# Requirements For A Healthy Body

Lesson 3

# Requirements For A Healthy Body

- A healthy body requires nutrients from five groups:
  - Carbohydrates, proteins, fats, vitamins, and minerals
- To grow, your body needs raw materials or **nutrients** 
  - Substances the body requires for energy, growth, development, repair, and/or maintenance



Carbs, fats,

→ proteins, vitamins,

and minerals

which provide **Energy & Materials** 

used for

Growth, development, and repair

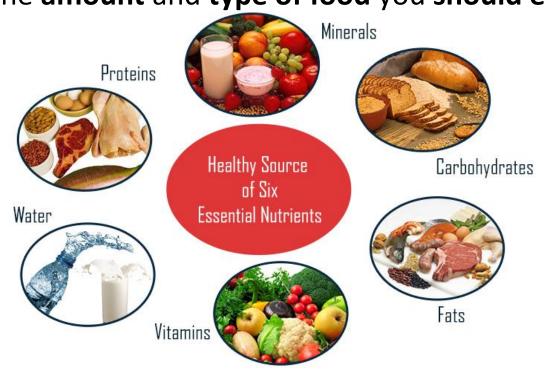


## Requirements For A Healthy Body

 We get nutrients from what we eat and drink, which health professionals call our diet

 Many think that "diet" means to cut out foods too lose weight, but the word "diet" actually refers to the amount and type of food you should eat to

maintain your health



## Four Food Groups

One way to make sure your diet s healthy is to eat a variety of food

from all food groups

• Grain produces

Vegetables and fruit

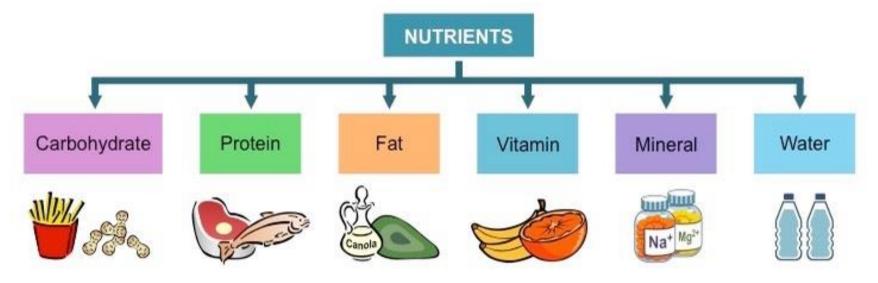
Milk and alternatives

Meat and alternatives



## Types of Nutrients

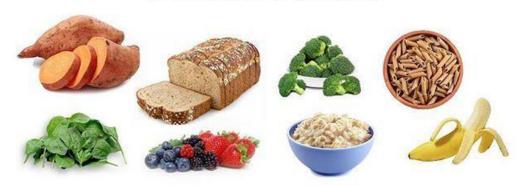
- A balanced diet ensures that you take the correct amount of nutrients your body needs to function
- There are five different types of nutrients you can obtain from food
  - Carbohydrates
  - Proteins
  - Fats
  - minerals



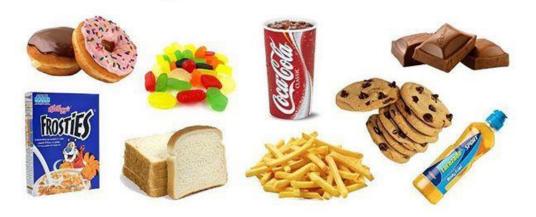
## Carbohydrates

- The body's quickest source of energy
- Two types of carbohydrates: SIMPLE and COMPLEX
- A **simple carb** is a molecule of sugar
  - The most common type of sugar is glucose
  - Glucose is like fuel for you body
- A complex carb is a chain of simple carbohydrates (sugar molecules) joined together
  - Pasta, brown rice, whole grain cereals
  - Your body takes time to break down the chain into simple sugars before it can use the energy

#### ✓ COMPLEX CARBS



#### SIMPLE CARBS



#### **Proteins**

- Used to build parts of your body's muscles, skin, hair, and nails
- Your body also manufactures proteins for use in various chemical reactions within your cells
- Fish, poultry, nuts, soy, and dairy produces are rich in protein



