

Hydration Protocol

Normal hydration (Euhydration)

Athletes should achieve good hydration on a daily basis. Fluids come from both liquids and food, with over half the daily water turnover coming from drinks. Increased requirement for fluids as a result of exercise should be met by increasing the intake of drinks.

Daily fluid requirements are estimated as 35mls per kilogramme of body weight (kg). Most players will require between 2 and 3 litres a day, which does not include the fluid lost as sweat during exercise.

Hourly fluid requirements are calculated by dividing total daily requirement by 24.

Example:

Fluid requirements = body weight (60kg) x 35 = 2100mls ÷ 24 = 90mls

This calculation can be used to gauge fluid intake over a number of hours eg 500mls over a 5-hour period, 700mls required to cover an 8-hour sleep period etc. It is a useful guide to promote regular fluid intake throughout the day to maximise absorption.

Pre training or competition

It is important to start each session fully hydrated.

- drink at least 300 – 600mls with the pre-event meal. Choose water, diluted squash or diluted sports drink
- continue to drink 150 – 300mls every 20mins up to about 45 minutes to 1 hour before the event, to allow time for a toilet stop
- drink 250 – 350mls fluid immediately before exercise starts

During training or competition

Drinking during exercise provides water and electrolytes to replace sweat losses, and can also give a source of carbohydrate to boost available energy for the muscles.

- fluids should be full or half strength isotonic drink according to preference
- if an athlete chooses to drink water, a sachet of carbohydrate gel with water should be taken before the start of the session
- for team sports during matches, each player should have 2 fluid bottles, each labelled with number. One bottle should be kept at the bench and the other at the nearest point off the pitch according to the position of the player
- begin drinking early in exercise
- use every opportunity to drink – in team sports, stoppages for injury, time off the pitch, half time
- the amount you need to drink depends on how much you lose

After training or competition

Replacement of body water and electrolytes after exercise is essential when repeated bouts of exercise are planned within a limited timescale. You have to work hard to take enough fluids to fully rehydrate, especially when exercising in the heat. Don't rely on being thirsty as a sign to drink.

Weight change monitoring (body weight before minus body weight after) provides a guide to fluid needs – a loss of 1kg equals a loss of 1 litre for sweat.

- start rehydrating immediately after exercise with full or half strength isotonic drink. A fluid that contains some sodium (salt) and carbohydrate provide faster body water replacement than plain water and is more palatable
- remember that you will continue to lose fluid during recovery through urine losses and ongoing sweating
- drink according to a plan
- caffeine containing drinks and alcohol are not good rehydration drinks as they can increase urine losses