Hydration Guidelines for Officials

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Water is the most important nutrient we consume.
Daily Hydration

- Hydrate as soon as you wake up
  - Aids with digestion
  - Aids with bowel movements
  - Increases metabolism
  - Reduces headaches

- Factors affecting water intake
  - How much you sweat
  - The weather/temperature
  - Amount of activity
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<td>2</td>
<td>If your urine matches the colors 1, 2, or 3, you are properly hydrated.</td>
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<td>3</td>
<td>Continue to consume fluids at the recommended amounts.</td>
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<td>If your urine color is below the RED line, you are DEHYDRATED and at risk for cramping and/or a heat illness!!</td>
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<td>5</td>
<td>YOU NEED TO DRINK MORE WATER!</td>
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Rule of thumb: lemonade not apple juice
Hydration Before Activity

- Avoid highly caffeinated fluids, as well as alcoholic drinks.
  - These are diuretics, they do not hydrate

- Practice daily hydration.

- 17 – 20 ounces two hours pre-activity

- Small “carb” snack (think fruit!)
**Hydration During Activity**

- **Thirst isn’t the best indicator of hydration level**
  - Batson, John MD. Staying Hydrated-Staying Healthy (2014)

- Drink 4-8 ounces of water every 15-20 minutes of activity.
  - One gulp = one ounce

- Carbohydrates + electrolytes
Sports Drinks

- Can it help you perform? Yes
- Do you need it? No
- Too much sugar, dilute it
- Shouldn’t make up for poor diet & hydration
Rehydration

- Record weight before and after activity.
  - one pound lost = 16-24 oz. fluid
- 2% or greater loss of body mass -> decreased performance

MORE SWEAT = MORE WATER NEEDED

- Include some carbohydrate, electrolyte
Consequences of Dehydration

**THIRST**
Thirst is a useful indicator of daily fluid requirements. Unfortunately, it's not fully reliable since the body is already mildly dehydrated by the time an average person starts to notice thirst.¹

**SKIN**
Dehydration results in dry skin and wrinkles.²

**KIDNEYS**
Higher water intake is shown to have a protective impact on the kidneys, and there is initial evidence that CKD (Chronic Kidney Disease) may be inversely related to higher water intake.³

A study by Dal et al. found a strong protective effect of fluid intake in preventing kidney stone formation in men.⁴

**PHYSICAL**
Studies have shown that the modest level of dehydration (2% of body mass) can result in around a 20% decrease in physical performance levels in temperate climates and up to a 40% decrease in hot temperatures.⁵

**MENTAL**
Dehydration can degrade specific aspects of cognitive performance including visual vigilance, tension, anxiety, fatigue and visual working memory. Dehydration was also linked to negative mood rating, impaired motor performance and short-term memory.⁶

**DEHYDRATION**
A 1% loss of body mass due to fluid loss is defined as dehydration.⁷

**WEIGHT LOSS**
Opting for water instead of sugary drinks can help reduce body weight and fat levels. According to Stookey, just drinking 500 ml (17 oz) of water increases energy expenditure by 100kJ. Findings in the same study indicate that an absolute increase in drinking water to ≥1L (34 oz)/day was associated with ~2 kg or 5 lbs weight loss over 12 months.

**WATER**
Water plays crucial roles, in transporting nutrients and waste products between our major organs and helping regulate temperature.⁹

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² Atlanta dermatologist Kenneth Ellner, MD.
³ Sundgot-Borgen et al. (2013). Am. J. of Nephrology
⁴ Dal et al. (2013). J. of Renal Nutrition (23) 2
⁶ Garlato et al., 2010; D'Anca et al.; 2009; Smith et al., 2012
5 SIGNS OF DEHYDRATION

Trying a new, Olympics-inspired workout routine? Don’t forget your water bottle!

- Drink water every 15 to 20 minutes of physical activity to prevent dehydration.
- Dizziness & headaches
- Muscle cramps
- Rapid breathing & heartbeat
- Dry mouth & skin
- Fever & chills

104°F

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Use the Athletic Trainer
References


Batson, John MD. Staying Hydrated-Staying Healthy (2014). American Heart Association


Korey Stringer Institute – University of Connecticut https://ksi.uconn.edu/prevention/hydration/

