

## Liquid Assets: The Value of Fluids for Your Health

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### Suggested Introduction

#### *What is ...*

- the most abundant compound in your body?
- utilized by every system in your body?
- the most important (but most forgotten) nutrient?

The correct answer to all three questions is **water**.

Some people are aware of the value of healthy food choices in disease control and prevention.

Some people have heard of the health benefits of increasing physical activity and getting plenty of rest.

But some people are unaware of the marvelous dividends they can receive from daily consumption of adequate amounts of water and other nutritious fluids.

### Educational Goals

Participants will be able to:

1. Discuss at least three vital functions of fluids in the human body.
2. Give examples of how fluids keep different parts of our bodies healthy.
3. Identify the common signs of dehydration and possible health problems of dehydration.
4. List reasons why older adults and children need to be more careful to meet their fluid needs.
5. Discuss the pros and cons of bottled water.
6. Make appropriate healthy choices in the types and amounts of fluids to consume daily.

### Suggested Program Preparation

1. Review this leader's guide and the fact sheet "Liquid Assets: The Value of Fluids to Your Health."
2. Review some of the websites and other resources listed, if possible.
3. Make sure you have enough copies of the fact sheet for each audience member.



4. Make a copy of the "Fluid Knowledge Quiz" and the "Fluids Crossword Puzzle" for each participant. Distribute the crossword puzzle and/or the fluid knowledge quiz to group members as they begin the lesson. This will test their current knowledge and stimulate interest in the role of fluids in their health. Review the answers to the quiz and/or puzzle after the presentation as an interactive activity to reinforce the lesson's content. Be sure to have pens or pencils on hand for those who may need one.
5. Review the section on Suggested Teaching Activities and gather visual aids or other materials needed to incorporate selected teaching activities into your program.

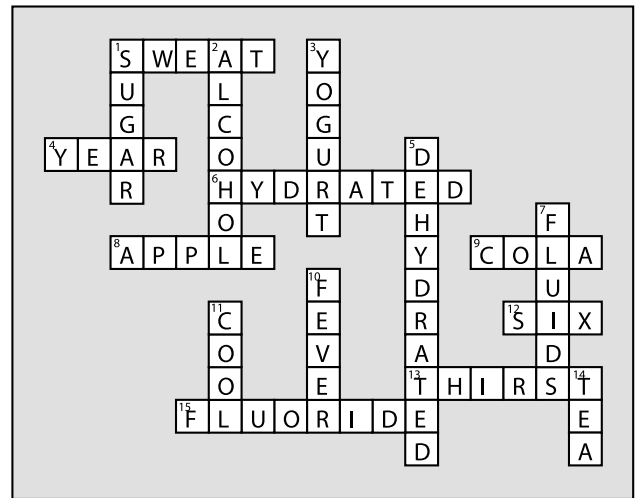
## Suggested Teaching Activities

- 1. Visual Aid.** In a 12-fluid-ounce bottle of soda, there are approximately 10 teaspoons of sugar. It depends on the brand and flavor. Clean and dry a 12-fluid-ounce transparent soda bottle and add 10 teaspoons of sugar to demonstrate the amount of sugar in regular soda. You can also provide examples of different brands or flavors and their amount of sugar. Read the soda label and divide the amount of sugar by 4 to obtain the number of teaspoons in the drink.
- 2. Bottled Water.** Distribute a bottle of water to each member of the group to drink during the lesson. Think of creative ways to refer to the bottled water as a teaching point. (Examples: Tell what amount of water it provides toward the daily fluid requirement. Propose a toast to good health.)
- 3. Nutrition Label.** Obtain bottles of water, 100 percent orange juice, 100 percent apple juice, a fruit drink, a sports drink, and soda. Let the group take turns reading the nutrition facts label and ingredient label on each bottle to discover the differences in sugar content and nutritive value of the various products.
- 4. Liquid Races.** Fasten a paper coffee filter to the top half of a glass to simulate a stomach — one for each fluid you choose to demonstrate. You may choose water, lemonade, fruit juice, pop, sports drink, etc. Be sure to use the same amount of fluid for each. Each liquid should also be the same temperature — hot or warm liquids flow through faster than cool liquids. How quickly different fluids are absorbed from the stomach is illustrated by how quickly the fluids pass through the filter. During the “liquid races,” time each one to see which liquid is the winner and which are the losers when your body is thirsty. The water is a clear winner!

