

## **Maryland State Youth Soccer Association**

### **Preventing Dehydration: Starts Right Here (II) / Be Aware!**

In our last article, we laid the foundation for better understanding dehydration and the many problems it can cause, especially for a young athlete. It is very clear that prevention is the key but before we look at those strategies, we have to understand what it is.

Dehydration, simply put, occurs when the body is losing more water than it is taking in. Seems easy to understand yet some statistics say

We usually associate heat with dehydration, because typically, the warmer you get, the more you should sweat. The more you sweat the more water you lose... But generally, our bodies do a great job at maintaining a “normal” core temperature by sweating.

Most kids are at risk for dehydration. ( I will spare you the science of why for now.) For children participating in sports, it can be even worse. Let’s start with the obvious. These are the ones you should be able to identify. The top four groups that you as coaches and parents may be exposed to are:

1. Kids who rarely exercise
2. Kids who are overweight / obese.
3. Have had a recent illness / nausea / diarrhea
4. Children that have had heat related illnesses before.

Some of the less obvious ones are:

1. Children on certain medications
2. Those who are very fit, or as I say, “beware the warrior”. These are the kids that can truly push themselves too hard and too far, especially if their body type has little fat to it.

Heat related conditions that our kids can experience include cramps, heat exhaustion and heat stroke; all which will be discussed at a later date.

But back to dehydration... so how do we know someone is dehydrated? The early signs are include dry mouth, reduced urination (or very dark urine), headaches, fatigue, or just being thirsty. (In moderate cases, these slightly different.) The affects are greatly increased in young athletes and can be a leading cause of injury. We used to think it was “cool” to see how much weight we could lose in a practice or game. Little did we know how much damage that can actually cause.

Here is an example. Take a 100 lb child (that seems to be an easy number to work with) and monitor their weight loss during a practice or game. This is what the numbers look like:

- 2% weight loss (or just 2 pounds) can affect their athletic ability.
- 3% (or just 3 pounds) will affect muscle endurance (fatigue faster).

- 4-6% weight loss will affect muscle strength.
- And more then 6% gets us into the dangerous range for cramps, exhaustion, and more.

So let me give you my top 5 ways to prevent dehydration in your young soccer players.

1. Keep Them Cool: Take frequent breaks, keep water handy, and find shady areas to rest and stretch. The cooler they stay, the longer they play.
2. Hydrate Them: Your kids should be drinking before, during and after games or practice (another topic for another time). *If you get thirsty, it is too late!*
3. Be Prepared: Heat Acclimation. Getting used to the heat can take about 2 weeks so ease into your practices if the temperature warrants it.
4. Stay Focused On Your High Risk Players. They are mentioned above.
5. Educate. Make the kids and parents aware of what they can be doing to help.

In the next article, we will address the drinking schedule; what to drink, how much, and when!

Here's to Your Health,

*Dr. Sok*

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