

5 TIPS TO STAYING HYDRATED

Hydration is critical for performance!

During exercise, fluids are responsible for carrying nutrients to working muscles, keeping the body cool during exercise, maintaining cognitive function, delaying fatigue, and reducing the risk of heat illness. When athletes lose too much fluid during exercise (become dehydrated) their body is unable to function effectively resulting in negative performance & health outcomes.

Below are tips to help athletes limit dehydration and its negative side effects.

YOUR HYDRATION STRATEGY

Designing a hydration strategy will help limit dehydration.

Three quick steps to designing an individualized hydration strategy include:

1. **Weight**, body mass losses, during exercise can indicate a fluid loss. These losses need to be limited to prevent dehydration. How to measure?

Weight before - weight after = weight loss where 1 kg loss = 1 L of fluid loss.

Take multiple measures in various conditions to determine average loss to build a strategy.

2. **Urine color & volume** can be used to indicate fluid balance. Low volume and dark-colored urine are both indicators of poor hydration status.

3. **Thirst** is an indication of dehydration. So athletes should be mindful of their thirst sensation.

BEGIN HYDRATED

Starting exercise well hydrated is key! To do so, athletes should start implementing their hydration strategy prior to exercise.

Three simple ways to do so:

1. Drink with all meals & snacks.
2. Drink approximately 500 ml of fluids 2-3 hours prior to exercise.
3. Drink approximately 250 ml of fluids 1-2 hours prior to exercise.

It is important to use these as guidelines but *an athlete's* tolerance and needs should also help guide intake.

For athletes with high sweat rates or competing in the heat adding electrolytes will help limit dehydration.

LIMIT DEHYDRATION

Consuming fluids during exercise is important to limit dehydration and its negative side effects.

Three simple tips for the prevention of dehydration during exercise :

1. Drink according to your hydration strategy.
2. Add additional fluids, electrolytes, and carbohydrates if the weather is hot, the game is longer, or the workload is higher.
3. Ensure fluids are tolerable in both taste and temperature to encourage intake.

RECOVERY

Rehydrating is one of the 4 R's of recovery. For optimal recovery from exercise and to prevent dehydration for subsequent events fluid replacement is critical.

How much should you consume?

It is recommended you replace 125-150% of fluid lost during activity.
To calculate 1kg loss = 1 L loss = 1.25-1.50 L replacement.

Note: fluid replacement should take place by consuming small amounts of fluid over time and not in large amounts (rapid consumption could be detrimental to health).

EFFECTS ON HYDRATION

Numerous factors affect hydration status. Even if athletes have an effective hydration strategy, the following factors will require athletes to make adjustments to their strategy to prevent dehydration.

1. Intensity & duration.
2. Environmental conditions - heat, humidity, cold, wind, rain, altitude, etc
3. Acclimatization - have you prepared to compete in this environment
4. Clothing/ability to stay cool (shade or shelter).

References:

Belval, L.N. et al. (2019) Practical Hydration Solutions for Sports.
Burke, L.M. et al. (2017) ACSM Joint Statement. Nutrition & Athletic Performance.