

# Hydration Preparation for Sports Performance

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As we approach our New Balance Outdoor National meet our medical staff would like to urge each athlete to factor hydration into his/her performance routine. As athletes we often consider critiquing our warm-ups, stretching routines, or specific event techniques. How many of us actually think about critiquing our hydration?

According to research done by physiologists at the University Army Institute Robert W. Kenefick, **being “more than 2 percent dehydrated in warm environments can cause a drastic decline in sports performance”**. The NSAF medical staff wants each athlete to excel in their abilities; breaking personal bests, taking national championships, and becoming All-Americans. With that being said we urge each athlete to not be a “casual sipper” but to focus on hydration for athletic performance.

## How does dehydration affect sports performance?

- Dehydration causes your blood volume to lower.
- Dehydration increases your heart rate.
- Dehydration can increase your breathing rate.
- Dehydration lengthens your recovery time.

All of these things cause your body to work too hard, which makes it difficult for your body to meet aerobic demands. If your body is using too much energy to fight your dehydration, then you are going to have less energy for your track & field event...which means your results won't be optimal.

## What is optimal water consumption for track & field athletes?

Many things have to be considered for hydration: length of run, environmental factors, and perceived exertion. **The NSAF medical staff recommends drinking eight to sixteen ounces of water, one to two hours prior to your run/event.** We also recommend drinking smaller amounts in intervals so that your body is able to absorb fluid more effectively. Replacing water levels after your run/event is very important, too. **After your run/event your goal should be to drink enough water to make you urinate 60 to 90 minutes post exertion.** Most of the time 24 ounces is sufficient.

## What is optimal electrolyte consumption for track & field athletes?

According to a study at the Medicine and Science Center, **it is recommended for athletes to consume a small (4 - 8oz) sports drink / carbohydrate / electrolyte beverage prior to your run/event** for optimal performance. If your stomach is unable to tolerate the amount of sugar that those sports drinks often have, then you can simply rinse your mouth out with the electrolyte/carbohydrate drink instead! The study recommends rinsing your mouth right before and every 15 minutes during your longer runs. Rinsing your mouth with these types of sports drinks triggers the brain to sense incoming energy, allowing the body to operate at lower perceived exertion levels. **It is also recommended that you consume 16 ounces of a recovery beverage after your final event of the day.** One of the best recovery drinks is 16 ounces of chocolate milk. If you cannot drink milk, then we suggest you consider an electrolyte tablet that you drop into water, like the brand NUUN. Be sure to replace your electrolytes during a multiple-day track & field meet. If you don't, then your body will not be fully recovered and prepared for competition the next day.

What are the signs and symptoms of dehydration?

- increased thirst
- dry mouth
- headache
- reduced urine output (You should be peeing at least once an hour!!!)
- being light-headed
- muscle cramps
- chills
- being disorientated

These symptoms need to be treated quickly with increased hydration efforts. If any of these symptoms occur, start increasing your fluid intake. ***Seek medical attention as soon as possible if you are unable to eliminate these symptoms on your own.***

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In conclusion, our medical team encourages each of you to challenge yourself to create an optimally hydrated machine for performance this weekend. Attack all aspects of your training, hydrate properly, and mentally prep yourself for the best outdoor track and field championship meet in the USA.

If you have any questions about hydration, sports performance, sports hydration/nutrition, or injury/illness please seek out assistance from one of our medical staff that will be around during the event.

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