



This is an exciting time in the field of nutrition. In January, the United States Department of Agriculture (USDA) and United States Department of Health and Human Services (USDHHS) released the Dietary Guidelines for Americans 2005 (see <http://www.healthierus.gov/dietaryguidelines/>). These guidelines are the most current science-based advice to promote health and reduce risk of chronic disease for Americans through eating habits and physical activity. Only three months later, in April, USDA launched MyPyramid, the new food guidance system. This includes the new Pyramid symbol, and an entire web-based system that helps you identify your personal dietary needs according to your age, gender, and physical activity level (see <http://www.mypyramid.gov/>). One change in the new food guidance system is a greater emphasis on milk and dairy products. Read this newsletter to find out why!

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NEP DIRECTOR

The UMass Extension Nutrition Education Program promotes a healthy diet, encourages the reduction of risk for foodborne illness and chronic disease, and emphasizes efficient management of food resources through research-based education. Nutrition educators and trained volunteers teach children and adults at risk and community agency staff through workshops, home study courses, conferences, newsletters, and mass media. **Food & Nutrition: News and Reviews** is published twice annually. It is designed to be used by agencies in their outreach work. We encourage you to copy and share articles. Please give credit to "UMass Extension," and let us know how you have used the newsletter. For further information and the location of the Extension office nearest you, contact the State Expanded Food and Nutrition Education Program at 1-800-622-3637.



United States Department of Agriculture cooperating. UMass Extension offers equal opportunity in programs and employment.

Water: Don't Get Caught Without It!

Water is a nutrient essential for human life. It makes up about 70 percent of our muscles and about 75 percent of our brains. Water is also necessary for everything our bodies do: absorbing and using nutrients from the foods we eat, safely removing toxins and waste, and even regulating our body's temperature. There is no system in the body that does not depend on water to function.

Dehydration

Water is easily lost through sweat, urine, vomit, diarrhea, and even breathing! If we don't replace what we lose, we can become dehydrated. Dehydration is the loss of both water and essential body salts, such as sodium, potassium, chloride, and magnesium, that are needed for normal body functions. When the body is dehydrated, it loses energy and muscles may start to cramp. It also can't cool itself, which can lead to heat exhaustion or heat stroke and, in severe cases, death.

Children and people over the age of 60 are particularly susceptible to dehydration. According to the Centers for Disease Control (CDC), dehydration caused by diarrhea is a primary cause of death in children worldwide, particularly in the first two years of life.

Keeping the body well hydrated is especially important during the summer months. During the summer, most people are more active. This physical activity, combined with hot weather, makes our bodies lose more fluids through perspiration. The more active you are, the more fluids you lose, and the

greater chance you may become dehydrated. Dehydration can be prevented by drinking the amount of water your body needs and taking other precautions when enjoying summer weather. It is also important to recognize the signs of dehydration and to know what to do if it occurs.

Signs and Symptoms

Surprisingly, you can't rely on thirst alone to tell you that you need fluids, especially if you are older. So how do you know if your body needs water? Thirst, dry lips, and dry mouth indicate mild dehydration. Early signs include headache, loss of appetite, fatigue, flushed skin, heat intolerance, and dark urine with a strong odor. Signs of severe dehydration include a rapid and weak pulse, cold hands and feet, difficulty swallowing, clumsiness, dim vision, and muscle spasms. Additional signs for children may include lack of tears when crying, no wet diapers for more than 3 hours, high fever, irritability, and sunken abdomen, eyes or cheeks.

For most of us, the easiest way to check for dehydration is to observe the color and quantity of urine. If you are not urinating much and your urine is dark, then you need to consume more fluids!

How much water do we need?

Recommendations vary, but most experts suggest drinking about 8-10 cups of water a day for good health.

HYDRATION TIPS FOR HEALTH

Hydration is extremely important. Most people do not get enough plain, pure water every day. Do you?

