

PERFORMANCE PLAYBOOK

Optimizing Hydration

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During the spring of 2000, the National Athletic Trainers' Association released a position statement titled "Fluid Replacement for Athletes."¹ This document provides extensive recommendations for all levels of athletics. Five key concepts of the position statement are highlighted below:

1) Educate athletes and fellow staff about the hydration process.

The perpetual struggle to keep athletes properly hydrated is much easier to accomplish when the athletes and staff are aware of the role that proper hydration plays in optimizing athletic performance and minimizing the incidence of heat illness. Also, all athletes should become active participants in their own hydration process and be educated about monitoring hydration status and encouraged to rehydrate based on individual needs.

2) Individualize the rehydration process.

This entails three important considerations.

- Athletes lose fluids via sweat and urine at different rates for many reasons and, thus, should replace fluids based on individual requirements. Encourage athletes to weigh in and out of practice to help determine their fluid needs.
- Athletes choose to drink different amounts and should be encouraged to monitor how much they drink to be sure that it matches the amount that is being lost.
- The confines of different sports and positions dictate how an athlete optimizes the rehydration process based on individual access to fluids.

3) Choose the optimal beverage.

Favor a sports drink over water, because electrolytes replace the sodium lost in sweat, carbohydrates fuel working muscles, and flavor encourages drinking. The sports drink should include a suitable amount of sodium (70 to 166 mg/8 oz) and carbohydrates (14 to 17g/8 oz).

4) Make sure that fluids are accessible and cooled.

Hydration is much more likely to be maintained if the fluids are conveniently located for the athletes to drink during practice and rest periods. Keep individual containers on ice in a cooler so that an athlete can access it during practice and increase fluid intake.

5) Recognize dehydration.

All coaches, athletes and medical staff need to recognize the common signs and symptoms associated with dehydration. They include:

- Noticeable thirst
- Muscle cramps
- Weakness
- Decreased performance
- Difficulty paying attention
- Headache
- Nausea
- Fatigue
- Lightheaded feeling or dizziness

¹Casa, D. et al. *J Athl Train* 35(2):212-224, 2000.