



# WHAT'S IN YOUR SWEAT?

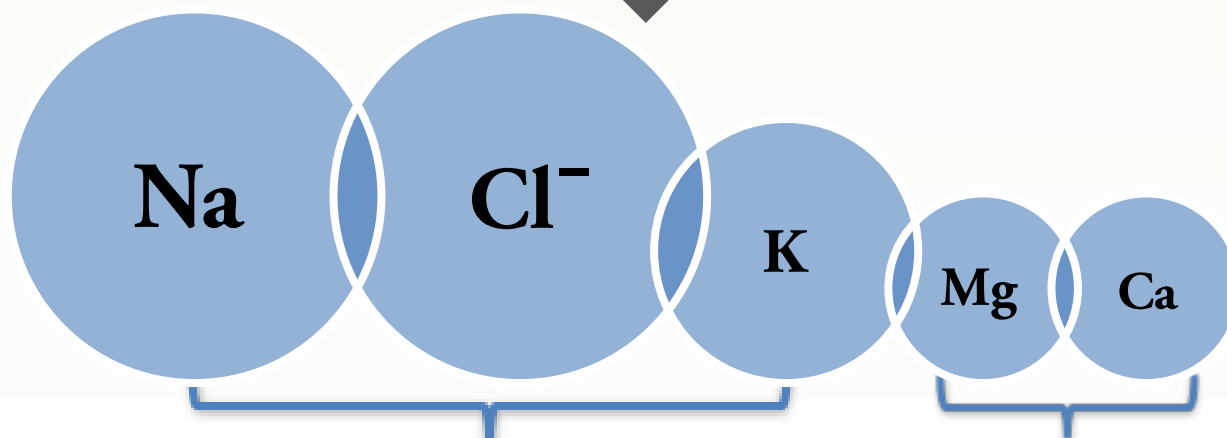
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The average athlete loses 1-3L sweat/hour. **Sweat** is primarily made up of water, but it also contains **electrolytes** that have essential roles in the body. **Sodium** and **chloride** are the most abundant electrolytes in sweat with **potassium**, **magnesium**, and **calcium** present in lower amounts.

Athlete Example: A runner who loses 3 liters of fluid in 1 hour is losing 1,380-5,520mg of salt.

## Sweat Composition

Mineral	mg/L
Sodium	460-1840
Chloride	710-2840
Potassium	160-390
Magnesium	0-36
Calcium	0-120



Sodium, chloride, and potassium work together to help regulate and maintain fluid balance.

Magnesium and calcium are essential for optimal muscle function and play an important role in energy metabolism.

- Losing as little as 2% of your body weight during a workout can result in decreased aerobic performance.
  - For a 200lb athlete, that is 4lbs of sweat lost during a workout.
- Water and electrolytes should be consumed throughout the day to maintain adequate fluid levels as well as optimal electrolyte levels.
  - Electrolyte replacement is most important during high-intensity training lasting >1 hours.
- Remember to properly hydrate before, during, and after exercise as well.

ELECTROLYTES ARE FOUND IN SPORTS DRINKS AND ELECTROLYTE PACKETS/TABS. THEY ARE ALSO FOUND IN FOOD.



- **Sodium-rich foods:** salted nuts/trail mix, pretzels, crackers and table salt.
- **Foods high in potassium:** bananas, potatoes, dark leafy greens, and citrus fruits.
- **Foods high in magnesium:** pumpkin seeds, almonds, cashews, peanut butter, spinach, and beans.
- **Foods high in calcium:** milk, yogurt, almonds, and broccoli.