



## **Unit V – Wellness, Fitness and First Aid**

### **Chapter 3 - You Are What You Eat**

#### **Section 1 – You Are What You Eat**



# What You Will Learn to Do

Evaluate how diet impacts life



# Objectives

1. Explain how calories consumed versus calories used affects body weight
2. Identify daily required food and portions
3. Identify sources and benefits of fiber in diet
4. Describe the importance of water
5. Describe the possible effects of a diet high in fat and cholesterol
6. Explain why salt, sugar and caffeine should be used in moderation



# Key Terms

**Nutrients -** Substances found in food that allow the body to function properly

**Fats -** Nutrients made up of fatty acids that are insoluble in water and provide energy to the body

**Deficient -** Having too little of something, such as a nutrient in the body



# Key Terms

- Calories -** The amount of energy it takes to raise the temperature of one kilogram of water one Celsius; a measurement of energy
- Metabolism -** The chemical process by which the body produces energy and maintains vital functions
- Vitamins -** Nutrients that occur naturally in plant and animal tissue and are required for proper function of the body



# Key Terms

**Minerals -**

Natural chemical elements of the earth used by the body to supply necessary nutrition

**Carbohydrates -**

One of the various neutral organic compounds composed of carbon, hydrogen and oxygen (including starches and sugars) produced by plants and used to provide energy necessary for growth and other functions



# Key Terms

- Protein -** Nutrients that are made of amino acids and that maintain body tissues and supply energy to the body
- Osteoporosis -** A condition characterized by a calcium deficiency in the bone mass; the body pulls calcium from the bones, causing them to lose their density and possibly leading to fractures



# Key Terms

**Fiber -**

Course food made mostly of carbohydrates, such as bran or broccoli, that serves to stimulate and aid the movement of food through the digestive tract

**Diabetes -**

A disease in which the body is unable to use sugars properly

**Stimulant -**

Nutrients that occur naturally in plant and animal tissue and are required for proper function of the body



# Introduction

A healthy lifestyle includes good nutrition. Your body will not function properly without the right nutrients.

A balanced diet helps maintain proper weight and lower risk of disease.





# Introduction

Eating on the run too often can affect your nutrition and weight. You may consume **too many fats** and **too few vegetables and fruits**, leaving you deficient in nutrients.

Eating balanced meals, even on the run:

- contributes to proper weight
- provides energy for physical activity
- supplies nutrients for good health.





# Introduction

Although too many fats can be bad for you, your body **needs** a certain amount of fat from the foods you eat.

Many necessary vitamins are fat-soluble only; meaning that without fat, these vitamins cannot be absorbed by the body.



# Balancing Calories

You must eat to fuel your body. The more active you are, the more fuel you need. Even remaining very still, your body uses **calories** for basic body functions. You do not have control over these functions.

For basic functions, some people use more calories, and some use less. Those who use more are said to have a high **metabolism**.



# Balancing Calories

Your body uses calories in everything you do. Unlike your basic functions, you can control how many calories you voluntarily use.



- You use more calories walking than watching TV.
- You use more calories walking fast than walking slowly.

The more effort you put in, the more calories you burn.



# Balancing Calories

When your body uses the same amount of calories as you eat daily, your weight remains the same.

If you eat **more** calories than your body uses, you **gain** weight.

If you eat **less** calories than your body uses, you **lose** weight.

It's a balance between calories eaten and calories used.



# Balancing Calories

Karen has gained 10 pounds in the past year, mainly because she is making some poor food choices and skipping regular exercise.

Compare her lunch with her friend Andrea's choice:



# Balancing Calories



<u>Karen</u>	<u>Andrea</u>
¼ Lb. Plain double Hamburger	Salad with Grilled Chicken
Mayonnaise	Light Italian Dressing
French Fries	
Large Chocolate Shake	Small Soda





# Balancing Calories

Andrea: "Do you ever eat fruit or vegetables?"

Karen: "Sometimes; do you?"

Andrea: "I had a hamburger and fries yesterday; that's why I ordered a salad today."

If you eat fruit and vegetables more often than fried foods, it will help maintain your weight."





# Balancing Calories

Most people need only 2000-3000 calories per day.  
Karen had 75% of hers in just one meal.

Karen	Calories	Andrea	Calories
Hamburger (1/4 pounder)	540	Salad with grilled chicken	200
Mayonnaise	100	Lite dressing	50
French Fries	360		
Lrg Chocolate shake	540	Small soda	150
Total	1540	Total	400



# Balancing Calories



If she didn't want a salad, Karen could have still chosen a **lighter meal** similar to her original choices.

