

HYDRATION GUIDELINES FOR ATHLETES

Proper hydration is essential for optimizing athletic performance, supporting recovery, and maintaining overall health. Dehydration can impair physical and mental function, with effects that may persist for hours or days. Athletes should develop personalized hydration strategies tailored to their training demands and environmental conditions.

Why Hydration Matters

Staying hydrated enhances performance and recovery by:

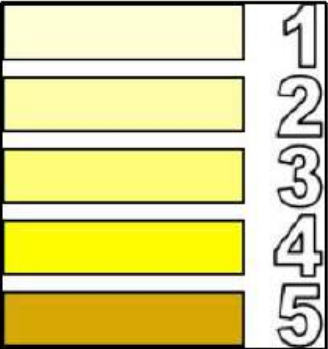
- ✓ **Regulating Body Temperature:** Prevents overheating and reduces unnecessary heart rate elevation.
- ✓ **Boosting Recovery:** Speeds up recovery post-training or competition.
- ✓ **Reducing Muscle Cramps:** Minimizes the risk of cramping during exercise.
- ✓ **Enhancing Mental Function:** Improves focus, decision-making, and motor control.
- ✓ **Supporting Immunity:** Strengthens immune defences for overall health.

Signs and Symptoms of Dehydration

- ✓ Lack of concentration
- ✓ Early fatigue in the training session
- ✓ High perceived exertion in training
- ✓ Trouble tolerating heat
- ✓ Delayed recovery
- ✓ Headaches
- ✓ Nausea and vomiting
- ✓ Heart rate elevated above normal response

How much fluid is enough?

You can monitor your weight, thirst and the colour of your urine to evaluate your hydration levels and increase or decrease your fluid intake accordingly. Try to keep your urine between 1- 2, after sleeping you may be closer to 3, but avoid ≥ 4 .

	<1.009	Well-hydrated
	1.009-1.020	Hydrated
	1.021-1.025	Minimal dehydration
	1.026-1.030	Significant dehydration
	≥1.031	Severe dehydration

Please note that vitamin and mineral supplementation alter the colour of your urine, therefore the colour might not be as accurate to monitor hydration status.

Water vs. Sport Drinks

Water: The best fluid to consume is *water*, which should be consumed throughout the day, during training, and at meal times.

Sport Drinks: If training is >60–90 minutes, choose a sport drink to help replenish fluids and electrolytes lost in sweat and provide a quick energy source to sustain performance during intense and longer duration training sessions.

GENERAL GUIDELINES

Before

Ensure you start the training sessions/competition days well hydrated. Aim for **at least** 400 ml fluid with your pre-event meal as well as **at least** 400 ml fluid during your warm up period.

During

Generally, drinking plain water is better than drinking nothing, but drinking a properly formulated carbohydrate–electrolyte ‘sports’ drink can allow for even better exercise performance. Water alone provides fluid replacement but not energy, electrolytes, vitamins and other nutrients essential for performance. Carbohydrates also helps with the absorption of electrolytes and fluid.

PVM Octane XTR contains carbohydrates, electrolytes vitamins and minerals to help with hydration.

Fluid intake and sweat rate usually differs between individuals, therefore overall recommendations are to drink according to thirst. Athletes should aim for at least 400-900 ml fluid per hour. This can be adapted according to the environmental factors, sweat rate, training intensity and the length of your training session.

Supplement use:

1 Octane gel + 250 ml water + additional water (at least 150 ml) to ensure you are hydrated.

OR

± 400 -500ml Octane/Octane XTR

Please note that Fluid is best absorbed if the solution is iso- or hypotonic; therefore, ensure that the supplements are mixed according to the guidelines.

- For an isotonic solution = Mix 50 g Octane/Octane XTR with 500 ml of water
- For a hypotonic solution = Mix 50 g Octane/Octane XTR with 600 ml of water.

Benefits of a hypotonic drink in hot and humid conditions:

- Faster gastric emptying.
- Slightly faster absorption.
- Palatable taste – Increased consumption.

After

Ensure you replace the fluid and electrolytes lost in sweat. PVM Reignite contains carbohydrates and protein to aid in recovery, as well as electrolytes (sodium, potassium, chloride, calcium, phosphorus, and magnesium) and vitamins.