

## Nutrition Bites

### Nutrition Bite Week 9 – Water and Fluid

Adequate hydration before, during and after exercise is essential for optimal performance. Daily fluid requirements are estimated at 35mls per kg of body weight, but if you are exercising you will need to drink more than this to replace any fluid lost through sweating.

During exercise fluid loss from sweating can be very high, especially in warm weather. If you do not replace lost fluids by drinking you will become dehydrated. Just a 2% reduction in your body weight through dehydration causes a 10 - 20% loss of performance. Dehydration will also make exercise a lot harder than usual and will make you tire earlier than you should. It can also cause nausea, dizziness, vomiting, an inability to concentrate and can even ultimately cause heat stroke.

#### Preventing dehydration

Prevention is better than cure! You can check for dehydration by noting the frequency, colour and volume of your urine. Your urine should be pale, the colour of straw. Don't worry if it's not pale first thing in the morning. Urine is concentrated overnight and is much darker in colour first thing in the morning.

#### How much fluid do I need?

Drink plenty of fluid during the day to ensure that you are properly hydrated when you start to exercise. It takes 15-30 minutes for fluid to be absorbed into the bloodstream, so you should not wait until you feel thirsty before you start drinking – you will already be dehydrated by this stage. During exercise you should aim to drink 150-200ml every 10-15 minutes. Make sure you have a bottle of water with you and keep it within easy reach during training.

#### During exercise

If you are training for less than one hour, water alone is enough! The aim is to replace fluid and prevent dehydration; no extra fuel should be needed. Your muscles should have enough glycogen to fuel an hour's exercise, provided your glycogen reserves are topped up before you start exercising – check back to the advice from week 3 on carbohydrate.

If you are planning to run for longer than 1 hour, consuming 30 g – 60 g carbohydrate per hour can help you keep going. This carbohydrate helps to keep your blood sugar levels steady and fuels your muscles, particularly in the last few kilometres, when glycogen reserves will be low.

Sports drinks, diluted juice and high-juice squash are often a better choice than plain water because they contain carbohydrate. This means that they not only provide fuel for your exercising muscles but they also speed up the absorption of water into your bloodstream. 500mls of an isotonic sports drink will supply approximately 30g carbohydrate.

Remember however, isotonic drinks contain added sugar. So if you are aiming to lose weight, you might be better to drink plain water during your training and limit consumption of these drinks to competition. That way you will avoid extra calories!

#### The elite runner

As you pound the pavements and clock up the kilometres you lose water as well as body salts. By drinking an isotonic sports drink, not only will it help replace the **fluid** you are losing, but it will also replace the **salts** and **energy**.

***An isotonic sports drink is more suitable for the serious runner.***

## **After exercise**

It takes, on average, between 30-60 minutes for the body to rehydrate after exercise. Good choices include;

- Sports Drink
- Fruit Juice
- Low fat milk

They will help top up your energy and fluid needs. Avoid alcohol or coffee straight away as they do not help the recovery process. In fact they work against it.

There is growing evidence that low fat milk (plain and flavoured) may be an effective recovery drink after exercise. Milk provides fluid for rehydration, as well as carbohydrate, protein and vitamins and minerals such as calcium, potassium and magnesium, so is a good choice after exercise.

## **Save you money and make your own isotonic drinks!**

### ***Homemade Sports Drinks:***

20-50g table sugar

1 litre warm water (previously boiled and cooled)

1g (pinch) salt

OR

500mls water

500mls fruit juice (whatever flavour you like best)

1g (pinch) salt

OR

100-200mls squash/cordial

800mls water

1g (pinch) salt

*For the above recipes, mix all of the ingredients together until they have dissolved.*

Next week we take a closer look at what to eat before, during and after exercise. You can email any questions on nutrition to [walsh.eimear@hotmail.com](mailto:walsh.eimear@hotmail.com).

