



*Haslemere Swimming Club Newsletter #1*

### **Hydration Advice for Swimmers**

With so much information at our disposal it makes it very hard to filter through the myth and get to the true facts you are after. Hopefully I can do a little of that for you here in this regular newsletter!

Nutrition, especially Sports, is a huge subject with many differing opinions. What to eat, how much, when, pre competition, during training. The list goes on...

Here, in my first newsletter for the club, I will iron out a few essentials about hydration that you can encourage your child or indeed yourself to follow, and hopefully the results will speak for themselves.

As you probably realise already, both diet and hydration play an essential role in many bodily processes at a normal everyday level. It is therefore of even more importance in the preparation, participation, and recovery from the stresses and strains of training and competition.

#### **So let's start with hydration**

I often see athletes describing feelings of fatigue and lethargy and they often put it down to their tough training schedule, may be increased mileage on the road or perhaps harder sessions in the pool. But when I ask them about their hydration status, it can often reveal that they just haven't been drinking enough.

Dehydration, in mild cases, causes fatigue, muscle cramping, and an overall poor level of physical performance. In its more advanced stages, dehydration will contribute to hyperthermia, which includes one or more of the heat-based illnesses, heat cramps, heat exhaustion and heat stroke.

Although in the water, swimming is a strenuous sport that can induce dehydration - especially when one is swimming for long periods of time. The problem experienced regularly by swimmers is that the amount of fluid lost during the training session is not visible as it is swept away by the gallons of chlorinated water they find themselves in, and as a result; rehydration can often be over looked.

However, solely relying on thirst as an indicator is generally unreliable as there is time lag between being dehydrated and then feeling thirsty.

So let's look at trying to find out how much your or your child needs to drink.

We are currently advised to drink between 1.5 to 2 litres of water per day, however as discussed above; a highly exercised swimmer/athlete will need to replace considerably more, due to the fluid losses sustained during training and competition.

To find out what you, as an individual needs to consume, the best way, although a little crude, is to firstly check the colour of your urine. See chart below.

Hydration Urine Colour Chart

1		
2		If your urine matches the colours 1,2 or 3, you are properly hydrated.
3		Continue to consume fluids at the recommended amounts.
4		If your urine colour is below the RED line, you are DEHYDRATED.
5		You are now at risk for cramping and/or heat illness
6		YOU NEED TO DRINK MORE WATER
7		
8		

Secondly, it is advisable, where facilities allow, to weigh yourself before a training session and then immediately after. The difference in weight will give you an idea of how much fluid you have lost through training.

1kg weight loss = 1 litre of water to replenish

Through the two tests above it should give you an idea of how much fluid you need to consume. Test one, aim to have urine the colour of 1, 2 and 3 throughout the day. Test 2 will give you a good idea of how much water you need to consume during training to maintain colours 1, 2 and 3 post training.

STILL WITH ME SO FAR!

Now let's look at the best ways of getting hydrated

Remember these are just guidelines and will not cover all scenarios.

When aiming to hydrate you need to look at your objective. Is it to just hydrate? Are you fueling yourself for training or an event? Or are you trying to recover?

### **1. General Hydration**

For short duration bouts of exercise (less than an hour) water is a good replacement, but for longer bouts, and if you are training more than once a day, you may have to add something to it. Adding a small amount of salt (half a teaspoon per litre) will not only help the water stay in your body, it will stimulate the thirst mechanism to encourage you to drink more.

### **2. Hydration + Fuel for Exercise**

If you are looking to fuel as well as hydrate then your approach needs to be a little different. There are many sports drinks on the market all claiming to make improvements to your performance, but do they work and are they necessary.

The answer to that is YES, but it depends on the brand and what you are fuelling for!

Any activity lasting less than an hour doesn't require any additional energy other than the usual meal consumed 3 hours before plus the hydration guidelines highlighted above. However, if your event does last longer than this you need to consider ways to increase your fuel storage. Obviously the first way would be to eat something, but an easy way to increase your energy stores is by consuming a sports drink and due to its ease of absorption, carbohydrate drinks can be consumed anytime up to 5-10 minutes before an event.

Aim to use a carbohydrate drink that supplies approximately 6-8% of carbohydrate. Research has shown that a 6% carbohydrate solution provides the best taste profile when exercising, is rapidly emptied from the stomach and absorbed by the intestine, and delivers performance-enhancing energy to active muscles better than lower or higher concentrations of carbohydrate. If you aren't sure if a drink matches the criteria simply look on the label. Most on the shelf drinks are 500ml in volume, so simply look at the carbohydrate content, divide it by the volume (500ml), multiply by 100 and you have your carbohydrate percentage.

The length of the training session or race will determine whether you need to continue hydrating. A good rule of thumb is to drink between 500-750ml per hour of a Isotonic drink. (A fluid containing electrolytes and 6-8% carbohydrate (such as Gatorade, Lucozade, SIS) To make your own add 200 ml (7oz) of orange juice fruit juice of choice to 1 litre (34oz) of water and add a pinch of table salt.

### **3. Hydration + Recovery from exercise**

This is where your research can pay off!

Having weighed yourself you will have a good idea of how much fluid is required to fully hydrate. But fluid is not the only thing you need to be concerned with. More and more research studies suggest the best time to aid the body's recovery and repair is within the first 2 hours after activity has ceased. Sometimes it can be impractical or unpalatable to eat a large meal immediately afterwards which is why a high carbohydrate drink offers a convenient alternative.

Begin replenishing within the first 20 minutes and replenish fuel stores by consuming carbohydrates with a high to moderate glycemic index. A sports drink can offer this or simply make your own by adding 400 ml (13.5oz) of orange juice or fruit juice of choice to 1 litre (34oz) of water and add a pinch of table salt. It is also advisable at this point to consume a little protein to aid the repair process. This is where a recovery drink can come in handy.

If you do use a recovery drink, look for one that has a carbohydrate/protein content in it (be careful of calorie content) as that has been shown not only to help repair and recover the energy loss from exercise, but also helps increase the uptake of fluid into the gut.

If you would like to make your own, check out my blog at [thesportsspecialist.blogspot.com](http://thesportsspecialist.blogspot.com) and look for the banana and pineapple recovery drink recipe.

### **Summary**

1. Aim to drink 2 litres of fluid per day as the baseline, and then add what you need for exercise or use the urine colour chart!
2. Avoid alcohol and caffeine 24 hours before exercise
3. Weigh yourself before and after exercise, looking to replace every 1kg lost with 1000ml of fluid.
4. If needing to fuel for exercise look for a carbohydrate drink, preferably with a 6-8% carbohydrate content or make your own.
5. To improve recovery rates consume a recovery drink within 20 minutes of completing training/competition.
6. Drink 150-350ml of fluid every 15-20 minutes during training
7. If training for more than an hour, or doing multiple training sessions, look to have some salt, sugars and protein in your recovery drink or food.
8. Avoid Energy drinks, such as Red Bull, Rockstar and Monster –they contain between 11-15% carbohydrate, unwanted calories and high amounts of caffeine.

There you have it, a few, somewhat long winded, hints to help you or your child with hydration. If you would like any more information please don't hesitate to get in touch.

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For more helpful hints check out my blog on:

[www.thesportsspecialist.blogspot.com](http://www.thesportsspecialist.blogspot.com) or follow on facebook. [www.facebook.com/fitnessspecialist](http://www.facebook.com/fitnessspecialist).