

FI-FI PALOOZA 5k

DRINK UP!

Water is the Drink of Choice

During this challenge, you are encouraged to stay hydrated with healthy fluids. The Drink Up! Challenge focuses on water with valuable information you can use and share.



Water has no color, taste, or odor. It is considered the most vital nutrient because of its numerous and diverse functions of the body.

Some Basic Water Facts:

1. Dissolves other substances.
2. Transports substances.
3. Catalyzes (starts) chemical reactions.
4. Lubricates tissues.
5. Regulates our temperature.
6. Provides minerals.

Determine Fluid Needs

The Dietary Reference Intake for Water established an adequate intake (AI) for total water to avoid the harmful effects of dehydration. It is imperative to note that the body eliminates nearly a liter of water from breathing, perspiring, and in bowel movement. Therefore, with about 81% of total water intake comes from drinking fluids (water and beverage) and 19% of water coming from foods, the AI recommendation for actual fluid intake is 3.0L for men and 2.2L for women.

1L = 33.8 fl. oz.

Men: 101.4 fl. oz.

Women: 74.4 fl. oz.

Girls (14-18): 77.7 fl. oz.

Boys (14-18): 81.1 fl. oz.

When there is a fluid deficit of more than 2% of body weight (BW), a person can experience poor cognitive function and aerobic exercise performance, such as endurance events, particularly in hot and humid conditions. Therefore, it is so vital to replace fluids lost to sweat during exercise.

Hydration Before Exercise

The pre-hydration goal is to ensure the body has sufficient amount of fluids and electrolytes before exercising. So, hydrating with about 5-10 mL/kg BW (1 kg = 2.2 lbs.) or 2-4 mL/pound 2-4 hours before the workout session is recommended.



Let's see how this works:

If a person weighs 150 lbs. (68 kg), then

$7 \text{ mL/kg} \times 68 \text{ kg} = 476 \text{ mL}$ of fluid

237 mL equals 8 oz.

476 mL is about 16 oz. or 2 glasses of water

Hydration During Exercise

Fluid requirements vary depending on the person's sweat rate, intensity, duration, weather, altitude, and other factors. The goal during the workout is to prevent excessive water loss (>2% loss) and imbalances with electrolytes in the working muscle cells. Athletes can estimate fluid needs by weighing in just before and after exercise and taking note of fluid intake and urinary losses. The general recommendation is 0.4 – 0.8 L per hour. Cold drinks can reduce body heat and improve performance in hot temperatures. If the workout lasts longer than 2 hours, or produces high sweat rates, then sodium should be added. It should be noted that athletes – especially recreational athletes in longer workout bouts – should be careful not to consume too many liquids. This can lead to a rare, but extremely dangerous condition called hyponatremia, where there is an abnormally low level of sodium in the blood.



Hydration Post Exercise

The goal is to replenish any shortfalls of fluid or electrolytes (substances in solution that conduct an electric current) such as calcium, chloride, fluoride, magnesium, potassium, and sodium. Athletes should rehydrate at a rate of 1.25 – 1.5 L fluid per kg of weight loss during the workout. Adding salty foods or fluids will improve fluid retention. Also, the cells of the body better absorb the fluids when taken in gradually.

Reasons to Drink Up!

1. Water consumption can improve cognitive performance, particularly visual attention and mood.

[-British Journal of Nutrition](#)

2. Drinking 500 mL of water increased metabolic rate by 30% in both men and women.

[- Journal of Clinical Endocrinology & Metabolism](#)

3. Replacing caloric beverages with water as a weight-loss strategy resulted in average weight losses of 2% to 2.5%

[- American Journal of Clinical Nutrition](#)

4. Drink more water because, on average, the more sugary drinks consumed, the lower the total brain volume and the lower the scores on memory tests. Brain shrinkage is tied to an increased risk of Alzheimer's disease.

[- Alzheimer's & Dementia](#)