The term hydration refers to the level of total body water content. Water is essential for bodily function as every cell needs water to function properly. Some functions that use water include temperature regulation, waste excretion, lubrication of joints, and regulation of blood pressure. Your total lean body mass is about 74% water!

**What is Dehydration?**
Dehydration occurs when fluid consumption is less than fluid loss
- Negative effects on cardiovascular system, thermoregulation, and exercise performance
- Drastic effects with 2% weight loss
- Symptoms include: dry mouth, low urine output, extreme thirst, dizziness or lightheadedness, headache, fatigue or sleepiness, nausea
- Many athletes begin activity in a dehydrated state

**Electrolytes**
In addition to water being essential, so are electrolytes. The most commonly lost electrolytes in sweat are sodium, chloride, and small amounts of potassium, calcium, and magnesium.

**Assessing hydration**
- The two easiest ways for athletes to assess their hydration status are: perform pre- and post-activity weigh-ins
  - Wear same clothing during pre- and post-weights
- Observe the color of urine and compare to the chart at the end of this document

**Hydration Strategies**
- Fluid containing sodium, CHO, and protein to increase fluid retention
- Avoid carbonated drinks
- Try to avoid high-sugar drinks
- 16 oz per 1 lb lost
- 2 mL/lb for each hour of activity
- Should be customized to the individual based on sweat rate and other factors

**Performance Effects**
- Dehydration effects performance with as little as 1% change in body weight
- Decreased performance of endurance activities, more pronounced decreases with ≥2% change in body weight
- Increased blood pressure, decreased cardiac output
- More susceptible to heat illness due to the inability to efficiently cool core body temperature
HYDRATION

References