- ✓ **EVERYONE NEEDS AT LEAST 8-10 CUPS (64-80 oz)** of water per day. More active people need at least 10-12 cups (80-96 oz) of water per day.
- ✓ **DRINK WATER REGULARLY** throughout the day, not just when you are thirsty! Bring water bottles with you to work and when running errands. Always take a water bottle when you exercise. Keep water cold in your fridge to make it more appealing. Add a few drops of lemon juice to take out mineral tastes if they exist in your local water.
- ✓ **CHECK YOUR HYDRATION STATUS.** Clear, light colored urine means you are well hydrated.
- ✓ **SPORTS DRINKS** are really only needed for exercise lasting over 90 minutes. Remember that they contain calories.
- ✓ **SIGNS OF DEHYDRATION INCLUDE:** headache, fatigue, loss of appetite, heat intolerance, light-headedness, dry cough, dark urine with a strong odor, and possibly muscle cramps. A sore throat, dry cough and hoarse voice can all be signals that you need more fluid in your day, as well. Dehydration is cumulative – your body can't rehydrate itself. You need a consistent daily intake of water to stay healthy.

HOW MUCH EXTRA WATER FOR EXERCISE?

BEFORE EXERCISE: 16 oz

DURING EXERCISE: 4 to 8 oz every 20 minutes

AFTER EXERCISE: At least 24 ounces for each pound lost

THE BOTTOM LINE: JUST DRINK IT!

Adapted From: www.boisestate.edu/healthservices/wellness/info/Hydration.pdf

Hydration

MYTH BUSTERS QUIZ

Do you know the facts about hydration? Take this Hydration Myth-Busters Quiz to see if you know fact from fiction when it comes to wetting your whistle this summer.

Complete the quiz by checking T (true) or F (false) and see what you really know about hydration!

1. Listening to your thirst is the best way to tell when you need to replenish your fluids.
2. We should aim to drink at least 8 glasses of water a day.
3. Water helps our bodies regulate body temperature.
4. About 5% of our daily water intake comes from food.
5. Some beverages, such as drinks with caffeine or alcohol, actually cause the body to lose water.
6. Some fruits and vegetables are more than 90% water.
7. Sports drinks are the best way to keep our bodies hydrated.
8. Dehydration can result in extreme fatigue and mental confusion.
9. Children have a higher risk of dehydration than adults.
10. Our bodies have more water as we age.

TRUE	FALSE
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Answers: 1. FALSE (We don't always feel thirsty when we need more fluids.); 2. TRUE; 3. TRUE; 4. FALSE (About 20% of our water intake comes from food.); 5. TRUE; 6. TRUE; 7. FALSE (Drinking water is the best way to stay hydrated.); 8. TRUE; 9. TRUE; 10. FALSE (Our bodies have less water as we age.)

WATER: continued from page 1

There is no official requirement. Many factors affect our needs, such as our physical condition, activity level, environment, and foods. For example, eating a diet rich in fiber or protein can increase the need for water. On the other hand, foods such as vegetables and fruits provide water. The best way to stay hydrated is to always keep a bottle of water at your side. Do not wait until you are thirsty to drink water – keep drinking throughout the day. On hot humid days, an active person can become dehydrated in as little as 15 minutes!

Take extra precautions to avoid the harmful effects of dehydration during the summer. These include:

- Drink plenty of water, especially when working or playing in the sun.
- Schedule outdoor physical activities for the cooler parts of the day.
- Wear clothing that allows your body to sweat properly.

Treatment for Dehydration

For adults, most cases of mild dehydration can be corrected by drinking water. Many sports drinks on the market effectively restore both fluids and salt balance. For children, directions for giving food and fluids will differ according to the cause of dehydration, so it is important to consult your pediatrician.

For moderate dehydration, intravenous fluids may be required. Cases of serious dehydration should be treated as a medical emergency; hospitalization and intravenous fluids are necessary.

Enjoy your fluids, whether you drink them or eat them!

