

HYDRATION

Proper hydration is one of the most important factors in maintaining peak athletic performance. Ensuring adequate hydration in athletes means looking at their entire day and week, not just focusing on the game or meet. Staying hydrated throughout the day will make restoring lost fluids easier and allow you to play harder and longer.

Pre-exercise

Approximately 2 hours prior to any exercise, quickly consume 2 cups of water. This will help get your body the fluid it needs and avoid that full belly feeling during exercise.

During exercise

The key point about hydrating during exercise is to drink at regular intervals. Our internal thirst sensors take awhile to kick in so it's best to drink a little bit every few minutes (two big sips every 15 minutes is a good goal) so you are providing your body with a steady stream of fluid.

Athletes should aim to drink 2 cups of fluid for every hour of exercise. In order to continue to fuel your body and replace used energy and electrolytes, a standard sports drink is the easiest option. The sports drink has carbohydrates, sodium and potassium which will help keep you going.

The temperature of the liquid matters, but only by athlete preference. There is conflicting evidence about temperature and increased performance, so the important thing is what will the athlete drink. If they prefer it cold or room temperature, it's best to provide them with it so they are more likely to drink it because having all the fluids available doesn't help if they aren't consumed!

Post-exercise

Immediately after exercise athletes should consume 2 cups of fluid and a snack to help with muscle recovery. The ideal post-exercise snack will have a combination of carbohydrates, sodium, potassium. A couple options are:

- 2 cups of a sports drink and a handful of pretzels or a few saltine crackers and peanut butter
- 2 cups of water and a cup of honeydew melon or cantaloupe and low-fat yogurt

After the athlete has consumed the initial 2 cups of fluid and the snack, they should aim to consume 1 cup of fluid every 15 minutes for the 3 hours after exercise.

This may seem like a lot, but your body has been working very hard and has lost more nutrients than you think. Keeping hydrated will help avoid the sluggish feeling after exercise and for days to come.

Drinking too little can have serious effects. Children are more susceptible to becoming overheating. Signs of dehydration include dark urine or decreased urination frequency. Young athletes should learn to monitor their urine color and consume additional fluid as needed.

Heat-Related Illness

Heat exhaustion and heatstroke are significant risks for children who are exercising, especially in the heat in the middle of the day. Heat exhaustion is less severe, and can be treated by cooling off the person. Heat stroke should be treated by calling 911.

Signs of heat exhaustion

- Weakness
- Cold, clammy skin
- Feeling faint
- Fatigue
- Nausea
- Weak pulse
- Dry skin, if severely dehydrated

Signs of heatstroke

- High body temperature
- Rapid pulse

Low Blood Sodium

- Headache
- Confusion
- Nausea
- Cramping
- Bloating stomach
- Swollen fingers and ankles
- Seizures
- Coma

Because sodium is lost in sweat, failing to replace sodium while replacing fluids can lead to low blood sodium. Signs of low blood sodium include:

Sources:

1. Advanced Sports Nutrition 2nd Edition, by Dan Benardot, PhD, RD, FACSM

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Allyson Hamacher, RD