



Civil Air Patrol – USAF Auxiliary
La Crosse Composite Squadron
SAFETY NEWS



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HYDRATION

Your body depends on water for survival. Did you know that water makes up more than half of your body weight?

Every cell, tissue and organ in your body needs water to function correctly. For example, your body uses water to maintain its temperature, remove waste and lubricate joints. Water is essential for good health.

HOW DOES MY BODY LOSE WATER?

You lose water each day when you go to the bathroom, sweat, and even when you breathe. And, you lose water even faster when the weather is really hot, when you exercise, or if you have a fever. Vomiting and diarrhea can also lead to rapid fluid loss. If you don't replace the water you lose, you can become dehydrated.

HOW DO I KNOW IF I'M DEHYDRATED?

Symptoms of dehydration include:

- Little or no urine, or urine that is darker in color than usual
- Dry mouth
- Sleepiness or fatigue
- Extreme thirst
- Headache and/or confusion
- Feeling dizzy or lightheaded
- No tears when crying

Don't wait until you notice symptoms of dehydration to act. It can be hard to recognize when you're dehydrated, especially as you age. **Actively prevent dehydration by drinking plenty of water!**

WHAT SHOULD I DRINK?

Some beverages are better than others at preventing dehydration. Water is all you need if you are planning to be active for an hour or so. If you plan to exercise longer than an hour, or if you anticipate being out in the sun for more than a few hours, you may want to hydrate with a sports drink. These replace not only fluid, but also chemicals like sodium and potassium, which are lost through perspiration. Use caution with sports drinks, though, as many contain high amounts of sugar and caffeine. Rule of thumb - for every bottle of sports drink, drink an equal amount of water.

Alcoholic and caffeinated beverages, such as coffee, teas and colas, are not recommended for optimal hydration. These fluids tend to pull water from the body and worsen dehydration.

TOP 10 DEHYDRATION FACTS

1. Water composes 75-percent of all muscle tissue and 25-percent of fatty tissue.
2. In one hour of exercise, the body can lose more than a quart of water.
3. Dehydration leads to muscle fatigue, cramping, and loss of coordination.
4. A dehydrated body is unable to cool itself, leading to heat exhaustion and possibly heat stroke.
5. It is important to drink more than thirst demands and to continue to drink throughout the day.
6. It is important to drink even before signs of thirst appear. Thirst is a signal that your body is already on the way to dehydration.
7. To prevent dehydration, you must drink before, during, and after physical activity.
 - Drink 8 to 16 ounces of water at least one hour before the start of activity and an additional 8 to 16 ounces of fluid within 30 minutes after activity.
 - Drink about 8 ounces of fluid every 15 minutes or so during activity.
8. Both caffeine and alcohol can have a diuretic effect. You will need to drink more to compensate for this additional water loss.
9. Other water sources include fruits, juices, soups, and vegetables.
10. To check your hydration level, check the color of your urine. The color should be clear to light yellow.

IN PRAISE OF WATER

- 75% of Americans are chronically dehydrated. Lack of water is the #1 trigger of daytime fatigue.
- In 37% of Americans, the thirst mechanism is so weak that it is often mistaken for hunger.
- Even MILD dehydration will slow down one's metabolism as much as 3%.
- Research has indicated that 8-10 glasses of water a day could significantly ease back and joint pain for up to 80% of sufferers.
- A mere 2% drop in body water can trigger fuzzy short-term memory, trouble with basic math, and difficulty focusing.
- Drinking five 8 ounce glasses of water daily decreases the risk of colon cancer by 45%, plus it can slash the risk of breast cancer by 79%, and one is 50% less likely to develop bladder cancer.

HOW ABOUT ENERGY DRINKS?

Commercial products are marketed directly towards young people today as beneficial. Energy drinks do not all contain the same ingredients and they are not regulated. It's difficult to make risk generalizations about different types of energy drinks without knowing the specific ingredients and the concentration in each product. In addition, not only do we have to know how much of an ingredient is in each drink but how often are you drinking it, and what are some possible pre-existing medical conditions that may be affected or aggravated within the person drinking it. Remember, most of these energy drinks contain various amounts of caffeine and sugar.

Some of the known adverse effects of caffeine are:

- **Angina (chest pain) and ventricular arrhythmia**
- **Flushing and palpitations**
- **Agitation or irritability**
- **Delirium and hallucinations**
- **Headache and dizziness**
- **Insomnia**
- **Psychosis and restlessness**

When drinking energy drinks, it may be true that you will feel a burst of energy for a short period of time however, it is at the expense of increased heart rate, increased blood pressure and blood sugar...THEN...the crash. You are left feeling more tired and run-down than before. The long term health effects on the body have not been studied, but it is reasonable to conclude that these products are like any other stimulant.

IN SUMMARY

It is important to understand that the human body has a basic need for hydration, specifically water consumption. Although there are various products available that seem to quench thirst, they may not be providing for the body's fundamental needs.

Work load demands on the body require additional fluids, and rest may be required to allow the body to catch up with consumption. Just because there isn't thirst, doesn't mean that the body is properly hydrated. Balance work/play with appropriate rest periods.

Remember to make rest breaks mandatory and ensure that drinking water is available during all CAP activities.

Semper vigilans!

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