

# Building A Hydration Plan

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Finding the perfect balance of fuel consumption in sport is no mean feat. Dietitian Tom Shand from Trailblazer Nutrition explains how to build a hydration plan.

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Gone are the days of sports nutrition involving an orange at half time and a beer in the clubrooms after the game. Professional sport drove science to find the perfect way to fuel an athlete and for runners of all abilities, hydration has been found to be a key part of this equation.

Runners following a well-designed hydration plan will be able to deliver fuel to their muscles efficiently, regulate their temperature, stave off cramp and perform at their peak. Get the hydration balance wrong however, and face the prospects of not finishing thanks to hyponatremia, heat stroke, electrolyte imbalances and exhaustion.

The following outlines how to supply muscles with the right amount of water to ensure you perform at your peak.

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## Water vs Sports Drink

Both have their place. Most sports drinks are a triple treat - they provide water, electrolytes and carbohydrates, the nutrients essential for performance that are lost when exercising. For more details on sports drinks, [Click Here](#).

Water, however, doesn't provide carbohydrates and therefore calories. If exercise lasts less than 60 minutes, carbs do not improve performance. Therefore, carbohydrates in these sessions are just adding calories. Staying (or getting) lean is important for endurance performance, so avoiding extra calories can be beneficial. Water is also free, is refreshing after carbo gels, and you can plan runs to pass water fountains.

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## Electrolytes

Electrolytes are micronutrients the body uses to keep its fluid stores in a delicate balance. Sodium is lost in sweat, so needs to be replaced during and after exercise. Low sodium levels can be a cause of cramp, and make it very difficult to rehydrate efficiently. Ensure that your sports drink contains at least 30mg of sodium per 100g, or add a pinch of table salt per litre of water. Sodium is the only electrolyte affected by exercise so ingesting others such as potassium will have no effect on performance or recovery.

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## Day To Day Fluid Consumption

Daily water intake depends on an individual's physical characteristics, training, and factors such as heat, humidity, wind, and incidental exercise. 8 glasses of water per day has proven to be a good general guide to follow, but a better, individual guide is to monitor urine colour. Pale, clear urine indicates good hydration levels, while darker, yellow urine means fluid consumption should increase.

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## Fluid Consumption When Training

For steady state exercise lasting less than 60 minutes, consuming water will not aid performance. However, taking water on shorter runs can be good practise for race day and will also build tolerance.

For exercise beyond 60min, performance is improved by ingesting water. The amount needed depends on individual sweat rates, their event, and their goals. However, an estimate can be made for fluid requirements per hour by taking into account training status, body size, tolerance, and other personal characteristics. Runners sweat more on hot, humid, and windy days, so drink more in those conditions.

Runners with high tolerance for food and fluids fuel during exercise can feed their muscles more energy, allowing them to exercise harder for longer. So throughout training try to increase the amount of water you take to improve tolerance.

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## Fluid Intake During A Marathon

There is no one-size-fits-all approach. Water intake can range from 400 to 800ml per hour, depending on body size, weather conditions, the goal time, training, tolerance etc. Remember the type and quantity of drink affects how much carb you need from other sources. Check what drink is supplied at the event aid stations and how often the aid stations are situated (every 5k?) and practise using the same type of drink and frequency during your training.

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