The hot summer months and sticky humid weather make hydration an important factor for any athlete, especially those who are outdoors for an extended period of time. Soccer players must be aware of their fluid needs, as failure to replace losses that occur via sweat can lead to muscle cramps, fatigue, headache, nausea, and injury. In one hour of endurance activity, the average soccer player sweats out 1 liter of fluid and up to a teaspoon of sodium along with other electrolytes such as potassium and magnesium. For every 2% of body weight lost due to dehydration (this can equate to as little as 2 pounds), factors such as speed, agility, and endurance decrease by 3-5%. For this reason, athletes must know how to replace these losses during games to optimize performance on the field.

Quick Tips for Hydrating

* Aim for 16-20 oz water 2-3 hours prior to exercise along with an additional 8oz 10-20 minutes beforehand
* Drink on somewhat of a schedule to avoid dehydration: Aim for 6-8oz every 15-20 minutes
* Be sure to consume adequate fluids throughout the day in addition to before and after exercise to ensure that you remain hydrated
* Beverages containing electrolytes such as a sports drink (6-8% carbohydrate) are recommended for endurance activity lasting over one hour or during hot and humid weather
* It is possible to drink too much water or sports drinks: knowing your fluid needs will prevent you from overhydrating

Figuring out your fluid needs…

To see how much you need to drink without over or under hydrating, it is recommended to conduct a sweat test. Every athlete has a different sweat rate, which determines how you should replace fluids and electrolytes lost during exercise.

1. Weigh yourself before and after exercise (without clothes, socks, and shoes as these absorb sweat)
2. Take note of miscellaneous factors such as temperature, humidity, and duration of activity
3. Record how much fluid was taken in during exercise
4. Subtract your post exercise weight from your start weight

If the amount of weight lost equates to more than two percent, this means you are not hydrating adequately during exercise. If you are heavier than your start weight then you are overhydrating. The goal is to be as close to start weight as possible.
For each pound lost during exercise, you should consume an additional 16-24 oz of fluid as part of your hydration plan

- Overhydrating (if you weigh more after exercise) is dangerous and can lead to hypernatremia (low sodium levels) – try drinking less fluids if this is the case

- If you are drinking adequate fluids but not retaining them during exercise (signs include muscle cramps, dizziness, headache) then you may need additional electrolytes
- Endurance formulas (ie: Gatorade endurance) are designed to have double the amount of sodium and potassium without the extra sugar and are great for athletes who are prone to muscle cramping
- If you do not need the carbohydrate from a sports drinks (ie: activity less than one hour) or if you are a "salty sweater", try adding an electrolyte tablet (Gatorade electrolyte power, hammer electrolytes) to your water – this will help you hold onto fluids consumed

Keep in mind that your hydration needs may change as the weather or your activity level changes. Bottom line: hydrating properly will optimize performance no matter what!