

Chapter 9

Nutrition

Objectives:

- How did you develop your current nutritional habits?
- What is your relationship of food to health?
- What are the essential nutrients and why does the body need them/
- What are the health problems that might occur from bad diet decisions about essential nutrients?
- Why is water such an important element of our diet?
- What is the new food label, and how can it help you plan a nutritionally balanced diet?
- What is the food guide pyramid?
- How should the food guide pyramid be used to plan a balanced diet?
- How should you determine your daily calorie requirements?

Historical use of Food:

The original need for food was for survival only. In ancient times, nearly all of human's day was spent searching for food by hunting, fishing, or scavenging. Later, when we learned to raise and store food supplies, food was used as the centerpiece of social and religious ceremonies.

Acquired Experiences with food:

Why do you choose the foods you eat?

Why do you like one food while your best friend likes another?

How does the family factor into this?

- Birth until now
- After high school
- Lifestyle
- Cost
- Advertisements

Food and Its Relationship to Health:

"You are what you eat"

Food is the fuel that keeps your body going. Food is the energy source for an active, vigorous, and fun lifestyle. Too much food leads to health problems associated with being too heavy. Also, if you eat too much food high in cholesterol or other fats, these foods may cause health problems.

Diets that promote weight loss without establishing sound nutritional practices are considered **Fad Diets**. No diet can cause a person to lose weight unless the caloric expenditure is greater than the caloric intake.

Essential Nutrients:

- **Proteins** – The most important function of protein is its role in the growth and repair of the body's tissues. Protein is made up of chemical substances known as **amino acids**. Amino Acids are essential in the digestive process.
- **Animal Protein** – Complete proteins include such animal products as meat, milk, and eggs.
- **Non-Meat Protein** – In many parts of the world, protein is obtained from dried beans or rice rather than animal products.
- **Carbohydrates** – serve as "fuel" for our active lifestyle and are obtained from bread, cereals, fruits, and concentrated sweets.
 - **Starches carbohydrates** such as bread, potatoes, and cereals provide a good source of energy and contain a variety of nutrients.
 - **Sugary carbohydrates**, like those found in soft drinks and candy, have few, if any, nutrients and are called empty calorie foods.
- **Fiber** – The indigestible materials that makes up the walls of plant cells is known as fiber. Fiber is another kind of carbohydrate. Fiber is useful in moving waste through the body system and helpful in lowering the risk of certain diseases, including colon cancer. Common sources of fiber include whole grain breads and cereal, fruits, and vegetables.
- **Fats** - two kinds
 - **Saturated Fats** – (animal fats) content are found in meat, poultry, milk, cheese, ice cream, and egg yolks.
 - **Unsaturated Fats** – (vegetable fats) are found in margarines, salad dressing, mayonnaise, cooking oils avocados, olives, and nuts.
- **Cholesterol** – is a wax-like fatty substance that is produced by the body in the liver and used for building cells. In healthy people, the body produces all the cholesterol that is needed. However when you eat animal products high in saturated fats such as meat, cheese, and eggs, you consume additional cholesterol. Cholesterol is transported throughout the body in the blood stream with excess amounts stored on the walls of blood vessels.
- **HDL Cholesterol**- (the good kind) helps remove the extra cholesterol on the artery walls.
- **LDL Cholesterol** – (the bad kind)

Minerals – There are 20 minerals present in the body that are used in the body functions. Each of these is needed (in a very small amount) or serious deficiencies and diseases may occur.

- **Calcium & Phosphorus** – are used to develop bones and teeth as well as in muscular development.
- **Iron** – is combined with protein to form hemoglobin, an essential element of the blood. (Meats, green leafy vegetables, apricots, prunes, whole grain).

- **Iodine** – is essential for proper functioning of the thyroid.
- **Potassium** – helps maintain heartbeat
- **Sodium** – helps the body maintain a proper balance of body fluids.

Vitamins: Vitamins are organic, chemical substances found in very small amounts in food. You need small amounts for normal growth and maintenance of the body.

- **Fat-soluble vitamins** – the vitamins that can be stored in fat deposits of the body.
- **Water-soluble vitamins** – vitamins that require water to dissolve them and cannot be stored in the body tissue as the fat-soluble vitamins.

****** The best approach to providing the body with proper amount of vitamins is by eating a balanced diet.

Water: An Essential Element.

Water is essential for your body and makes up 65% of your weight. Water carries dissolved waste products from the body, helps digest food, and carries nutrients throughout the body. It is also critical in temperature control.