Why is it so important to stay properly hydrated?

Whether you're a serious athlete or recreational exerciser, it's important to make sure you get the right amount of water before, during and after exercising. Water regulates your body temperature, lubricates joints and helps transport nutrients for energy and health. If you're not properly hydrated, your body will be unable to perform at its highest level, and you may experience fatigue, muscle cramps, dizziness or more serious symptoms.

How much water should I be drinking?

There are no set guidelines for water intake while exercising because everyone is different. Sweat rate, heat, humidity, exercise intensity and duration are just some of the factors that must be considered. A simple way to make sure you're staying properly hydrated is to check your urine. If your urine is consistently colorless or light yellow, you are most likely staying well hydrated. Dark yellow or amber-colored urine is a sign of dehydration.

The American Council on Fitness has suggested the following basic water intake guidelines for people doing moderate- to high-intensity exercise:

- Drink 17 to 20 ounces of water 2 to 3 hours before you start exercising
- Drink 8 ounces of water 20 to 30 minutes before you start exercising or during your warm-up
- Drink 7 to 10 ounces of water every 10 to 20 minutes during exercise
- Drink 8 ounces of water no more than 30 minutes after you exercise

To get a more specific measurement of how much water you should be drinking, you can measure your sweat loss. To do this, weigh yourself on a digital scale before and after you exercise on a few different days, and then average any weight loss. Any weight loss you experience is most likely from fluid loss and needs to be replaced with water. Record this number and use it as a guide for how much you need to be drinking while you exercise. Drink 16 to 24 ounces of water for every pound of body weight you lost after you exercised. (Helpful hint: a gallon weighs about 8 pounds, a quart weighs about 2 pounds, and a pint weighs about 1 pound.) This approach to estimating water needs is especially useful for high-performance athletes, such as people who run marathons.

What about sports drinks?

While you are exercising, water is the best drink for most people, most of the time. However, if you are exercising at a high intensity for more than an hour, you may want to chose a sports drink. The calories, potassium and other nutrients in sports drinks can help provide energy and electrolytes to help you perform for a longer period of time.

Choose sports drinks wisely, as they are often high in calories, sugar and sodium. Also check the serving size – 1 bottle may contain several servings. If you drink the entire bottle, you may need to double or even triple the amounts given on the Nutrition Facts Label. Some sports drinks contain caffeine. If you use a sports drink that contains caffeine, be careful not to get too much caffeine in your diet.

What are the signs of dehydration?

Dehydration happens when you lose more fluid than you drink. When your body doesn't have enough water, it can't work properly. Dehydration can range from mild to severe. The signs of dehydration can include:

- Dizziness or lightheadedness
- Nausea or vomiting
- Muscle cramps
- Dry mouth
- Sweating stops
- Heart palpitations

Signs of severe dehydration can include mental confusion, weakness and loss of consciousness. Seek medical attention immediately if you have any of these symptoms.

Severe dehydration combined with exercise can also lead to heat illness. Heat illness can occur when the body is dehydrated, which can compromise the body's ability to cool itself. There are 3 stages of heat illness: heat cramps, heat exhaustion and heatstroke. Symptoms of heat cramps include muscle spasms in the legs, abdomen and arms. Symptoms of heat exhaustion are more serious and can include feeling faint or weak, nausea, headache, rapid pulse and low blood pressure. The most serious heat-related illness is heatstroke, and symptoms can include high body temperature, rapid pulse, flushed skin, lack of sweating, rapid breathing and possibly even delirium, loss of consciousness or seizures. Seek rapid emergency medical attention if you experience any of these symptoms of heatstroke. Untreated heatstroke can lead to death.

What is hyponatremia?

Hyponatremia is rare, but it is something that athletes should be aware of. Hyponatremia is when there is too little sodium in the body. It can occur when athletes, particularly endurance athletes, drink too much water. When sodium levels in your body are too low, your cells begin to swell with water. This can cause your brain tissue to swell, putting pressure on your brain. It can also cause your lungs to fill with fluid. Symptoms of hyponatremia can include headache, vomiting and swelling of the hands and feet.

Just how much water is too much depends on your body and the kind of activity you are doing. Talk to your family doctor if you have questions about the right amount of water to drink while exercising.