## Hydration

Water makes up about 60 percent of body weight, it is involved in almost every bodily process and is by far the most important aspect of sports nutrition. Your body cannot make or store water, so you must replace what you eliminate through urine and/or sweat. Everyone should drink at least two quarts (eight cups) of water each day, and athletes need more. Drink plenty of fluids before, during and after sports events to stay hydrated and avoid overheating. When you workout or compete, especially in hot weather, try to closely match the amount of fluid you drink with the amount you lose to sweat. Cool water is the best fluid to keep you hydrated during workouts or events lasting an hour or less. Sports drinks like Gatorade or Powerade are useful for longer events.

## Do's and Dont's for staying hydrated:

- Don't wait until you feel thirsty. You won't start feeling thirsty until you have already lost about 2 percent of your body weight. That is enough to hurt your performance and can affect your short term memory.
- Don't drink soda pop like Coke/Pepsi. Soda contains high amounts of sugar and carbonation which slow your body's ability to absorb the water.
- Don't drink beverages of any kind which contain caffeine. Caffeine is a natural diuretic, which means it makes you pee, it makes you sweat which keep you from retaining the water your body needs.
- > Do drink small amounts of water frequently, rather than large amounts less often.
- > Do drink cold beverages to cool your core body temperature and reduce sweating.
- Do pay attention to the amount and color of your urine. You should excrete a large volume that is nearly colorless. Small amounts or dark colored urine can indicate dehydration.

## What to drink:

While maintaining hydration is a primary goal, fluids containing an appropriate carbohydrate concentration will not harm water delivery and may enhance endurance performance. Carbohydrates are the primary fuel for muscular work at high intensities. The longer the exercise continues past one hour, the more likely it is that blood glucose will be used to help supply energy for muscle contraction. Thus the beverage you drink should contain an appropriate amount of carbohydrates. ACSM guidelines recommend that the beverage contain about 4-8% carbohydrate and the delivery rate be 30-60 grams of carbohydrate per hour during endurance exercise lasting longer than one hour.

One of the biggest comments they make in ads for Gatorade is that it replaces "important electrolytes." Sodium is the main electrolyte in sports drinks. Drinks which contain sodium do 2 major things. It improves the taste, and helps maintain the athlete's drive for thirst. Thus, the athlete may drink more fluid and stay better hydrated during exercise when the beverage contains a small amount of sodium. For exercise lasting longer than 4-5 hours, drinking a beverage containing sodium helps offset sodium loss in sweat. In addition, the osmotic pressure exerted by sodium helps maintain blood volume, especially during prolonged endurance or ultra-endurance exercise.

Beverages like Gatorade and Powerade contain sodium which is good, but they contain about 2 times the amount of the recommended carbohydrates and high doses of sugar. Thus it is recommended that you mix those beverages with water about 50/50. That way you are getting the carbohydrates and sodium that are needed for lengthy play, without impeding your bodies ability to absorb the liquid into the system in a timely manner.

- Your best plan for hydration is to plan ahead. Purchase a large water thermos/bottle and your favorite drinks ahead of time. Mix them together with water and ice and carry that to the park with you. If the average person is supposed to consume 64 ounces of water per day, just sitting around you should take at least that much if not twice that much with you if you are going to be playing in a tournament that lasts all day long. Don't wait until the middle of the game to go to the concession stand.
- Beverage companies are now offering a wide variety of sports drinks which provide the needed electrolytes, provide a good taste so that athletes will drink them but provide far less of the sugars which made them a bad choice. However, their taste is derived from artificial sweeteners rather than natural sugars which can cause side effects in large quantities. So it is still better to plan ahead and just water down the older varieties of drinks with natural sugars, but if you are in a pinch, look for the newer varieties when grabbing them on the go.