

## HYDRATION FACT SHEET

- Fact #1: Muscles are comprised of 60-70% water, while fat cells are about 25-30% water. Dehydration has a much greater negative affect on muscle cells than on fat cells. Therefore, **dehydration negatively effects strength and power very quickly while doing nothing to help lose fat.**
- Fact #2: On a daily average, a person loses 80 ounces (ten, 8-ounce glasses) of water through breathing, perspiration and other body processes. This does not take into account perspiration through exercise! Those ten glasses of water need to be replaced daily, in addition to any lost during exercise.
- Fact #3: Weight lost during practice or competition is sweat. **For each pound of weight lost through sweating, the body needs 2-3, 8-ounce glasses of water to replace the water lost.** If you lose five pounds, you need to drink 10-15 glasses of water to replenish the fluid lost. This is in addition to the 10, eight ounce glasses your body needs every day!
- Fact #4: **It takes 24-48 hours (1-2 days) to rehydrate your body after being dehydrated.** Being hydrated before competing is essential because **a 2% loss of body weight due to sweat loss is equal to a 15-20% loss of performance!** It is impossible to drink enough immediately before competition, or during competition, to make up for being dehydrated.
- Fact #5: Thirst is a poor indicator of the body's need for fluids. **Drinking enough to quench one's thirst replaces only about ½ to 2/3 of the body's water requirements.** If you wait until you are thirsty to drink, performance has already decreased by as much as 10%. **For a runner who can run a 7-minute mile that 10% performance loss means they will run a 7:42 mile!**
- Fact #6: An easy way to monitor hydration status is to check the color of the urine. **Clear, or pale, urine indicates adequate hydration while yellow urine indicates dehydration.** Expect yellow urine after a workout or when getting up in the morning. Begin drinking fluids immediately.

Fact #7: **Drinking cold water during exercise is preferable to room temperature water because it is available for use by the body faster.** Cold water also helps cool the body during exercise.

Fact #8: **Sports drinks consumed before or during exercise should be low in fructose and should not contain more than 50 calories per 8-ounce serving.** Fructose, and drinks with more than 50 calories per serving, put sugar quickly into the body too quickly which slows the absorption of water and can cause nausea, cramps or diarrhea. Pop and fruit juices are not recommended during exercise because of the high sugar content. 100% fruit juices are nutritious and can help replenish depleted energy reserves after exercise.

Fact #9: **Avoid carbonated and caffeinated beverages before and during exercise.** Carbonation can cause a feeling of fullness and stomach upset in some athletes. Caffeine is a diuretic which can cause dehydration.

**The American College of Sports Medicine and the American Dietetics Association make the following recommendations to help athletes stay hydrated and maintain peak performance:**

- 1) Drink between 8 & 10, 8-ounce glasses of water every day,
- 2) Drink at least 2, 8-ounces glasses of fluids two hours before practice or competition,
- 3) Drink 2, 8-ounce glasses of fluids 15 minutes before practice or competition,
- 4) Drink at least ½ glass of fluids every 15-20 minutes during practice,
- 5) After (practice or) competition, drink 3, 8-ounce glasses of water for each pound lost,
- 6) Sip beverages slowly rather than gulping them down.

**Sources:** American College of Sports Medicine Position Statement; “Eat to Fuel Your Performance,” Jeff Louck, RD, Iowa State University, 1997; “Taking it to the Mat: The Wrestler’s Guide to Optimal Performance,” The Center for Nutrition in Sport and Human Performance, University of Massachusetts, Amherst, MA, 1999; United Dairy Industry of Michigan.