Replace Electrolytes Lost During Sports

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Replace Electrolytes Lost During SportsBalanced Diet, Sports Drinks HelpBy Susan Yeargin, Ph.D. ATC

Here's what you need to know about electrolytes:

Important for bodily functions

Electrolytes such as sodium, potassium, and chloride are necessary for:

- » Maintaining fluid levels in the body
- » Muscle contractions:
- » Nerve impulse transmission; and
- » Conservation of fluids.

Lost during sports » Sweating results in the loss of both electrolytes (particularly sodium) and water

- » Water losses are proportionately greater than electrolyte losses, so the body's cells end up with a greater electrolyte concentration (this is the imbalance that is believed to lead to <u>heat cramps</u>)
 - » As the body becomes acclimated to the heat, the sodium content of sweat decreases
 - » As children matures they also conserve more salt but sweat more.

Replaced by foods in balanced diet » Salt: Your child's regular diet should provide an abundance of salt. For instance, a 2-pound loss of sweat results in a loss of only 1 gram of sodium -- an amount easily replaced by moderate salting of food (one half teaspoon of salt). Recommendation: Do *not* give your child salt tablets

» **Potassium**: Replacing the small amount of potassium lost during exercise is easy. Orange juice, bananas and potatoes are all excellent sources of potassium. For instance, a large glass of orange juice will replace the potassium lost in about 4 pounds of sweat. **Recommendation**: Do *not* give your child potassium supplements: not only are they unnecessary, they can cause excessively high potassium levels in the blood, resulting in an abnormal heart rhythm.

When deficits occur Electrolyte deficits, particularly sodium, can occur under the following conditions:

- » When acclimatizing to a hot environment
- » After repeated workouts in hot weather
- » During ultra-endurance events (50-mile runs, 100-mile cycling races, triathlons)
- » Hot weather in which sweat losses are greater
- » In an individual who is a "salty sweater."

Sports drinks containing sodium:

» Reduce the risk of hyponatremia

- » Promote re-hydration following exercise by maintaining thirst (which keeps your child drinking) while delaying the production of urine. By contrast, drinking plain water *eliminates* thirst so your child stops drinking, and *stimulates* urine production.
 - » Encourage fluid intake because the sodium makes them taste better.