A Hydration Key for Coaches and Parents

When participating in sport(s), it is extremely important to maintain proper fluid levels. It’s not the temperature that is the enemy, but rather the inability to acclimate our bodies to the temperature. Research indicates that you should drink more than it takes to satisfy your thirst. Since most of our body’s weight is water, it’s still one of the best fluid replacements. Being dehydrated by as little as 2% of your body weight can begin to increase fatigue, and reduce athletic performance, both mentally and physically, and increase your risk of Heat Illness. You’re also more likely to develop muscle cramps during your activity. However, when your body is hydrated and nourished, you have the capacity to tolerate longer and more intense exercise.

How can I keep my Athlete Hydrated?

• 80% of our water intake typically comes from beverage consumption, and the other 20% comes from foods we consume. This is important for your athlete to NOT skip a meal.

• Beverages that keep your athlete well hydrated include water, milk, and juices. For better absorption, it’s important to spread drinking beverages over the course of the day and not in short spurts that requires “Gulping”.

• The beverage of choice should be one that is a cool temperature, and tastes good.

How do I know if my Athlete is Dehydrated?

In knowing whether or not your athlete is hydrated assess their hydration status by checking their urine concentration (color) and volume (amount produced).

Your athletes’ urine color should be pale yellow or straw colored.

If your athletes’ urine color is a dark yellow and there’s not much of it, chances are that he/she is dehydrated.

A good reference is if the urine is “Lemonade” then one is hydrated!
If the urine is “Apple Juice” then one is dehydrated!
**What should my athlete drink DURING exercise?**

- If your athlete is exercising at a moderate intensity for less than an hour, water should be sufficient enough to maintain normal fluid balance.

- However, most youth practices and/or games go longer than 1 hour, so a sports drink will be beneficial.

- Sports drinks have three components that help replenish what is lost throughout physical activity. These components include fluids, electrolytes, and carbohydrates.

- Fluids help maintain water balance within one’s body. Electrolytes (Sodium and Potassium) help the body retain fluid and limit urine output. Carbohydrates provide glucose to the working muscles throughout the body.

Most sports drinks are formulated with 6-8% carbohydrates within the drink to promote fast absorption during physical activity.

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**What should my athlete consume AFTER exercise?**

Post physical activity consumption is important for all athletes! The general rule is that an athlete should consume 16 to 24 ounces of fluid for every pound of weight lost during exercise.

- 1 Pound Lost = 16 to 24 ounces to drink.
- 2 Pounds Lost = 32 to 48 ounces to drink
- 3 Pounds Lost = 48 to 72 ounces to drink.

Post game snacks and meals that contain salt can help replace sodium losses from sweat.

Muscles will recover more quickly when carbohydrates and protein are consumed post activity. The Carbohydrates are necessary to replace the depleted glycogen in the muscles. Glycogen is the energy that fuels the muscle. The Protein is necessary to replace amino acids that help repair muscles.

Post physical activity consumption can be done by either drinking or eating. The focus should be on carbohydrates, with protein added in. Chocolate Milk is a great post activity beverage as it contains both carbohydrates and protein, and can be found almost anywhere.
What happens if my athlete drinks too much?

Drinking too much water can lower the concentration of electrolytes in your athlete’s body. Hyponatremia is when the concentration of sodium in the body is too low. This can cause a variety of symptoms including, nausea, headache, fatigue, disorientation, and even more life threatening conditions such as seizures.

The stress of competition can result in a decrease in your athlete’s body to maintain a balance between salt intake and fluid output. This results in water overload.

General Hydration Guidelines for Exercise

These guidelines are to help parents, players, and coaches prevent dehydration and heat illness in our youth athletes.

<table>
<thead>
<tr>
<th>Time Line</th>
<th>Amount to drink</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Hours before Event</td>
<td>16 – 20oz of fluids</td>
</tr>
<tr>
<td>10 – 15 minutes before Event</td>
<td>8 – 12oz of fluids</td>
</tr>
<tr>
<td>During Exercise (activity less than 1 hour in length)</td>
<td>3 – 8oz of fluids every 15 – 20 minutes, depending on exercise intensity and environmental conditions</td>
</tr>
<tr>
<td>During Exercise (activity greater than 1 hour in length)</td>
<td>3 – 8oz of sports drink every 15 -20 minutes, depending on exercise intensity, duration, and environmental conditions</td>
</tr>
<tr>
<td>After exercise</td>
<td>16 – 24oz of fluids per every pound of body weight lost</td>
</tr>
</tbody>
</table>

It is important that your athlete does not skip a meal. Remember 80% of our water intake typically comes from beverage consumption, and the other 20% comes from foods we consume.

For more information or to schedule an appointment call:

(516)-747-8900

WINTHROP University Hospital