If drinking plain water doesn't sound exciting, there are many other ways to get fluids. Although drinking water is the best way, flavored or sparkling water, fruit juices, low-fat milk, and frozen juice pops, will do the trick. Sports drinks can be good for those who need to replace electrolytes lost due to excessive exercise and sports performance. Just go easy on beverages that are high in sugar or caffeine, such as sodas, coffee, or tea.

Another way to get your fluids is to eat your fruits and vegetables! Grapes, watermelon, and oranges are delicious and full of water – so are cucumbers, lettuce, and celery.

Water is great – it helps every cell in our bodies, keep things moving the way they should, and even cools us down when we need it. Be sure to keep your body healthy by drinking enough liquids, especially in the summer. Being aware and prepared is the easiest way to enjoy another beautiful summer without the fear of dehydration. If you have further questions about dehydration or any heat-related illnesses, be sure to contact your physician.

References:

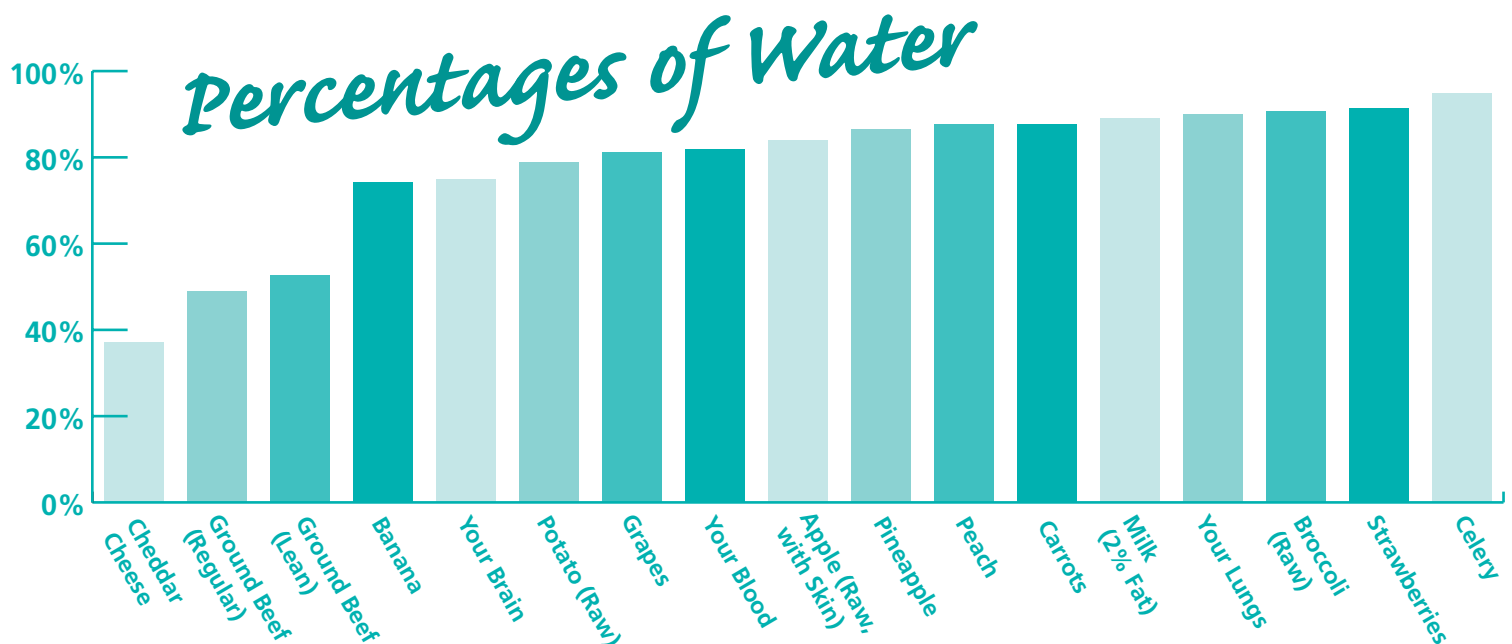
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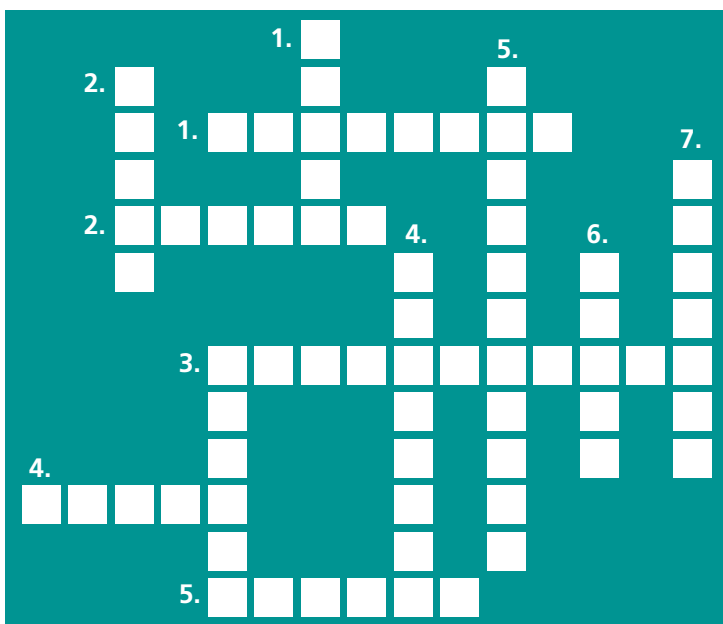
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TEST YOUR HYDRATION KNOWLEDGE WITH THIS CROSSWORD PUZZLE