### Key for Fluid Knowledge Quiz

- |        |         |
|--------|---------|
| 1. No  | 8. No   |
| 2. Yes | 9. No   |
| 3. No  | 10. Yes |
| 4. Yes | 11. Yes |
| 5. Yes | 12. Yes |
| 6. No  | 13. Yes |
| 7. Yes | 14. Yes |

## Fluids Crossword Puzzle



## Helpful Web Sites

[www.bottledwater.org](http://www.bottledwater.org)

<https://bottledwater.org/hydration-calculator/>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6723611/>

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Thanks to the original author, Barbara L. Ames, retired family and consumer sciences agent.

## Reviewers

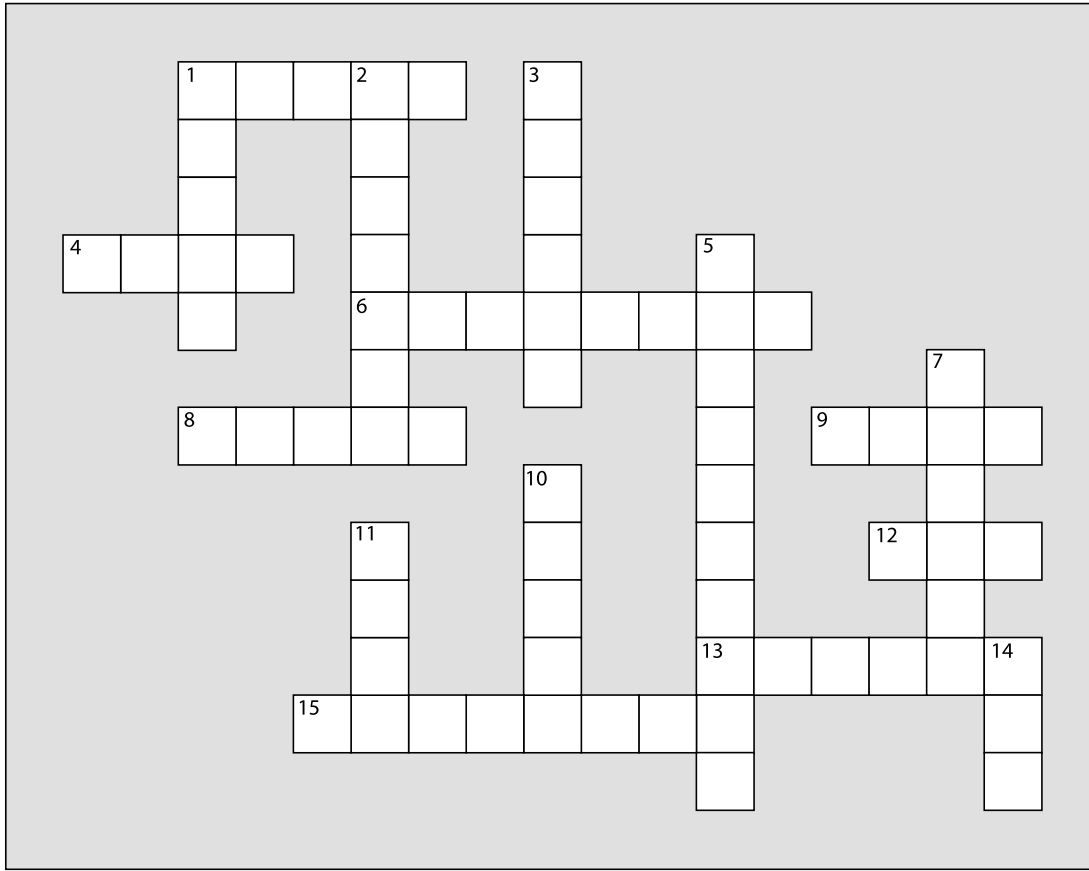
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# Fluids Crossword Puzzle



## Across

1. Muscle work of any kind causes the body to lose water through \_\_\_\_\_.
4. With every passing \_\_\_\_\_ people have a greater risk of fluid problems.
6. Water remains the best drink for keeping humans \_\_\_\_\_.
8. Many fruits increase fluid intake. An example of one kind of fruit is an \_\_\_\_\_.
9. Type of drink high in caffeine.
12. Minimum cups of fluid needed each day by most older adults.
13. Not a good early indicator of fluids needs in older adults.
15. Often added to tap water to promote dental health.

