Got Water? Stay Hydrated During the Hot Summer Months

How does your drink weigh in?

Summer is a great time to relax and enjoy the outdoors with family and friends. However, when the dog days of summer come around, dehydration becomes an issue of concern. Water is lost through sweating, breathing, metabolism, urination, and physical activity. As the weather gets warmer, it gets increasingly difficult to stay adequately hydrated. Dehydration occurs when we lose more fluid than we take in, and do not have enough fluid to perform normal body functions.

How does HIV/AIDS affect hydration?

Some antiretroviral medications may cause diarrhea or vomiting, which can disturb electrolyte balance. Electrolytes are essential for normal cell and organ function, specifically for muscle contraction and maintaining fluid balance. Electrolytes include: sodium, potassium, magnesium, calcium, phosphate, bicarbonate, and chloride.

A weak immune system can leave you more susceptible to a secondary infection (i.e. flu or cold) which can cause diarrhea, vomiting and fever. A fever may also significantly increase your fluid needs.

<table>
<thead>
<tr>
<th>What is considered adequate hydration?</th>
<th>Thirst is not a good indicator of hydration because by the time you become thirsty, dehydration has already set in. Other signs and symptoms of dehydration include:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>● Dry mouth and/or lips</td>
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<td></td>
<td>● Headache</td>
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<td>● Weakness, dizziness, or extreme fatigue</td>
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<td>● Concentrated urine (appears darker than normal)</td>
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<td>● Nausea</td>
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<td>● Muscle cramps</td>
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<td>● Decreased skin elasticity</td>
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<td>● Dry or sunken eyes</td>
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Fluid needs vary from person to person and depend on one’s environment, level of physical activity, and overall body composition.

A general rule of thumb to figure out your fluid needs is to divide your body weight by half. For example if you weigh 160lbs, you should drink 80 fl oz of fluid/day (6-12oz cups).

Rethink your drink

Drinking water throughout the day is the best way to hydrate. Flavored waters are good alternatives to juice drinks but be careful, as some have added sugar and a lot of calories. Consider jazzing up your water with lemon, lime or mint. This will not only save you calories, but it will also save you money. Other good alternatives are flavored or plain seltzer water, or unsweetened iced tea. Low fat/fat free dairy beverages are also good choices. Milk is 80-90% water and the remaining 10% consists of nutrients needed by the body, such as protein and calcium.

You should avoid caffeinated beverages and alcohol because they can further dehydrate you.

**Exercise and Hydration**

Exercise performance can be affected by even a slight fluid loss. To prevent dehydration during exercise we recommend drinking prior to, during, and post exercise routines. Follow the instructions below:

- Two to three hours prior to exercise: 12-20 oz
- Right before exercise: 6-12 oz
- Every 15-20 minutes during exercise: 6-12oz
- Immediately following: 8-16 oz

**Sources:**


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### How does your drink weigh in?

**Choosing a high sugar drink leads to excessive calorie intake and weight gain. It can also increase your blood sugar and triglyceride levels (a type of fat in your blood). Is your drink worth the calorie investment?**

<table>
<thead>
<tr>
<th>8 oz glass of water or flavored/plain seltzer</th>
<th>Calories = 0</th>
<th>Sugar = 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 oz glass of coconut water</td>
<td>Calories = 43</td>
<td>Sugar = 11g (~5 sugar cubes)</td>
</tr>
<tr>
<td>8 oz cup Vitamin Water</td>
<td>Calories = 50</td>
<td>Sugar = 13g (~6.5 sugar cubes)</td>
</tr>
<tr>
<td>8 oz cup of Gatorade</td>
<td>Calories = 50</td>
<td>Sugar = 14g (~7 sugar cubes)</td>
</tr>
<tr>
<td>8 oz cup of Powerade</td>
<td>Calories = 60</td>
<td>Sugar = 15g (~7.5 sugar cubes)</td>
</tr>
<tr>
<td>8 oz cup of soda</td>
<td>Calories = 97</td>
<td>Sugar = 27g (~14 sugar cubes)</td>
</tr>
<tr>
<td>8 oz cup of fruit juice</td>
<td>Calories = 107</td>
<td>Sugar = 25g (~13 sugar cubes)</td>
</tr>
</tbody>
</table>

**Remember when looking at the calories on the nutrition label you also have to consider serving sizes. For example, Vitamin Water contains 2.5 servings per 20-ounce bottle, so if you drink it all you are getting 125 calories and 32.5 grams of sugar.**

Also, keep in mind exercise drinks are not healthy alternatives to water. As you can see here, they contain added sugar and are only beneficial if you are participating in long periods of physical activity (> 60-90 minutes).

**Sources:**


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### Spice of the Quarter: Cinnamon

Cinnamon is a spice that comes from a small evergreen tree. It has a comforting aroma and sweet taste.

The cinnamon bark or quill is commonly ground into powder and used in American, Latino & Indian dishes.

Centuries ago, in Middle Eastern countries, cinnamon was viewed as a form of currency; and it was worth more than gold. Its popularity grew, and eventually it lost its monetary value.

For years, cinnamon has been used for medicinal purposes. Research has suggested that cinnamon may be useful for the prevention and treatment of certain diseases. Cinnamon contains polyphenolic polymers, which have been shown to increase sugar metabolism in fat cells. Although further research is needed, it is thought that specific forms of these compounds might help treat common diseases such as Type II Diabetes and Cardiovascular Disease.

