

Hydration: The Importance of Water for Athletes



Inadequate water consumption can be physically harmful. Consider this. A loss of as little as 2% of your body weight due to sweating, can lead to a drop in blood volume. When this occurs, your heart works harder in order to move blood through the bloodstream. Pre-hydration and re-hydration are vital to maintaining cardiovascular health, proper body temperature and muscle function.

1. Drink plenty of water between exercise sessions.
2. Drink 2-3 cups of water about 2 hours before exercise.
3. Drink every 15 - 20 minutes during exercise.
4. Keep drinks cooler than air temperature & close at hand (a water bottle is ideal).
5. If you exercise for more than 60 minutes, you may benefit from a sports drink containing carbohydrate (not greater than 8% concentration).
6. Take 30-60 grams of carbohydrate per hour to delay fatigue & fuel muscle contractions.

Many athletes suffer from symptoms of dehydration without even knowing. You can dehydrate during competitive events, especially long ones, even when it's not particularly hot. You can't rely on feeling thirsty as your sign of dehydration as one of nature's dirty tricks is that exercise suppresses thirst. Some of the signs of dehydration are:

- **Dry or sticky mouth**
- **Thirst**
- **Headache**
- **Dizziness**
- **Cramps**
- **Excessive fatigue**

As a general rule, you should drink approximately 100 oz. of water throughout your day. Your goal is to keep your body hydrated all the time, not just before you train or compete. You can increase performance and delay fatigue or muscle pain by staying properly hydrated. Consider 'pre hydrating' by drinking 12-16 ounces of water 1-2 hours before exercising. To get an idea of just how much you need to drink, you should start weighing yourself before and after your workouts. Any weight decrease is probably due to water loss. If you have lost 2 or more pounds during your workout you should drink 24 ounces of water for each pound lost.

Another way to determine your state of hydration is by monitoring your morning and pre-exercise heart rate. Over the course of a few weeks, you will see a pattern. This information can be extremely helpful in determining your state of recovery. Days when your heart rate is elevated above your norm may indicate a lack of complete recovery, possibly due to dehydration.

In our sportsmassage clinic many athletes come to us complaining of cramps, especially in glutes, hamstrings and calf muscles. Our first question is “How much water do you drink every day?” Most athletes say they drink lots of water but when asked how much, they usually say “a couple of bottles a day and I never pass a water fountain without taking a drink.” Wrong answer! A couple of bottles of water would be about 40 oz. You probably drink an oz or two from a water bubbler.



The best way to assure that you are staying hydrated is to purchase a plastic water bottle. If the bottle holds 20 oz. then you know you need to re-fill that bottle at least 5 times each day...and maybe more when it is hot and humid.

Are you a salty Sweater??

Some athletes lose more sodium (salt) when they sweat. If this is true for you, then you need to pay attention to this and drink even more water than usual. You may also want to keep a replacement drink handy, such as Gatorade. Some of the signs of a salty sweater include: salt stains on your clothes, you cramp up easily, and you feel tired all the time. Ask yourself these question: How often have I experienced cramps? If your answer is “a lot” then you need to plan your fluid intake. Does my sweat taste salty? Again, if your answer is “yes” then this is another sign to plan well.

What about Sports Drinks?

Sports drinks can be helpful when you are exercising at a high intensity for 90 minutes or more. Fluids supplying 60 to 100 calories per 8 ounces helps to supply the needed calories required for continuous performance. But remember, water should be your first choice. Sport drinks, such as Gatorade, are replacement fluids and should not be used until you are well into your training or competition. Sport drinks are considered a food and must be digested. Water does not need to be digested so water is more readily available to your body.



A good replacement drink is comprised of 8 - 10% carbohydrate plus sodium and other nutrients. Do not use sport drinks with high concentrations of sugar.

So - under the Hydration section of your Worksheet, you should include:

your weight

How many oz. does your water bottle hold

What sport drink will you carry with you