#### Fats

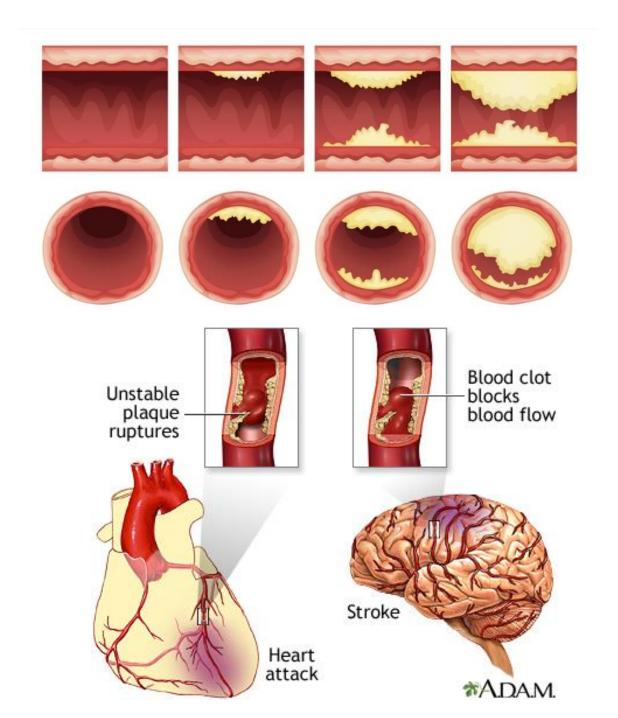
- Used to build cell membranes and can be stored by the body for future energy uses
- Shortening, butter, oil, cream, and meat contain fat
- "Good" fat is often called unsaturated fat and comes from fruits, vegetables, and fish, as well as, corn oil, olive oil, and vegetable oil
  - Liquid at room temperature
- "Bad" fat is often called saturated fats
  - Animals fats such as butter or lard
  - Solid at room temperature



### Fats cont'd

#### **Saturated Fat diet:**

- Research shows that diets rich in saturated fat can lead to an increase in heart disease (heart attacks) and stroke
- Believed to promote the build-up of a material called plaque
  - A fatty material that is deposited along the walls of blood vessels that reduce blood flow



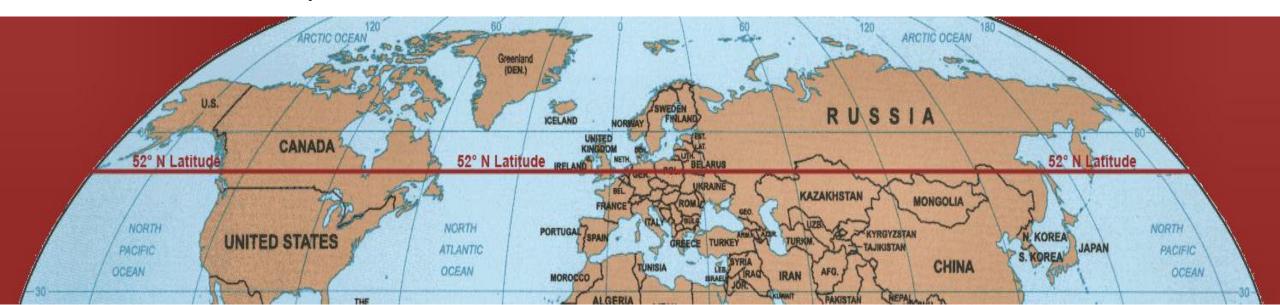
### Minerals and Vitamins

- Needed by the body in small amounts to perform various body functions
- Two common minerals and vitamins are calcium and vitamin D
- Calcium is required to help build strong bones
  - Lack of calcium can lead to osteoporosis a disease that weakens your bones
- Vitamin D is required to assist in absorbing calcium



## Minerals and Vitamins

- A person who lacks vitamin D can develop rickets, which causes bones to weaken
- One way to help your body make vitamin D is by simply going outside in the sunlight
  - However, if you live above 52° north latitude, there is not enough sunlight to make vitamin D between the months of October and March
- Drinking beverages with added vitamin D (milk, soy milk) can help you get the vitamin D you need



#### Water

- Water is not a nutrient, but it is necessary for life
- Transports nutrients and wastes
- Necessary for many chemical reactions
- Needed for cooling the body through perspiration or sweat
- Health authorities recommend about 8 cups or 2 L a day



## Questions

- 1. What is the difference between a simple carbohydrate and a complex carbohydrate?
- 2. What are two functions of protein
- 3. Give a food example for each of the five nutrients
- 4. What is the role of water?