Cinnamon contains Manganese. Manganese helps remove free radicals from the body. Free radicals are the result of a number of biological processes which are necessary to sustain life. Pollution, toxins, smoking, exercise and normal metabolism also create free radicals. They are chemically unstable and often damage other healthy cells in order to become stable. Two teaspoons of cinnamon contain 38% of the manganese, 10% of the fiber, 10% of the iron, and 6% of the calcium you need for one day.

**Cinnamon Roasted Almonds:**

This sweet and savory snack will satisfy any craving and is perfect for a mid-day pick me up.

**Ingredients (serves 16):**

- 1 egg white
- 4 cups whole almonds
- 1 teaspoon cold water
- 1/4 cup white sugar
- 1/4 teaspoon salt
- 1/2 teaspoon ground cinnamon

**Directions:**

1. Preheat oven to 250 degrees.
2. Spray a baking sheet with non-stick cooking spray.
3. Lightly beat the egg white; add water and beat until frothy but not stiff.
4. Add the nuts and stir until well coated.
5. Mix the sugar, salt, cinnamon and sprinkle over coated nuts.
6. Toss the nuts to ensure even distribution and evenly spread on baking tray.
7. Bake almonds until golden brown (~1hr), occasionally stirring.
8. Allow to cool, store nuts in an airtight container.

**Sources:**

Fruity Omelet to Kick Start Your Day

Want to use blueberries in a new way? Experiment with this blueberry omelet for an antioxidant and protein boost to start off your day.

Ingredients (Serves 1):
- 3 egg whites (or 1/2 cup egg beaters)
- 1/2 teaspoon olive oil
- 2 tablespoons low fat ricotta cheese
- 3 egg whites (or 1/2 cup egg beaters)
- Fresh Mint (for garnish)
- Salt and Pepper to taste

Directions:
1. Pour olive oil into a non-stick skillet and heat on high.
2. In a bowl, whisk egg whites with a small amount salt and pepper until they appear foamy.
3. Pour egg whites into hot skillet and lower heat. Gently scrape the egg whites from the bottom while tilting the pan towards and away from you. This ensures thorough cooking.
4. When the eggs appear to be set, top with blueberries (if using frozen, consider thawing them first otherwise your eggs will become runny).
5. Allow the eggs and blueberries to sit for one more minute on low heat. Then transfer to a plate.
6. Add ricotta cheese and garnish with mint.

Nutrition Facts:
- Calories: 157
- Total Fat: 2.2g
- Carbohydrate: 12g
- Fiber: 1.7g
- Protein: 17g
- Sodium: 246mg
- Calcium: 44g
- Potassium: 56g

Be Food Savvy & Safe this Summer!

It’s the time of year again for barbecues and picnics. When packing your picnic basket, bear in mind that these warm weather events are great opportunities for food borne bacteria to thrive. Here are some tips to avoid food borne illness this summer.

First and Foremost: Wash Your Hands!
You’ve heard it a million times before; it’s an essential step to take in order to reduce the risk of cross contamination or ingestion of bacteria when handling food. Always wash your hands and forearms with warm soapy water for at least 30 seconds before handling food. Be sure to wash thoroughly after handling raw meat.

Food Preparation
As always, wash your fruits and vegetables thoroughly.

Don’t cross contaminate! Be sure to keep raw meat, poultry, and seafood securely wrapped. This keeps their juices from contaminating prepared/cooked foods or foods that will be eaten raw, such as fruits and vegetables.

Health Benefits
Blueberries have long been recognized as an antioxidant powerhouse. The summer is a great time to buy blueberries, because they are in season, cheapest and taste the best! Try adding them to your breakfast cereal, yogurt or smoothie.

Health Benefits
Blueberries are considered a “Superfruit”. The term Superfruit refers to a fruit which has exceptional nutrient content and antioxidant quality. Blueberries supply nearly 1/3 of your needs per day of Vitamin C. Along with Vitamin C, they also contain Vitamin E, and Manganese. All three are antioxidants that neutralize free radical formation. Blueberries contain phytochemicals (anthocyanodins), which give the fruits their purple or blue hue. This pigment can also help prevent cellular damage from free radicals. Blueberries may also protect visual acuity, improve brain function, promote gastrointestinal integrity and health, protect against colon and ovarian cancer, and relieve diarrhea and constipation.

When to Buy
Blueberries are easiest to find from May through October, when they are in season. They can also be found frozen year round. Frozen berries have the same health benefits as their fresh counterparts because they are picked when ripe and frozen immediately.

How to Buy
When choosing blueberries in the market, look for ones that appear firm and have a similar color. A good strategy is to shake the container to see if the berries move. If they don’t, they may be too soft, which indicates that they may be damaged or moldy. Moldy berries may also be dull in color or have moisture in the container. To ensure that you are getting the most nutritional bang for your buck, choose only fully ripened berries as they contain the most antioxidants and the most flavor.

Sources:

Packing and Transportation
It’s important to keep your food safe from the refrigerator to the picnic table. Remember to keep cold food cold. Place cold food in a cooler with ice or frozen gel packs; it should be stored at 40°F or below to prevent bacterial growth.

Consider packing beverages in one cooler and perishable foods in another. That way, as people open the cooler to get drinks, the perishable foods won’t be exposed to warm outdoor temperatures.

Serving Food
Make sure that meat that is cooked first is served first. Meat and fish should be used before the internal temperature drops below 140 degrees, or within 2 hours of being cooked.

These are easy steps to take to ensure you will stay healthy this summer.

Sources:
- http://www.health.state.ny.us/environmental/i ndoors/food_safety/barbecue.htm