

WHAT MAKES UP SWEAT?

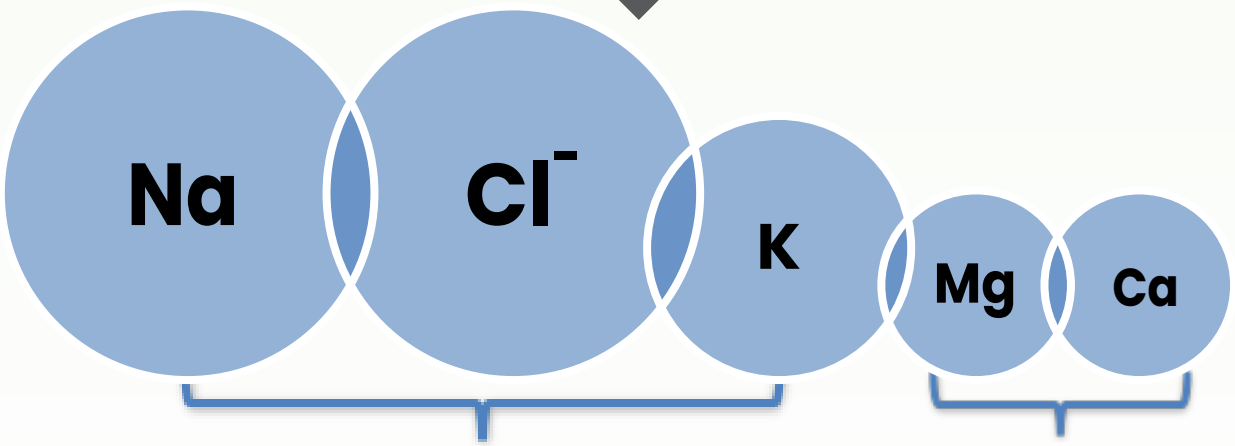
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Athletes typically lose 1-3 L of sweat per hour. **Sweat** consists mostly of water, along with **electrolytes** that carry out essential functions. **Sodium and chloride** are present in the greatest amounts; **potassium**, **magnesium**, and **calcium** occur in smaller quantities.

Runner example: Losing 3 liters of fluid over 1 hour means losing 1,380-5,520 mg of salt.

Sweat Contents

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



Sodium, chloride, and potassium act together to regulate and sustain fluid balance.

Magnesium and calcium support optimal muscle function and are key to energy metabolism.

- **Losing just 2% of body weight through sweating during exercise can reduce aerobic performance.**
  - **For a 200 lb athlete, this equals 4 lb of sweat lost in a workout.**
- **Take in water and electrolytes across the day to keep fluid levels adequate and electrolyte levels in balance.**
  - **Replacing electrolytes matters most in intense training that lasts >1 hour.**
- **Hydrate adequately before, throughout, and after exercise.**

SPORTS DRINKS, ELECTROLYTE PACKETS/TABLETS, AND FOODS ALL SUPPLY ELECTROLYTES.



- **Sodium sources:** salted nuts/trail mix, pretzels, crackers, and table salt.
- **Potassium sources:** bananas, potatoes, dark leafy greens, and citrus fruit.
- **Magnesium sources:** pumpkin seeds, almonds, cashews, peanut butter, spinach, and beans.
- **Calcium sources:** milk, yogurt, almonds, and broccoli.