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FCS80018

Hydration in Hot Working Environments[1]

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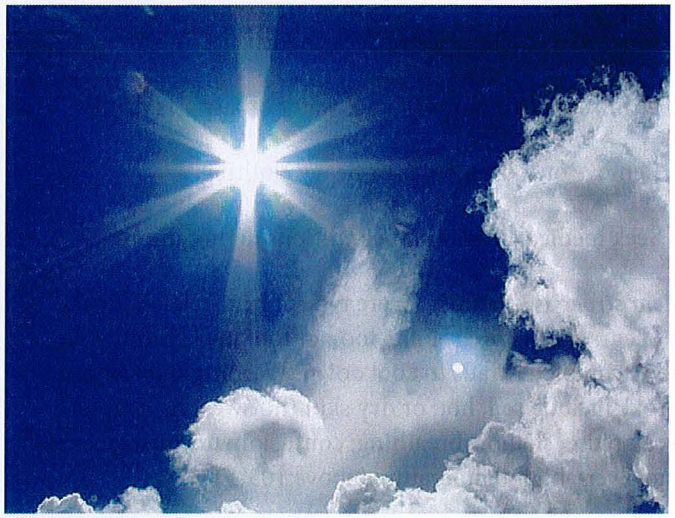
Summertime isn't the only time you should be concerned about drinking enough water to stay hydrated. Workers in construction, landscaping, laundry, factory, farm, or restaurant settings, among others, often are faced with hot working environments year-round. These conditions can increase the risk for developing heat-related illnesses, so staying well hydrated is very important. The information in this publication can help identify if you are at risk for heat-related illnesses and ways you can take action.

Did you know that water makes up more than half of your body weight? Every cell in your body needs water to function correctly. That's why it is important to stay hydrated. Your body loses water on a daily basis when you urinate, breathe, and sweat. These losses must be replaced in order to stay hydrated.

Why Do We Sweat?

Your body has different ways of making sure it doesn't overheat. One of the most obvious ways is by sweating. Sweat evaporates on your skin and helps to cool it down. Working in a hot environment can cause you to lose up to 2 liters of water per hour through sweat. That's almost 4 pounds of water weight! It's extremely important to stay hydrated as you work by replacing the water you have lost. If you lose too much water, you can't sweat as much and your body overheats. This can lead to dangerous heat-related illnesses.



Credits: Alana Sise (http://bit.ly/GN9JmD)

Heat-Related Illnesses

If your body is unable to cool off by sweating, you can develop a heat-related illness. Heat-related illnesses are very serious and can even lead to death. Heat-related illnesses include dehydration, heat exhaustion, and heat stroke. The quicker you can recognize and treat these conditions, the better. Descriptions of each of these heat-related conditions and tips for treating them are presented below.

Dehydration occurs when you lose too much water from your body because of sweating too much. It is corrected easily by drinking water and electrolyte solutions. Being well hydrated helps your body work better and prevents heat exhaustion. Signs of dehydration are thirst and dry mouth.

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- Drink at least 1 pint (2 cups) per hour to stay hydrated. Water or a sports drink is the best choice.

- Avoid caffeinated, carbonated, sugary (i.e., regular soda, sweetened tea, etc.), and alcoholic beverages. These beverages will cause you to urinate more, which can make you more dehydrated.

- Monitor the color of your urine. One sign of dehydration is dark-colored urine, ranging from dark yellow to orange or even darker. If you start drinking enough water, your urine should change to pale yellow.

- Drink plenty of water or other appropriate fluids often. By the time you feel thirsty, you are already dehydrated.

Resources

Centers for Disease Control and Prevention. (2011). *Emergency preparedness and response: Extreme heat.* Retrieved from http://emergency.cdc.gov/disasters/extremeheat

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Texas Heart Institute. (2011). *Hot weather exercise tips.* Retrieved from http://www.texasheart.org/hic/topics/hsmart/hydrate.cfm

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Table 1. Recommended Daily Water Intake

	Liters/day	Quarts/day	Cups/day
Men 14–18 years	3.3	3.5	14
Men 18+ years	3.7	~4	15.5
Women 14–18 years	2.3	~2.5	9.75
Women 18+ years	2.7	~3	11.5

Note. Total daily water intake from water, other beverages, and foods that are liquid at room temperature.