY!
- PLANTS are the major source of carbohydrates in the food we eat.
- Source of Fiber

Simple Carbohydrates

- Sugars that are quickly digested and provide a BOOST of energy for the body
- Foods with LOTS of sugar: oranges, milk, cookies, candy



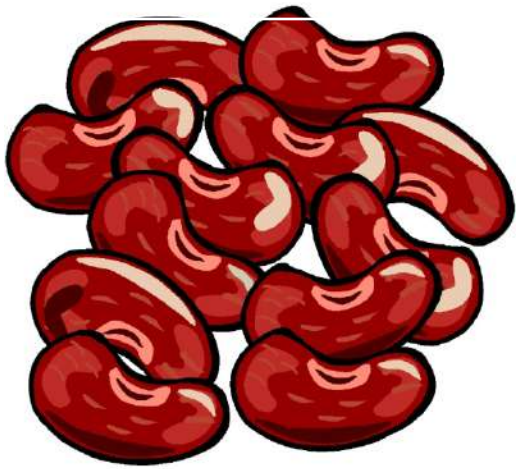
Carbohydrates

Complex Carbohydrates

- Starches that are composed of many sugars linked together

- They provide the body with long-term energy since they are digested more slowly than sugars.

- Foods with LOTS of starch: rice, beans, potatoes



Protein

Proteins

Structure: Proteins are made from many amino acids connected together in different arrangements.

Function: Provide the building materials your body needs to grow and repair itself

- 9 of the 20 amino acids are called **essential amino acids** because you must obtain them from the foods you eat since your body cannot make them.

Protein

Sources: anything that walks, flies, or swims as well as beans and peanuts

Complete proteins:

- Foods containing all the essential amino acids
  Examples: fish, meat, eggs, milk, cheese

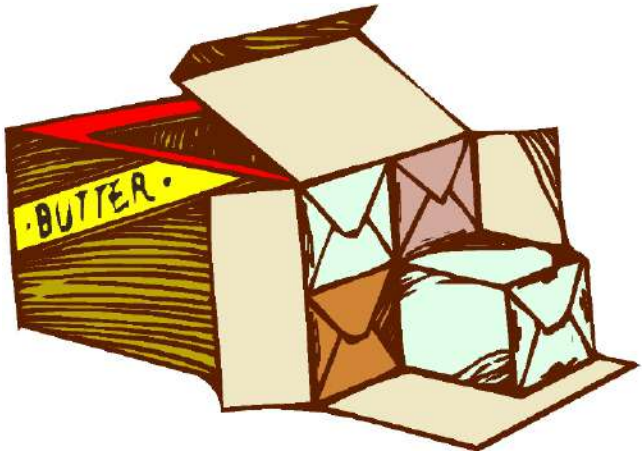
Incomplete proteins:

- Foods that are missing some essential amino acids
  Examples: Legumes, nuts, whole grains

Fat

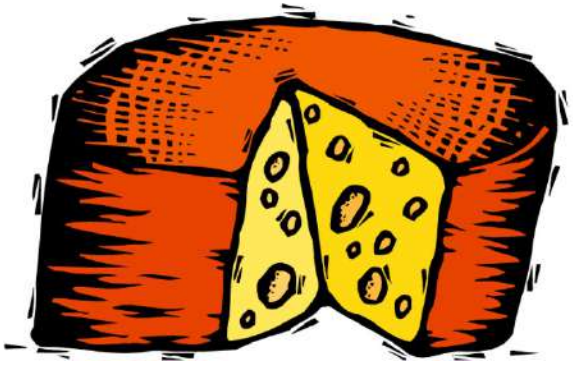
Functions:

- Secondary ENERGY source for the body (more than carbs and proteins)
- Help protect and cushion vital organs as well as joints
- Insulate the body



Structure:

- Fats belong to a group of organic compounds called lipids which are substances that do not dissolve in water.
- Fatty acids are the building blocks of fats.



Fat

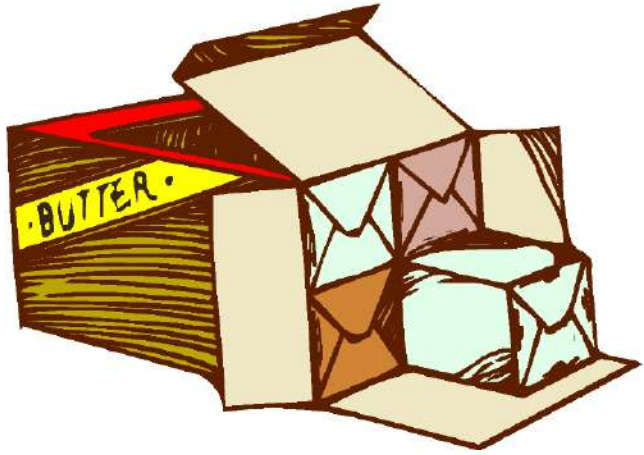
Unsaturated fats:

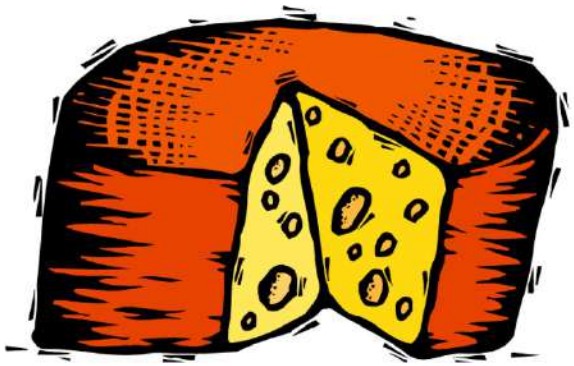
- Contain fatty acids that are missing hydrogen atoms
- At room temperature, they are typically in liquid form.
- They are less harmful to the circulatory system than saturated fats.
- Foods with a lot of unsaturated fat: canola, safflower, and peanut oils

Fat

Saturated fats:

- Contain fatty acids with the MAXIMUM amount of hydrogen atoms
- At room temperature, they are typically in solid form.
- Diets with TOO MUCH saturated fat have been known to cause heart disease because of high cholesterol
- Foods with a lot of saturated fat: beef fat, egg yolks, dairy products





Calories

What is a calorie?

- The energy obtained from carbohydrates, proteins, and fats is measured in units called *calories*.
- 3500 calories make up 1 pound of fat

Converting Grams to Calories

- Carbohydrates
  - (number of grams x 4 = calories from carbohydrates)
- Protein
  - (number of grams x 4 = calories from protein)
- Fats
  - (number of grams x 9 = calories from fat)

How many calories come from each

- Calories
  - 200
- Total Fat
  - 5 grams
- Carbohydrates
  - 37 grams
- Protein
  - 2 grams

How many calories come from each

- Calories
  - 201 exactly
- Total Fat
  - 45 calories
- Carbohydrates
  - 148 calories
- Protein
  - 8 calories

  - Add up all the calories to determine the exact amount of calories (201)

Assignment

1. Read and study Figure 8.2 Sample Food Label on page 146
2. Write Ques. and Ans. for pg. 150 Comprehension Check
3. Do Chapter Review WS (Do Not do Take it Home)

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