

FAST FACTS

Hydration

Water is life

Proper hydration is a critical factor for optimal health and wellbeing. It should be an integral part of any approach to dietary optimisation. You can think of hydration as the 4th macro; Carbs, Fats, Protein and Water.

On average a 70kg person will turn over about 4% (approx. 2.5L-3L) of their body weight in water each day. This can vary significantly due to body weight, age, exercise, and weather conditions, so understanding your unique hydration requirements is important.

Why is hydration so important?

The structure and functions of your body are all dependent on the cells being properly hydrated to help regulate body temperature, maintain the skins and mucous membranes barrier functions, and most importantly, to enable nutrient and waste transport, and cellular signalling to work efficiently.

Your body contains thousands of biochemical molecules, which move between the different compartments of the body. When you're under-hydrated, these biochemicals can become concentrated, and therefore, can not be transported around the body efficiently, leading to dysfunction.

How to maintain proper hydration

The most simple way to assess your level of hydration is to look at the colour of your urine. Ideally your urine should almost be clear, perhaps with a faint tinge of yellow. If it is visibly yellow or darker orange brown, then you should consume more water to rehydrate. If you have become dehydrated you should consider using a low glucose rehydration solution to replenish the electrolytes and ensure optimal fluid balance.

Resources

[Oral rehydration protocol](#)

[Further reading](#)



Some other approaches to maintaining adequate hydration include:

- Upon waking have a glass of water or oral rehydration solution to help rehydrate the body after the overnight fast.
- Thereafter, consume 250ml (1 cup) of water each hour for the first 10hrs of the day. After this you can reduce your fluid intake to prevent interruption to your sleep by having to urinate.
- During exercise the water you consume does not count towards your daily baseline fluid intake. You can use the Galpin equation to calculate your fluid intake needs during active exercise. The Galpin equation is 2.2ml of water per kilogram of body weight, every 15 mins during exercise that increases your heart and breathing rate, or induces sweating. Alternatively, regularly sip small amounts of water during exercise.

The best strategy for monitoring your hydration is the simplest one; drink enough water regularly throughout the day to keep your clear or pale yellow. If you feel like you are urinating too often, try a low-dose rehydration solution to balance the electrolytes.

Note, if you take vitamin B, it is normal to see bright yellow urine for several hours after taking the supplement. Take your B supplement in the morning, and by mid-afternoon, it should return to clear or pale yellow if you are adequately hydrated.