50 Mile March 2027 – Top Five Hydration FAQs

Note that this document does not contain medical recommendations and instead offers a consolidation of collective wisdom from previous Marchers augmented by existing evidence-based literature.

Contents

Question 1. How do you stay hydrated during the March? 1

Description of "Drink to Thirst" 1

Description of "Programmed Hydration" 1

Question 2. Should I avoid consuming fluids to avoid having to pee outside? 2

Question 3. What should I drink during the March? 2

Question 4. Should I take salt tablets throughout the March? 2

Question 5. How do I avoid heat illness? 3

Question 1. How do you stay hydrated during the March?

BLUF → Hydration is essential. Stay healthy and hydrated by listening to your body's thirst mechanism and staying ahead of dehydration.

In general, Marchers fall into two philosophies regarding hydration – **Drink to Thirst** or **Programmed Hydration.**

Description of "Drink to Thirst"

Thirst is a developed and precisely regulated mechanism that protects plasma osmolality and circulating blood volume. Thirst mechanisms prompt when drinking is required to prevent dehydration – however, during quick escalation to high sweat rates particularly if not conditioned to such conditions – thirst may be an inadequate stimulus which is why marchers are encouraged to strategically take sips! Marchers should attenuate thermal and circulatory strain via fluid intake. Keep fluids nearby and listen to your body. By doing so, you will avoid both dehydration and overhydration.

Description of "Programmed Hydration"

It is not unusual to come across recommendations that endurance athletes should use "programmed" hydration. Typically, this advice is to determine sweat rate by measuring body weight before and after a timed workout, and then drink at this calculated sweat rate so that the water lost in sweat is fully replaced. This is tricky (*and miscalculation can be dangerous*) because sweat rate and salt level varies considerably across conditions. Consider a situation in which you have presumed you need to match all of your weight loss during prolonged exercise with fluid intake, and you have calculated that your rate of sweat loss is 1000 ml per hour. But, then the conditions during the March are a bit different than your practice test conditions and you have overestimated your needs by 25% (250 ml per hour). If you drink that full 1000 ml per hour (*note: this would be a lot!*), then in 4 hours, you have consumed a full liter (~1.4% body weight) more than necessary to keep your weight constant. Then, recognizing that you should have lost ~1-2% of body weight to keep the body water pool stable, you would have actually overhydrated by over 2% of your body weight during this 4-hour time period. Under concerning

circumstances, that could induce symptomatic exercise-associated hyponatremia (EAH) or low sodium, as has been described in the literature. Any programmed hydration approach **needs** to be attentive to environmental and personal conditions as well as electrolyte balance (not drinking just plain water) to stay safe.

Most Marchers listen to their body's needs based on March conditions that day versus pre-calculate their fluid intake requirements.

Question 2. Should I avoid consuming fluids to avoid having to pee outside?

BLUF → Drink to protect your kidneys.

No!! You need to love on your hard-working kidneys! In fact, you need to carry and consume enough fluid to support your hydration between water sources to protect your kidneys. Your kidneys are already going to be stressed because your body secretes arginine vasopressin during extreme exercise so your kidneys are already working overtime reabsorb fluid. Renal blood flow may fall to 25% of the resting value when strenuous exercise such an extended walking occurs (your poor kidneys!). Plus, some people take NSAIDs like Ibuprofen for aches/stiffness during the March and those medications further constrict blood flow to your beans (*note: other people prioritize protecting their kidneys and take non-NSAIDs like Tylenol instead*). Plus, your kidneys are getting hit with a high protein load from muscle breakdown which is rough on your kidney filtration system. You want to have clear to yellow-clear urine for the March duration and thereafter. You need to seek medical attention if your pee turns blood-tinged. There are bathrooms on every RV and you can pee outside, if needed. Ideally you'd train your body to pee at each rest stop. Do not punish your hard-working kidneys by dehydrating them.

Question 3. What should I drink during the March?

BLUF → Drink more than just water to maintain adequate electrolyte balance.

In a liter of sweat the average person loses 13 mg of magnesium, 15 mg of calcium, 200 mg of potassium, and 900 mg of sodium. Electrolytes have really essential physical roles and water alone doesn't replenish those. For example, magnesium directs blood to your muscles efficiently and helps to remove lactic acid = muscle recovery! Symptomatic hyponatremia (low sodium) is virtually exclusively seen from overhydration with water alone. The inclusion of electrolytes (consider adding high-quality electrolyte packets to your water and consuming sports gels designed to replace sweat loss) is a practical practice used by many Marchers.

Question 4. Should I take salt tablets throughout the March?

BLUF → A balanced goal is steady replenishment versus sudden load replacement.

There are different perspectives on this and so feel welcome to chat with your personal health provider on topic. A general consideration is that sodium by itself causes water retention (and not necessarily in blood volume). Too much sudden sodium while running can also leach water out of your system and dump it in your digestive tract which can cause a sloshing feeling in the stomach (this feeling can also occur if you consume too much fluids suddenly all at one time). In general for the March, a balanced focus with electrolytes would be steady replenishment, versus salt-load sudden replacements.

Question 5. How do I avoid heat illness?

BLUF → Staying well-hydrated, strategically reflecting away the sun, and core cooling help protect against heat illness.

Dehydration results in a lower sweating rate for a given core temperature and so it's particularly important to stay hydrated. However, it is now recognized that severe heat illness during high intensity exercise can occur *even without* dehydration. Preventive measures include chewing on ice or holding ice at rest stops (cooling palms and feet can be helpful) and raising your feet/legs up at rest stops. Additional ways to lower your core temperature include wearing a cool soaked cloth on your neck or mid-back. It's smart to wear light-colored, sweat-wicking, non-restrictive clothing (going shirtless is less heat-sparing than wearing a loose white shirt due to sun reflection vs absorption). Monitor for signs of heat illness (will discuss) and seek help early. Hydrate, hydrate!