Original Choice	Calories	New Choice	Calories
Hamburger (1/4 pounder)	540	2 Ounce Hamburger	275
Mayonnaise	100	Lettuce & Tomato	10
French Fries	360	Ketchup & Mustard	23
Large Chocolate shake	540	Regular Size French Fries	220
		Small Chocolate shake	330
Total	<b>1540</b>	Total	<b>858</b>



# Balancing Calories



## Calories of Some Common Foods

Tomato (medium)	25	Whole Milk (cup)	150	Egg (large)	80
Green Pepper (medium)	20	Wheat Bread (slice)	65	Ice Cream (cup)	270
Cheese Pizza (slice)	290	Potato (medium)	45	Apple (medium)	80



# Balancing Calories

If Karen really wants to lose weight, she should have a salad, work to reduce calorie intake and get more exercise. (Tennis burns three times as many calories as watching TV.)

“Eat sensibly. Exercise. Lose weight.”





# The Importance of a Proper Diet to Your Health

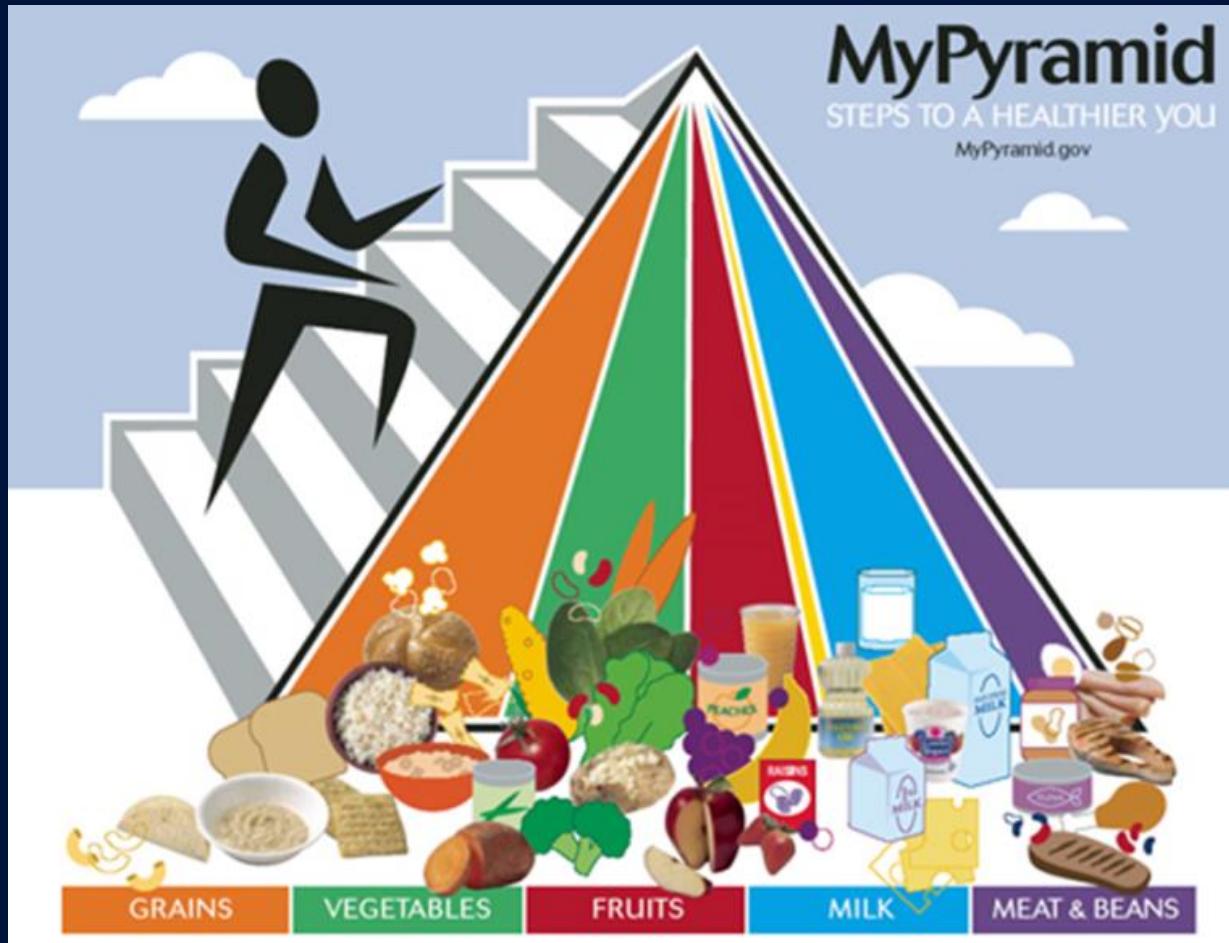
What you eat to get calories is as important as the amount you eat. If you eat like Karen, you give your body too much fat, cholesterol, salt and sugar – which causes health problems to start when you are young.



At your next physical, ask the doctor about your cholesterol, blood pressure and blood sugars... you may be surprised.



# What Should You Eat?



The Food Guide Pyramid indicates daily servings of 6 food groups to get the proper nutrients for your body.



