

HEALTH & WELLNESS

PROGRAMS FOR VOLUNTEER DEPARTMENTS

January 2012

NUTRITION NEWS

Health & Wellness
Series

Water: A Firefighter's Best Friend

References:

American Council on
Exercise, *Fit Facts: Healthy
Hydration*
http://www.acefitness.org/fitfacts/pdfs/fitfacts/itemid_173.pdf

Center for Disease Control
and Prevention, *Water:
Meeting your Daily Fluid
Needs*
<http://www.cdc.gov/nutrition/everyone/basics/water.html>

For as long as organized firefighting history has been recorded, water has been the firefighter's chosen weapon of controlling fire. One could easily assume that without adequate water, firefighters simply could not do their jobs. Ironically, this statement is also true regarding water's effect on our mental and our physical abilities as firefighters. Without adequate water intake, the health, wellbeing, and performance of a firefighter will suffer. The very nature of firefighting duties places firefighters at an increased risk of suffering from dehydration. Have you ever returned home from a long incident requiring the use of full PPE, or live fire training and realized that you haven't felt the need to urinate for hours; or, if you are able to use the bathroom, your urine is dark yellow? Were you tired, irritable, or clumsy during and/or following the incident or training? These are all classic *signs of dehydration*. Without adequate water, muscles become fatigued quickly, cognitive function is impaired and fine motor skills are diminished. This can be a recipe for poor performance or injury on any emergency incident. Aside from performance, water serves a variety of other functions in the human body. Sixty percent (60%) of our body's mass is comprised of water. It acts as a solvent and a transportation system in our bodies. It carries nutrients to cells and organs, and provides a medium in our central nervous system for electrical impulses to travel between cells (so we can move, think, see, taste, etc.). Water also serves to regulate body temperature through perspiration. It lubricates and cushions our joints, as well as provides a means for excretion of waste products.

So how much do you need?

Over the course of a day, your body loses around 6-12 ½ cups of water per day (50-100 ounces). This amount doesn't account for physical exercise. These numbers are based on water loss during routine respiration, perspiration, urination and defecation. Active individuals will lose more water on a daily basis due to heavier respiration and perspiration. With that said, general recommendations for daily water intake are as follows:

Women (ages 19-50): 9-11 cups (72-88 ounces)

Men (ages 19-50): 13-15 cups (104-120 ounces)

When do you need it?

Of course, it's a good idea to consume water throughout the entire day. Purchase a reusable water bottle that bears quantity markings. That way, you can keep up with how much you are actually consuming. If you plan on exercising, drink 16 ounces of water two to three hours beforehand. Consume an additional 8 ounces 30 minutes prior to exercise. For firefighters, the very act of fire suppression, vehicle extrication, or other strenuous emergency activity constitutes a form of physical exercise. We don't have the luxury of knowing when such "exercise" will take place; therefore, it is even more imperative that we consume at least the above recommended amounts of water throughout each day.

HEALTH & WELLNESS

PROGRAMS FOR VOLUNTEER DEPARTMENTS

January 2012

NUTRITION NEWS

Health & Wellness
Series

Water: A Firefighter's Best Friend



HYDRATE FOR STAYING POWER!

1		
2		If your urine color matches the colors 1, 2 or 3, you are properly hydrated.
3		Continue to consume fluids at the recommended amounts.
4		If your urine color is below the RED line, you are
5		<u>DEHYDRATED</u> and at risk for cramping and/or a heat illness!!
6		<u>YOU NEED TO DRINK MORE WATER!</u>
7		
8		