



## Sport Nutrition

Tip of the Month | March 2011



# What's in the Bottle? From Sports Drinks to Vitaminized Water

There is an ever-increasing variety of beverages in the store coolers these days. Some are targeting athletes and athlete wannabe's; others sound like they're healthy choices. Before you grab the best-tasting, or the one with all the hype, look to see what's in the bottle and consider what it is you really need.

### What are Sports Drinks?

Are sports drinks just sugary beverages? In fact, there's more to these drinks than just sugar. The science behind sports drinks technically defines them as **carbohydrate electrolyte solutions** designed specifically to replace energy (carbohydrates), electrolytes (e.g. sodium, potassium), and fluids lost as a result of physical exercise.

### Sports Drinks can be used:

- **Before** exercise to provide a little extra fuel;
- **During** physical activities that last longer than 60 minutes of non-stop exercise;
- **During** and **in-between** multi-events (e.g. swim meets, soccer tournaments);
- **After** exercise to help restore carbohydrates, electrolytes and fluids lost.

### Sports Drinks are not necessary when:

- Random drinking not related to exercising;
- Exercise is < 60 minutes steady duration (e.g. community hockey game);
- Sipping throughout the day or as a drink with meals.

However, selecting a suitable sports drink isn't always an easy task as the composition of these drinks can vary from product to product, especially their carbohydrate and sodium content. To make this even more confusing, there are a variety of beverages that may be perceived to be sports drinks, but technically are not designed to aid sport performance.

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## True “Sports Drinks”: Carbohydrate, electrolyte beverages

- *E.g., Gatorade™, Powerade™, eLoad™, Accelerade™*
- Ideally consist of 6-8% carbohydrate\* (i.e., 6 to 8 grams of carbohydrate for every 100 ml of beverage), 500-700 mg of sodium per litre\*, 80-200 mg of potassium per litre\*.
- **Purpose:** replace energy (carbohydrates), electrolytes (e.g. sodium, potassium), and fluids lost as a result of physical exercise.
- **Usage:** (See “Sports Drinks can be used”).

## Low-Calorie Electrolyte Drinks: Artificially sweetened, provide electrolytes & fluids

- *E.g., G2™, Nuun™*
- **Purpose:** provide fluids and electrolytes only
- **Usage:** when no need for carbohydrates in a drink, but want to replenish electrolytes and fluids lost with sweat. Will not enhance endurance as they contain no carbohydrates.

## Vitaminized Water: Water with vitamins added and possibly carbohydrates

- *E.g. Aquafina Plus™, Vitamin Water™*
- **Purpose:** promoted as a “healthy” type of water.
- **Usage:** not a replacement for a healthy diet; could result in consumption of too many random vitamins; may be too high in sugar for use during exercise.

## Energy Drinks: Source of caffeine, taurine, carbohydrates, vitamins, possibly herbs

- *E.g. Red Bull™, Rockstar™*
- **Purpose:** promoted to boost energy levels and improve mental concentration.
- **Usage:** only provide short-term perception of energy; caffeine content is usually excessive for children and/or for those not accustomed to regularly consuming caffeine; may be too high in sugar for use during exercise.

Next time, before reaching for any old “sports drink”, take a moment to consider your physical needs. If in doubt, you may benefit from consulting with a sports dietitian to help you make the best choice for your fluid needs – before, during and after training or competition.

\*American College of Sports Medicine, **Exercise and Fluid Replacement.** *Medicine and Science in Sports and Exercise.* 39(2):377-390, 2007.