## Down

1. Drinks containing \_\_\_\_\_ pull body fluids from other parts of the body into the stomach and intestine.
2. Beverage that actually increases fluid loss.
3. This dairy food item is a good source of calcium and fluid.
5. Weakness, difficulty breathing with exercise, and increased pulse rates may mean you are \_\_\_\_\_.
7. Lack of \_\_\_\_\_ is one of the most frequent reasons people over 65 years of age go to the hospital.
10. More fluid is needed when one has a \_\_\_\_\_.
11. \_\_\_\_\_ water absorbs more readily than warm, hot, or ice water.
14. Beverage containing some caffeine.

## Fluid knowledge quiz

Read each statement and mark if you agree (Yes) or disagree (No).

- | Yes                      | No                       |   |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | Beverages with caffeine, such as coffee or colas, are better choices for increasing fluid intake than water or juice. |
| <input type="checkbox"/> | <input type="checkbox"/> | Foods such as gelatin or ice cream can be counted toward your total daily fluid intake.                               |
| <input type="checkbox"/> | <input type="checkbox"/> | A good early indicator of needing to increase fluid intake is thirst.   |
| <input type="checkbox"/> | <input type="checkbox"/> | Drinking plenty of fluids helps medications work more effectively in your body.                                       |
| <input type="checkbox"/> | <input type="checkbox"/> | Older adults are at higher risk than younger adults of developing dehydration.  |
| <input type="checkbox"/> | <input type="checkbox"/> | Drinking plenty of nutritious fluids helps keep skin healthy and moist.   |
| <input type="checkbox"/> | <input type="checkbox"/> | Since people lose small amounts of electrolytes with sweat, most people should use sports drinks                      |
| <input type="checkbox"/> | <input type="checkbox"/> | Bottlers are required to put manufacturing dates on their bottled water products.                                     |
| <input type="checkbox"/> | <input type="checkbox"/> | People lose ½ to 1 liter of water every day just by breathing.  |
| <input type="checkbox"/> | <input type="checkbox"/> | Helping to maintain blood volume is a function of fluids in the body.   |
| <input type="checkbox"/> | <input type="checkbox"/> | When you feel hungry, your body is often only dehydrated.   |
| <input type="checkbox"/> | <input type="checkbox"/> | Fatigue, dizziness, and a headache are all signs of dehydration.  |
| <input type="checkbox"/> | <input type="checkbox"/> | Fluids in the body help regulate body temperature.  |

## Information Resources

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Lorenzo, I., Serra-Prat, M., & Yébenes, J. C. (2019). The Role of Water Homeostasis in Muscle Function and Frailty: A Review. *Nutrients*, 11(8), 1857. <https://doi.org/10.3390/nu11081857>

Mayo Clinic. (2020, October 14). Water: How much should you drink every day? Mayo Clinic. <https://www.mayoclinic.org/healthy-lifestyle/nutrition-and-healthy-eating/in-depth/water/art-20044256>

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# Participant Survey for Liquid Assets: The Value of Fluids to Your Health

Please take a few minutes to help us by answering the following questions.

Overall, I learned more about fluids: (Circle one)

No                      Yes, some                      Yes, a lot

Please specify what you learned that you did not know or that surprised you:

How often do you think you will use this information? (Circle one)

Never                      Once a year                      Once a month                      Once a week                      Daily

How important is this information to you? (Circle one)

Not at all                      Somewhat                      Very

After today, how often will you drink the proper amount of fluids each day? (Circle one)

Never                      Often                      Always

Before today, how often did you drink the proper amount of fluids each day? (Circle one)

Never                      Often                      Always

Please write any additional comments here:

Thank you for your time!

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