# What Should You Eat?

If you follow the guidelines, you will get the vitamins and minerals the body needs; and enough carbohydrates, protein, and fat for energy.

If not, you increase your risk of disease. For example, lack of calcium can lead to osteoporosis.



# What Should You Eat?

Your body also needs **fiber** to aid digestion and prevent cholesterol, fats and toxic minerals from entering your blood stream.

It also helps control diabetes by balancing blood sugar levels.



# What Should You Eat?

You find fiber in:

- Raw or lightly cooked vegetables
- Fresh fruit, nuts and beans
- Whole wheat or bran breads
- Cereals and crackers





# What Should You Eat?



Water is the final nutrient vital to keeping you alive. The body is more than 65 % water. Water lost must be replaced.

## Water:

- Aids digestion
- Carries vitamins and minerals through the body
- Is important for the removal of waste
- Regulates temperature



# What Should You Eat?



Water is the final nutrient vital to keeping you alive. The body is more than 65 % water. Water lost must be replaced.

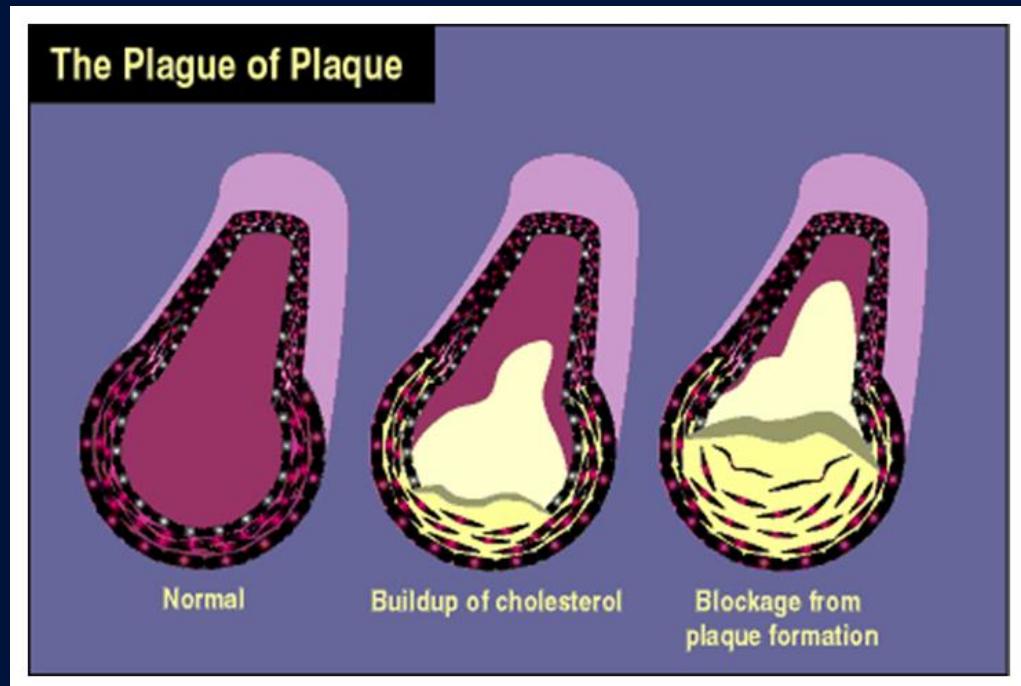
Drinking five to six glasses a day is recommended  
– except on days when you exercise – then you  
should drink more!



# Eating in Moderation

Your body needs fat, but too much is harmful.

It forms plaque in artery walls leading to high blood pressure and an increased risk of heart disease.





# Eating in Moderation

Too much salt forces the body to retain unnecessary water and may contribute to high blood pressure.

Many foods, especially prepackaged and restaurant foods, already have added salt – so don't add more!





# Eating in Moderation

Sugary foods like candy and soda supply “empty calories” and few, if any, nutrients.

Avoid them while dieting, and do not eat them as a replacement for nutritious foods. Many fruits and vegetables contain sugar, but they also contain nutrients.





# Eating in Moderation

Limit your intake of coffee, tea and sodas that contain caffeine, a **stimulant**.

Caffeine can temporarily reduce drowsiness but can:

- Upset your stomach
- Make you irritable
- Give you diarrhea





# Conclusion

Your body needs food for energy. The amount needed depends on how active you are, and how many calories your body uses for its basic functions.

You know you are getting the right amount when you maintain your ideal weight.



# Conclusion

Food supplies you with energy along with the nutrients to operate properly and lower the risk of disease.

Eating a healthy, balanced diet and exercising regularly increases your chances of a long, strong, and disease-free life.



# Questions?



Which one of these amount correctly identifies the appr number of fat cells an average weight adult has?

- A. 20 million
- B. 200 million
- C. 30 billion
- D. 200 billion