

Hydration: Half Empty or Topped Up?

Since the human body is 60% water, water is one of our key nutrients. That's why it's so important to replenish fluids or to stay hydrated to keep your body functioning properly. Here's why your water supply should be topped up.

Water: for the Body and Mind

The water present in beverages and foods travels to every part of your body to perform important tasks. Here are examples of how water works in the body.

- **Cells:** *the smallest part of any living being*
Cells depend on water to deliver vital nutrients, such as carbohydrate, protein, fat, vitamins and minerals, from food or beverages. When the nutrients arrive, cells can then produce energy needed to fuel your busy days.
- **Tissues:** *collections of cells and the building blocks of organs*
Muscles and joints are tissues that team up with your bones to help you stand, sit, move and go about your daily life. Water helps cushion joints and keeps muscles working properly.
- **Organs:** *complex systems that have specific roles in the body*
Getting enough water from beverages and foods can satisfy fluid requirements for organs, including the brain, heart, liver and digestive tract. Water helps your brain concentrate, as well as process and recall information. Water also assists in maintenance of blood pressure and heart rate for proper heart function. Additionally, the kidneys rely on water to help filter and remove waste and excess nutrients from your body. Water is also present throughout the digestive tract—from saliva in the mouth to enzymes in the lower digestive tract—where it is essential for digesting, processing and using the foods we eat.

What If I Come up Short?

Dehydration can result if you do not have an adequate fluid supply. *Dehydration* is defined as a greater than 5% drop in water levels in the body, but losing even 2% of body water can affect performance. Fortunately, your body usually signals you when you're coming up short. Learn to pay attention to these signals—especially during vigorous physical activities, extreme high temperatures and illness.



Bubbly Iced Tea

- Feeling *thirsty* is a signal that your body needs more fluids so you don't become dehydrated.
- Signs of *mild dehydration* are persistent thirst, dry mouth and infrequent urination.
- Signals of *moderate dehydration* include very dry mouth, sunken eyes and deep-yellow to dark-brown urine.
- Symptoms of *severe dehydration* are cold hands and feet, lethargy, confusion and a rapid, weak pulse.

Dehydration can affect people of all ages. It is caused by losing too much fluid (e.g., sweating, vomiting or diarrhea), not getting enough water from foods and beverages or a combination of the two. While mild dehydration can *usually* be resolved by

drinking fluids, moderate and severe dehydration are serious health conditions that require immediate emergency treatment by a physician. If you have questions or concerns about dehydration, ask a healthcare professional for advice.

How Much Water is Right for You?

Fluid needs vary from person to person, depending on factors such as gender, age, physical activity levels and environmental conditions. However, experts have established adequate intake levels for people of different ages. (See chart on page 2.)

While these recommended amounts may seem like a lot, keep in mind that water in drinking water, other beverages and foods count toward the total. For most people who are not engaged in strenuous and/or prolonged physical activity, drinking when thirsty and eating a balanced diet that includes recommended amounts of vegetables and fruit is a good plan for staying hydrated.

Active children often ignore thirst cues when they are busy playing or participating in sports. They also sweat less and do not tolerate extreme temperatures as well as adults. Encourage them to drink about ½ cup of fluid every 15 to 20 minutes during participation in vigorous physical activities. *Older adults* are also advised to pay attention to getting enough water because thirst indicators become less reliable with age.

Choosing nutritious beverages, such as fat free milk, 100% vegetable and fruit juices, broth-based soups, as well as water-rich vegetables and fruits, in addition to drinking water, can help with daily fluid intake. For *athletes* and *very physically active people*, experts recommend drinking 1 cup of fluid 10-15 minutes before and at 10-15 minute intervals during exercise—whether thirsty or not. Replacing water lost through sweat helps regulate body temperature, which is one key for a safe workout.

Adequate Intakes for Total Water*

Group	Age	Recommended Intake/Day
Children	1-3 years	5-1/2 cups
Children	4-8 years	7 cups
Girls	9-13 years	9 cups
Boys	9-13 years	10 cups
Girls	14-18 years	10 cups
Boys	14-18 years	14 cups
Women	19+ years	11-1/2 cups
Men	19+ years	15-1/2 cups

*Includes drinking water, other beverages and water in foods

Staying Hydrated

Here are some tips for staying hydrated:

- Eat vegetables and fruits: they are nutritious and supply water.
- Drinking a beverage with meals and snacks helps you meet your fluid goals. Also, keep water at your desk or in your gym bag.
- Various beverages—including milk, fruit and vegetable juices, water, sugar free beverages and coffees, teas and soft drinks—contribute to total water intake.
- Caffeine does not cause dehydration. Studies find that the effect of caffeine on total body water is very short term, and there is no evidence that beverages containing caffeine dehydrate the body.
- Research shows that people drink more fluids when offered choices they enjoy, such as flavored beverages. Remember, though, that calories in beverages count as part of your daily calorie intake.
- Next time you reach for food shortly after eating, try drinking a glass of water instead. You may be thirsty, rather than hungry.

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 Are you thirsty for a delicious beverage option? We've selected a Healthy Living idea we think you will enjoy.

Bubbly Iced Tea

Prep: 5 min. **Makes:** 2 qt. or 8 servings, 1 cup each

- 1 qt. (4 cups) water
- 1 pkt. (makes 2 qt. drink) or 2 pkt. (makes 1 qt. drink each) CRYSTAL LIGHT Natural Lemon Flavor Iced Tea Mix*
- 1 bottle (1 L) diet carbonated lemon-lime beverage, chilled

ADD water to drink mix in large plastic or glass pitcher; stir until mix is dissolved.

STIR in carbonated beverage just before serving.

SERVE over ice.

*CRYSTAL LIGHT packets come in two sizes. Please note packet size before preparing.

Substitute: Substitute orange-flavored seltzer for the lemon-lime beverage.

Make Ahead: Mix water and drink mix as directed. Refrigerate until ready to serve. Add carbonated beverage just before serving.

Special Extra: Garnish with lemon slices and mint leaves

Nutrition Bonus: Quench your thirst with this calorie free iced tea!

Nutrition Information Per Serving: 0 calories, 0g total fat, 0g saturated fat, 0mg cholesterol, 15mg sodium, 0g carbohydrate, 0g dietary fiber, 0g sugars, 0g protein, 0%DV vitamin A, 0%DV vitamin C, 0%DV calcium, 0%DV iron.

Exchange: Free

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 Dietary Exchanges based on *Choose Your Foods: Exchange Lists for Diabetes* © 2008 by the American Diabetes Association and the American Dietetic Association.