ACROSS

1. A group of people who are especially hurt by dehydration.
2. The season when we are most likely to need more water.
3. Our body's water prevents this from getting too high in hot weather.
4. This nutrient is essential to life.
5. Another word for "poisons" water removes these from our bodies.

DOWN

1. If this is fluid is dark, you may be dehydrated.
2. If this is rapid and weak, you may be dehydrated.
3. You can't rely on this feeling to tell you that you need fluids.
4. Through this process we lose a lot of water from our lungs.
5. This is the loss of water and salts that our bodies need.
6. This group of foods contains a lot of water.
7. Infants should not go more than 3 hours without wet ones.

ANSWERS: Across: 1. CHILDREN, 2. SUMMER, 3. TEMPERATURE, 4. WATER, 5. TOXINS, Down: 1. URINE, 2. PULSE, 3. THIRST, 4. BREATHING, 5. DEHYDRATION, 6. FRUIT, 7. DIAPERS

Recipes

Berry SmoothiesServes 6

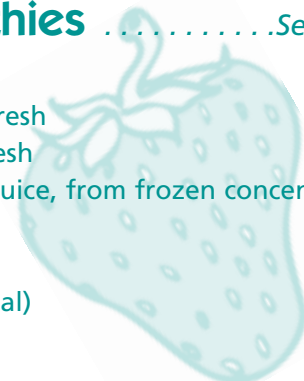
Ingredients:

- 1 cup strawberries, fresh
- 1 cup blueberries, fresh
- 1 cup 100% orange juice, from frozen concentrate
- 2 cups cold water
- 4 cups ice
- 2 tbsp. sugar (optional)

Directions:

Mix all ingredients in a blender until smooth.

Nutrition Facts: Serving size: 9 ounces; Calories: 80;
 Fruits and Vegetables: 1; Fat: 0 g; Fiber: 1.5 g



Homemade Sports Drink

Ingredients:

- 4 tbsps. sugar
- 1/4 tsp. salt
- 1/4 cup boiling water
- 1/2 cup orange juice or 2 tbsps. Lemon juice
- 3 3/4 cup cold water

Directions:

In the bottom of a pitcher or jar dissolve sugar and salt in hot water. Add juice and remaining water and chill.

Per 8-ounce serving: Carbohydrates: 12 grams,
 Sodium: 110 mg., Potassium: 30 mg.