

## Hydration Tips

**Fact** – A 5% drop in bodyweight during exercise due to dehydration can lead to a 30% drop in performance.

When you exercise a few simple processes start happening inside your body. Your heart rate increases and you burn more calories, your muscle tissue gets broken down leading to soreness the day after and, more obviously, we all sweat.

Sweating is your body's attempt to regulate its core temperature and the evaporation of moisture at the skin creates a cooling effect at the skin's surface.

So how does this affect your own performance during exercise?

Principally sweat is comprised of water, but it also contains several important minerals called electrolytes which your body uses to perform most of its natural functions. Your body is a fine tuned machine and the subtle balance of these minerals plays a vital role in the physiological performance of your body under the stress of exercise, in particular nerve and muscle function. Without adequate levels of electrolyte in your body it can lead to muscle weakness and muscle contractions (more commonly known as cramp).

There are three important areas of exercise nutrition – before, during and after. Getting your hydration right during all three will enable you to get the most out of a training session.

### Before



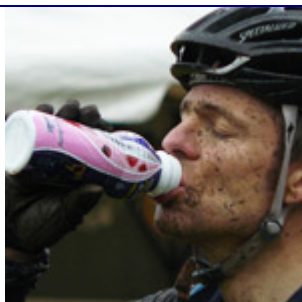
Keep a water bottle close by all day. Little and often is the key. Taking regular sips will help keep you hydrated throughout the day. You may not notice it so much, but even sitting at your desk, sleeping and walking around the office will cause some level of sweating. As a basic rule your urine should be clear or pale yellow. Staying well hydrated will also benefit other bodily functions, such as the digestion and absorption of food and its ultimate availability as energy during exercise.

Try to avoid eating and drinking a large amount of simple carbohydrate or sugary foods in one go. It may lead to a sugar rush in your blood stream, and ultimately a spike in your energy levels, which is often followed by a sugar low and impaired performance. Keep your energy levels topped up, without indulging in anything too sweet.

**During**

Drink a little regularly. About 125ml every 20 minutes. But don't worry as it's not an exact science. Body size, weather conditions and intensity of the session will all affect the amount that you sweat. Training provides a great opportunity to try different drinks.

In particular try sipping an isotonic sports drink. Isotonic means that the solution of water and minerals is roughly similar to that of your body. This makes it easy for your body to break it down, absorb it and use it quickly and efficiently. These drinks will also contain some of the electrolytes – sodium, potassium and calcium – which are lost naturally through sweating. Sports drinks will also contain some carbohydrates, which your body needs to replenish glycogen stores in your muscles. This is the most available source of energy during exercise, but regularly needs topping up because your body can only store a finite amount at one time.

**After**

Arguably the most important aspect of sports nutrition. Getting it right here will have the greatest affect on how good you feel the next day, and how quickly you are able to train again at the same level. Try to think of training as not being over until you have recovered. You don't get fitter during exercise. That bit actually breaks you down. Taking on the right food after exercise will help your body to energise, feed, rebuild and hydrate quickly.

A few important points to remember:

- Just because you have stopped doesn't mean that your body has. You will continue to sweat and burn calories for a long time after you finish exercising. It takes time for your body to return to its normal state and cool down. Drinking the right thing now, as soon as you finish exercising and whilst your muscles are warm and primed from exercise, means that your body will use the nutrients most effectively and send them straight to where they are required most;

- Your body needs more than an isotonic drink now. It still needs that fluid to rehydrate, but it also needs more carbohydrate to re-energise and protein to work on re-building your muscles which get broken down and suffer micro tears during exercise.
  
- Try drinking a milk-based drink, such as 'For Goodness Shakes!' after your training session. It may seem strange to turn to milk after exercise, but here's why:
  - o As a fluid it will stay in your system longer than water and won't leach out the nutrients you need;
  - o It naturally contains some of the electrolytes that your body needs to rehydrate;
  - o It contains both slow and fast acting proteins and essential amino acids to help repair the muscle damage;
  - o Your body knows what to do with milk – we've been drinking it since we were born;
  - o To keep your metabolism ticking over you need to feed it little and often, not starve it;
  - o Dehydration can cause nausea and discomfort because it slows down the flow of blood to the intestinal tract.