

# Health & Fitness

> OUR GUIDE TO STAYING ON TRACK FOR A HEALTHY OUTER LIFE



**People rarely drink anywhere near enough liquids to compensate for the fluid lost during a good day's outing.**

By **Tory Trehitt**

**H**oof it more than a few kilometres and odds are you'll start thinking about the meaning of life. Water that is. Without it, you (not to mention life on earth) won't survive long and any extra exertion - like trekking or biking - means you'll have to replace more than usual. A five-hour walk over middling terrain during a warm stretch can result in the body losing between four and five litres of fluid.

Rarely do we give adequate consideration to when and how much fluid we should consume - be that water or sport drinks - particularly considering the body's specific physiological requirements during exercise. Put simply, it doesn't matter if you are training, racing or just exposed to the elements rain, hail or shine: hydration levels directly correlate to performance levels.

The facts are alarming. Your brain and muscles are 75% water. Your kidneys can filter 200 litres of fluid per day and it

is recommended that 40% of your daily fluid intake should be water. Yet 25% of the Australian population drink less than the recommended daily allowance (RDA). Combine these statistics with the fact that 60-70% of your body is made up of water and it's obvious: hydration levels are vitally important, especially when at play in the outdoors.

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## Pre adventure

To get the most out of your session, pre-hydration levels are vital. So how hydrated are you? The easiest

way to check is by looking at the colour of your urine. If it's pale and you can whistle all four verses of Waltzing Matilda while passing it, then your hydration levels are on track. However, rather than having a water binge minutes prior to getting out there, get into the habit of drinking small amounts frequently. This will deliver optimum hydration and performance levels.

Drink 500-750ml one hour before

you start and again five minutes prior to setting off. Then chug another 125ml to guarantee you are well hydrated. This doesn't have to consist solely of water. Sports

## Over Watered

Although maintaining your fluid intake while exercising is vitally important, it is possible to drink too much water. A condition called hyponatremia, caused by having a very low sodium level, has led to the deaths of some marathon runners and endurance athletes. Hyponatremia becomes a concern if you replace fluids lost through sweating with just water - you also need to replace your body's vital salts and electrolytes, which can be found in most sports drinks. Symptoms of hyponatremia include feeling bloated, fatigue and sickness. If you or one of your exercise buddies seems to be suffering from hyponatremia, seek medical assistance immediately.

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drinks containing electrolytes or powder concoctions can also assist with hydration. Avoid caffeinated drinks, which are counter-productive due to their diuretic (water and sodium leaching) properties. Also be wary of the idea that you only need to drink when you feel thirsty: this is usually too late. Lastly, save your consumption of beers and other alcoholic beverages until well after the event - quaffing them the night before will mean you start the race in the red in terms of hydration.



## Mid adventure

Fluid consumption can alter quickly once you're on trail.

Regardless of your hydration level prior to kicking off, it is important to understand how your body's physiological properties perform under varying conditions. To ignore these details is to risk dehydration-related physical responses such as muscle cramps, fatigue and heat stress. When thinking of a hydration strategy consider the following:

- 1. Duration of the activity**
- 2. Weather conditions (heat, humidity, wind)**
- 3. Your sweat rate (body size and fitness)**

These factors correlate directly with how much fluid and what type you should consume (water, electrolytes, Gatorade etc) during exercise. The overarching rule for fluid consumption is 250ml of fluid per 20 minutes of exercise.

It's important to remember that in warmer conditions you will sweat more. This means that you will lose more sodium. So you should include more complex fluid replacement in any effort to counter balance your sweat response. This is where sports drinks with additives come into their own, by replacing not only water but also lost electrolytes, minerals and sodium, which are equally important to physical performance.

Strong wind can also cause increased rates of dehydration and is dangerous because, without rivers of sweat, you won't be alerted to the amount of fluid you are losing.

To correctly prepare, try to work out your sweat rate under varying conditions. The easiest way to calculate it is to measure your body weight pre exercise and again post exercise. To assess if you are rehydrating properly use the following equation:

Weight loss in kg minus 1kg = litres of fluid deficiency

So if your pre exercise weight is 76kg and post exercise weight is 74.2kg, then your gross loss is 1.8kg. Your fluid loss, therefore, is 1.8kg - 1kg = 0.8L.



## Post adventure

Recovery techniques are extremely important after strenuous activity, particularly to repair the muscles and tissues. Simple carbohydrate (CHO) drinks containing fruit and sugar are popular choices. Combining these with a simple whey protein drink to assist with muscle repair and recovery will ensure your body remains on track for your next outdoors adventure.

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## Water tanks

So we appreciate the need for H<sub>2</sub>O, but how best to carry it? Take your pick: there is no shortage of drinking accessories in all shapes and sizes and usually plastered loudly with brands. The most appropriate device depends on the type of activity and the amount of fluid you will need according to conditions. Three of the more common options are:



### Drink bottles:

a versatile but sometimes cumbersome option that usually hold 500ml to 1L. Good for short walks, biking or for when you are ensconced in a mode of transport (4WD, sailboat, kayak) where you have to sit and there is storage available.

### Fuel belts:

commonly two- or four-bottle belts that clip around your waist. Some come with extra pockets for gels or an iPod. Fuel belts are popular with runners and reasonably comfortable if fitted properly. The bottles are ergonomically designed, either for comfort around the waist or for holding while running and drinking. Each bottle usually contains 200ml.



### Hydration packs:

these are popular with off-road endurance runners and mountain bikers. They're very comfortable, as they fit like a backpack and bladders come in a range of sizes from 1L-4L. A drinking tube runs over the shoulder ending in a squeezable mouthpiece to regulate flow. When choosing the larger capacity versions be mindful that every litre equals 1kg of extra weight. Kayakers will find that hydropacks restrict and tire back muscles - stick with a bottle or pouch stashed in your boat.