

Water is crucial to many of the chemical reactions that support athletic performance. Athletes must stay hydrated before, during and after running to optimize performance.

“The Effects of Hydration on Athletic Performance”
by SportsCardiologyBC

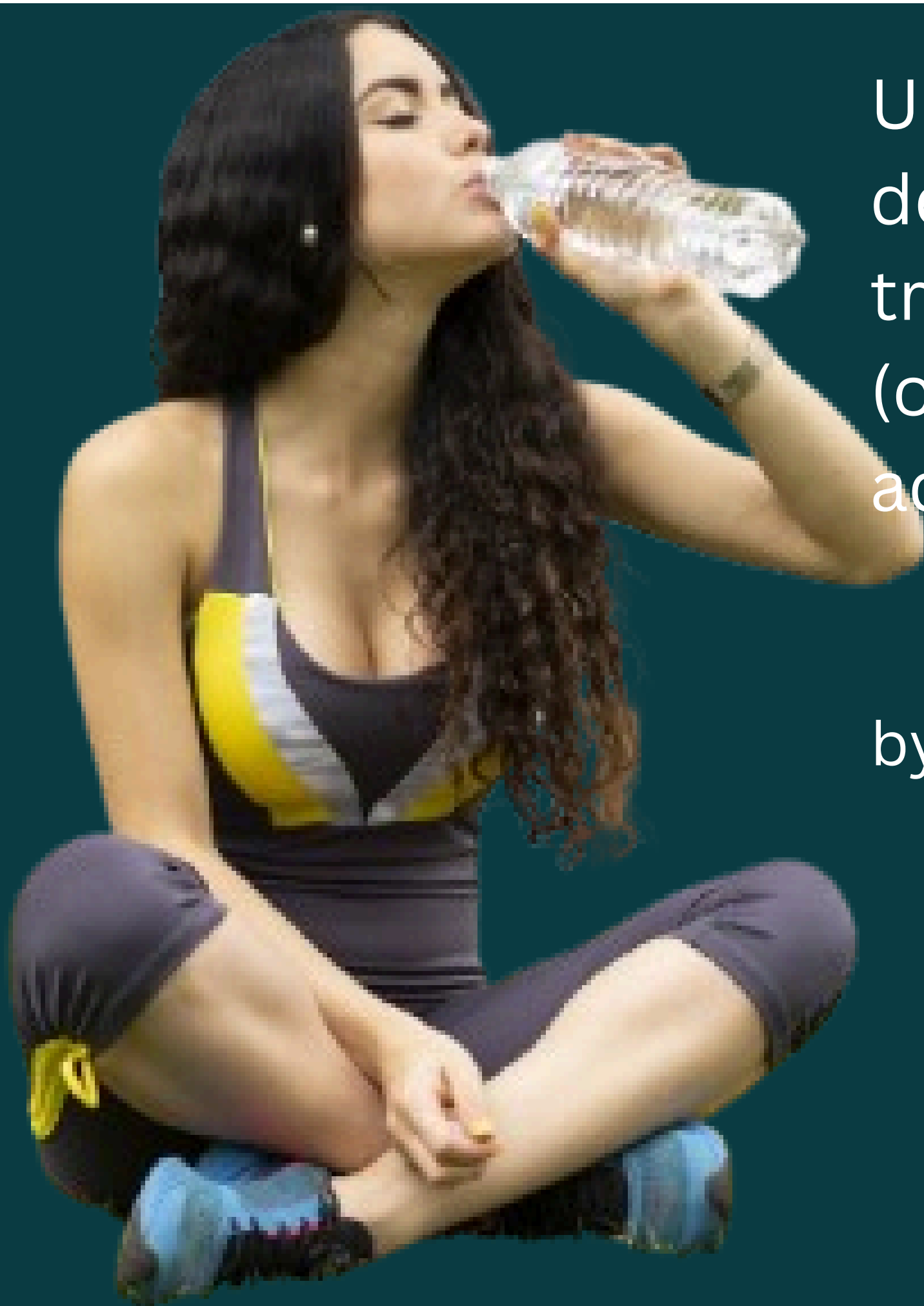
Dehydration is no fun and it is the result of:

- Blood volume reduction
- Skin blood flow decrease
- Sweat rate decrease
- Heat dissipation decrease
- Core temperature increase
- Increased rate of muscle glycogen use

“Sport Nutrition - 2nd Edition”
by Asker Jeukendrup and Michael Gleeson

Women should drink about 11 cups of water daily, while men need about 16 cups, with some fluids coming from flavored water, coffee, or tea. However, it's important to avoid sugar-sweetened drinks like soda and juice, as they can harm health.

“Benefits of water: Are you getting enough fluids to stay healthy?”
by Sandee LaMotte, CNN



Urine color is a valid parameter for assessing acute dehydration. It is a cost-effective tool for athletic trainers and clinicians to assess hydration (or lack thereof), particularly in the absence of advanced equipment.

“Accuracy of Urine Color to Detect Equal to or Greater Than 2% Body Mass Loss in Men”
by Amy L. McKenzie, Colleen X. Muñoz, and Lawrence E. Armstrong

Fun Facts

Sweating and passing urine leads to sodium loss. While replenishing sodium is crucial to maintaining normal body activity, it is easy to fall short or exceed that sweet spot. One way to replenish sodium is to hydrate with fluids infused with sufficient sodium.

“National Athletic Trainers' Association Position Statement: Fluid Replacement for the Physically Active”
by Brendon P. McDermott, Scott A. Anderson, Lawrence E.

Armstrong,
Douglas J. Casa, Samuel N. Cheuvront, Larry Cooper, W. Larry Kenney,
Francis G. O'Connor, and William O Roberts