

Unit #2: Nutrition and Weight Control

T3: Nutrition

EQ:

What is needed by the body for daily and lifelong activity?



Nutrition

 the study of food and the ways the body uses food.

 Nutrients are substances in food that provide energy, help form body tissues, and are necessary for life and



Nutrition

- Six Classes of Nutrients
 - 1. Carbohydrates
 - 2. Fats
 - 3. Proteins
 - 4. Vitamins
 - 5. Minerals
 - 6. Water
- A Balanced Diet To be healthy, you need the right amount of nutrients from each class.

1 cup of broccoli: 27 Calories



1/2 cup of ice cream: 178 Calories



How Much Energy?

Flour tortilla with beans and rice: 218 Calories



1 apple: 81 Calories

1 cup of low-fat fruit yogurt: 231 Calories 3 slices of Cheddar cheese: 154 Calories

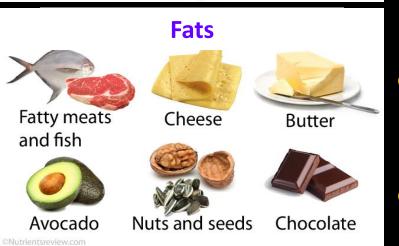


Discover Your Metabolic Type

Metabolism

- the sum of the chemical processes that take place in your body to keep you alive and active.
- Metabolism requires energy from carbohydrates, fats, and proteins.
- The energy in food is measured in Calories.







Metabolism

- Carbohydrates are energygiving nutrients that include <u>sugars</u>, <u>starches</u>, and <u>fiber</u>.
- Fats are the main form of energy storage in the body.
- Proteins are made of amino acids, which build and repair structures and regulate processes in the body.

Calories per Day

- The amount of calories your body burns at rest is called your Basal Metabolic Rate (BMR)
- It is important to know your **BMR** and **Daily Caloric Intake** when maintaining, losing, or gaining weight.
- BMR Formula
 - Weight (W) in kilograms: (lbs / 2.2) = kg
 - Height (H) in centimeters: (inches x 2.54) = cm
 - Age (A) in years

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Male\ BMR = 66.47 + (13.75 x W) + (5.0 x H) - (6.75 x A)
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Female BMR = 665.09 + (9.56 x W) + (1.84 x H) - (4.67 x A)

$$Male\ BMR = 66.47 + (13.75 \times W) + (5.0 \times H) - (6.75 \times A)$$

- Weight (W) in kilograms: (lbs / 2.2) = kg
- Height (H) in centimeters: (inches x 2.54) = cm
- Age (A) in years

Male: 180 lbs, 5'6", 16 yrs

66 inches

$$_{-}$$
 = **66.47** + (13.75 x **81.82**) + (5.0 x **167.64**) + (**16** x 6.75)

$$2,071.23 = 66.47 + (1,125.03) + (838.2) + (108)$$

Male BMR =
$$66.47 + (13.75 \times W) + (5.0 \times H) - (6.75 \times A)$$

<u>Female BMR</u> = $665.09 + (9.56 \times W) + (1.84 \times H) - (4.67 \times A)$