

Hydration

Why is fluid important?

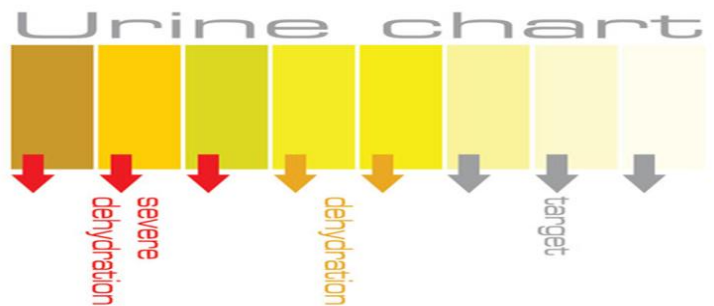
Water has a number of key functions in our body including maintaining core body temperature and removing waste products. We lose fluid in a variety of ways including breathing, sweating and urinating. We lose more fluid during exercise and in extreme environmental conditions i.e. sweating in the heat. Athletes should therefore be more vigilant with their hydration status when training/competing in these conditions.

The dangers of dehydration

Fluid loss as little as 2% of body mass (1.4kg in a 70kg individual) can impair endurance performance. In a dehydrated state, the body works harder to regulate body temperature, causing further cardiovascular strain. Even small fluid losses can make exercise seem more difficult.

Side effects of dehydration include:

- Poor concentration/co-ordination/reaction time
- Increased body temperature/heat stress
- Increased heart rate/cardiovascular stress
- Increased use of carbohydrates/glycogen stores
- Exercise is perceived to be harder
- Headaches and light headedness



How can I monitor my hydration?

Hydration can be monitored in a couple of ways during training and competition: 1) Athletes can use a urine colour chart pictured above 2) Monitoring weight before and after exercise to assess fluid balance.

How much fluid do I need?

The easiest way to calculate approximate fluid loss during exercise is to monitor your weight before and after exercise. Any fluid loss should be replaced as soon as possible. During recovery, every 1kg of body mass lost should be replaced by 1.5L of fluid. You should aim to keep the fluid deficit <1kg during a training session by drinking during exercise.

Practical Tips

- Drink a wide range of fluids i.e. water, milk, dilute squash
- Drink smaller volumes of fluids frequently during the day – try to avoid drinking large volumes of fluid directly before bed
- Understanding your basic hydration needs will help you to develop a good hydration strategy

Rower Initials	Change in pre/post session body mass (kg)	Fluid Consumed during session (L)	Sweat Loss (l)	Approx. Dehydration (%)	Fluid Required to replace losses (L)
AJ	1.3	0.5	1.8	1.9	1.3*150% = 1.95

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Aim to keep weight change to less than 1kg

