

Activity 1

Water and Phytochemicals

Water and the Human Body

Purpose: To explain how the body uses water.

Directions: Read each sentence below. Then complete each sentence by writing the correct word or words in the space provided to the left of each number.

- _____ 1. Years ago no one thought of ___?___ as a nutrient essential for a well-balanced diet. It is one of ___?___ nutrients needed to sustain life.

- _____ 2. Water makes up about ___?___ to ___?___ percent of a mature body weight, depending on age, gender, and body composition.

- _____ 3. A person can live about six weeks without food, but only a(n) ___?___ ___?___ without water.

- _____ 4. Water has a lot of work to do in the body. Within cells, water participates in ___?___ ___?___ to sustain the body, such as breaking down food. ___?___ is also necessary to ___?___ nutrients and ___?___ joints, tissues, and organs to protect them from shock.

- _____ 5. Water helps to filter out pollutants and toxins for ___?___ such as urine.

- _____ 6. Your body should keep a constant 98.6 degrees; therefore, your body works to ___?___ your ___?___.

- _____ 7. When you inhale, your body adds ___?___ to the air so your lungs can process it.

- _____ 8. Water is essential for ___?___ ___?___ - ___?___ so you can feel better and stronger and have more energy.

Activity 2**Water and Phytochemicals**

Comparing Water Requirements to Consumption

Purpose: To compare your own water requirement to what you actually consume.

Directions: Answer all questions honestly. You will also be asked to do some calculations for questions 9–11. Do the calculations according to the way the question is written. When answering the questions, take into consideration the information in the text.

- _____ 1. How much water do you drink in the morning when you wake up, in approximate ounces?
- _____ 2. How much water do you drink before breakfast, in approximate ounces and in addition to the previous question?
- _____ 3. How much water do you drink before lunch, in approximate ounces and in addition to the previous question(s)?
- _____ 4. How much water do you drink before dinner, in approximate ounces and in addition to the previous question(s)?
- _____
_____ 5. Do you carry a water bottle? If so, how many ounces of water does your bottle hold?
- _____ 6. How many times a day do you refill your water bottle?
- _____ 7. Do you drink caffeinated beverages on a regular basis? If so, do you drink more or less caffeine than you should?
- _____ 8. According to questions 1 through 7, calculate the amount of water you drink each day. How many ounces do you consume?
- _____ 9. What is the minimum amount of water you should consume each day?
[Your weight (in lbs.)] \div 2 = Number of ounces of water you should drink each day.
- _____ 10. Do you drink more or less water than you should? If you drink less, how much water are you short each day?
- _____ 11. What can you do each day to ensure your body receives the correct amount of water?

Activity 3

Water and Phytochemicals

Phytochemicals to the Rescue!

Purpose: To relate specific phytochemicals to their possible benefits and food sources.

Directions: Complete the chart below by filling in the shaded areas with the information found in your text.

| Phytochemical Category | Specific Phytochemical | Health Benefit | Food Sources |
|------------------------|------------------------|---|--|
| 1. Carotenoids | Beta-carotene | | <i>Fruits:</i> <i>Vegetables:</i> |
| 2. | Lycopene | May prevent cancer and heart disease. | |
| 3. Carotenoids | | May prevent blindness. | |
| 4. Flavonoids | | | <i>Fruits:</i> <i>Vegetables:</i> |
| 5. | Isoflavones | | |
| 6. | | Prevent cancer, lower blood pressure and cholesterol. | Garlic, onions, chives, leeks, and shallots. |
| 7. Saponins | | May lower cholesterol and prevent cancer. | |