



Hydration for Hockey Players

An often overlooked area for coaches is whether or not their players are properly hydrated before, during and after practices and games. This matters because players who are dehydrated perform at lower levels and they do not recover as quickly. Proper hydration has a direct impact on performance.

At the International Coaches Conference during the IIHF World Championships in May, 2008, Dr. Lawrence Spreit presented research finding about hydration and offered suggestions to help your players.

The research centered on the science of hydration, carbohydrates and protein all of which are consumed during exercise. The most important fuel for athletes is carbohydrates which should be consumed as a regular part of an athlete's diet. They are the fuel for the engine. Athletes should eat 3-4 hours prior to competition and consume replacement carbos as soon as possible after practice/games.

Some sports drinks claim to offer combinations of carbohydrates, sodium, protein and electrolytes. Some of these products are actually quite beneficial to athletes and are great compliments to ordinary water

According to Dr. Spreit, the most beneficial sports drinks contain 6% carbohydrates, plus sodium and electrolytes. These drinks, for example Gatorade Endurance, are a mix of bitter and sweet flavor and as a result do not quench thirst thereby encouraging the athlete to drink more than might be consumed with plain water.

The research on hockey players was conducted by Dr. Spreit on an NHL team, a Canadian Junior team and several high school age teams. The results were very interesting and so as not to present too much science, I have listed the important findings below.

- The research indicated that 75% of high school players arrived at the rink partially dehydrated.
- Players lose as much as 1.5 liters of fluids during a game and goalies as much as 3 liters.
- Players lose on average 4 teaspoons of salt during games.
- Goalies lose as much as 3 liters of fluid per practice.
- 30% of properly hydrated players will become dehydrated during practice.

Hydration matters because it materially impacts performance. Just like your car engine will quite working efficiently when the coolant levels fall causing the engine to overheat, so to with athletes. Coaches need to educate their players and their parents about the importance of proper hydration. Here are some suggestions:

- Athletes of all ages need to drink plenty of water every day. They need to consume 600-700 ML prior to going on the ice.
- Water is good and a sports drink with the right additives is also recommended. An example is Gatorade Endurance. There are other products available that will work. The key is 6% carbohydrates.
- Make sure your players have plenty of fluids before and during practices/games. Once they get thirsty they are already getting dehydrated.
- Remind your players they need to drink lots of water while they are in school. The air in schools tends to be quite dry which helps to dehydrate them during the school day.
- Drinks containing protein are excellent after competition to help in the recovery process. Accelerade is a product with protein. Dr. Spreit indicates that chocolate milk is also an excellent post exercise drink to rehydrate an athlete and provide the needed protein required for recovery.

Drinks that are sold as energy drinks that contain stimulants like caffeine are quite detrimental to a player's performance and health. They do get an energy kick for a while but when the energy levels drop during the games/practices the athlete ends up at much lower levels. Drinks like Red Bull and AMP to name a couple are in this category. Soda drinks with caffeine are also a poor choice. Besides the caffeine and sugar they also

contain acids which cause the demineralization of teeth. Drinks with caffeine actually cause dehydration as the body reacts pulling fluids to deal with the caffeine. Soda drinks are not a good choice.

Coaches need to take some time at the pre-season meeting with your team parents to share this information with them and ask for their assistance in helping their children learn good habits regarding the liquids they consume.

When the players are in your control insist on good habits regarding hydration.

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