

CU SPORTS MEDICINE  
**Hydration Tips for Exercise**

In normal temperatures, the average person should drink at least 8 glasses of non-caffeinated, non-alcoholic beverages daily. Warm weather and exercise place even higher demands on the body for fluid. If you start an exercise session well hydrated, you'll go a long way towards maintaining performance and personal safety. Water is a great beverage choice, but fruit juices, smoothies, seltzer waters, lemonade, soft drinks, milk, and herbal teas are also good. Remember that beer, coffee, and caffeinated soda pop draw fluid *out* of the body due to the effects of alcohol or caffeine.

Don't rely on thirst as an indicator of your body's need for fluids. By the time you're thirsty, you are already dehydrated! If your urine is dark and there is not much of it, you are dehydrated. You should increase your fluid intake.

- Drink fluids until your urine is pale yellow or clear and plentiful.
- In general, drink as much fluid as you can comfortably tolerate both before, during, and after exercise. Drinking small amounts of fluid frequently usually works better than drinking a large amount once or twice.
- **General guidelines for fluid intake are:**
  - ✓ Drink 2 to 3 cups      about 2 hours before exercise.
  - ✓ Drink 1 cup              5 to 10 minutes before exercise
  - ✓ Drink 1 cup              every 15 to 20 minutes during exercise,  
   especially in warm weather.
- *Cool* beverages are absorbed better than warm beverages.
- Studies have shown that the stomach can only empty about 1 quart of fluid per hour during exercise. If you drink more you could feel bloated.
- You'll often see athletes pouring cold water over their head during a race or competition. While this may provide some temporary relief, pouring enough cold fluid *into* the body is more effective in dealing with hot temperatures.



**What about sports drinks?**

It's a good idea to drink a beverage with 4 to 8% carbohydrate (and electrolytes) during *vigorous* physical activity. This is typically half the carbohydrate concentration of soft drinks. This helps with fluid absorption while providing energy. Sports drinks usually meet this standard. While many people consider the taste of sports drinks unpleasant during rest, they appreciate these lightly sweetened beverages during sports participation. Because some athletes tolerate various beverages or sports drinks differently, never experiment during a competition. Your training workouts are the time to try new and different options.

### **Do I have to buy commercially prepared sports drink?**

Sports drinks are convenient beverages that have been formulated to contain an ideal mix of carbohydrate, sodium, and water for sports participation. However, you can make your own inexpensive “sport drink”. Use any fruit juice or fruit drink and dilute it in half with water. Remember to read labels. Fructose as the primary source of sugar appears to be absorbed more slowly and may cause stomach distress in some people. Experiment to see what works for you. You can also find a sports drink recipe similar to commercial sports drinks in Nancy Clark’s *Sports Nutrition Guidebook*. Homemade beverages are definitely easier on your budget!

### **Do the fluid recommendations change after I’m through exercising?**

- Some athletes find it helpful to weigh themselves both before and after a workout. For every pound of weight you lose during a workout, drink 2.5 to 3 cups of fluid. Rehydration occurs faster in the presence of sodium (salt). It does not matter whether you get the sodium from a sports drink or food.
- To replace muscle glycogen stores and speed recovery from the workout, you should start replenishing carbohydrates within 15 minutes after exercise. You may not feel like eating so soon after a workout, but a sweetened beverage will often hit the spot. You’ll get more carbohydrate per ounce of fluid if you choose fruit juice, a juice drink, or other “typical beverage” instead of a sports drink.

### **What about heat cramps?**

Heat cramps are brief, often excruciating muscle contractions that can occur in athletes who sweat a lot, particularly when exercising in hot surroundings. Usually this happens because the person has lost large amount of sodium chloride through sweating and hasn’t consumed enough sodium when replacing fluid losses. Mild heat cramps can be treated by drinking 1 liter (about 1 quart) of water with about 1/4 to 1/2 teaspoon salt dissolved in it. Athletes with normal or low blood pressure shouldn’t restrict their sodium intake. Salt tablets should definitely be avoided because they irritate the stomach. Getting used to the heat appears to reduce the incidence of heat cramps. You can often prevent heat cramps by following the above suggestions for fluid intake, having adequate sodium in your diet, and gradually progressing your training.

