# Newsletter

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## Picking a sports drink is a workout in itself

Jill Barker, Postmedia News

Rewind a decade or so, and the debate about what to drink while exercising was limited to water vs Gatorade. Nowadays, there's no shortage of beverages competing for the lucrative fitness market.

Most of these products aren't just promoting their ability to keep athletes hydrated while on the run, bike or swim. The sports beverage market has segmented itself into products designed for before, during and after exercise.

Do you really need three different sports drinks to fuel a workout? Or, is the sports drink market more about hype than hydration?

#### THE ABCS OF SPORTS DRINKS

Long before the sports beverage market segmented itself, scientists grouped sports drinks into three distinct categories: isotonic, hypotonic and hypertonic.

Isotonic drinks replace fluids and electrolytes in a ratio similar to what is lost through sweat. Quickly absorbed into the bloodstream, they also top up glycogen stores in muscles running low on energy. Popular brand name examples are Gatorade and Powerade.

Hypotonic drinks replace fluids only and are without the added electrolytes and carbohydrates found in isotonic drinks. Water and vitamin waters are popular examples.

Hypertonic drinks contain higher quantities of sugar and salt than the fluids lost through exercise and often include added ingredients like protein to refuel and rebuild depleted muscles as well as rehydrate after the race. Chocolate milk, coconut water, fruit juice and recovery sport drinks are popular examples.

### WHEN AND WHAT TO DRINK

Deciding which type of sports drink is right for you depends on the duration and intensity of your workout.

If you are heading out for a 30-minute walk on a cool day, chances are you aren't exercising at an intensity that causes significant sweat loss or muscular fatigue. If you're sufficiently hydrated to start, you probably don't need to drink much more than a glass or two of water before, during or after your walk.

If you're running a marathon, on the other hand, you'll need more than water to get you to the finish line. An isotonic drink will keep you hydrated, refuel your muscles before energy levels get to a critical level and replace electrolytes lost through sweat. The amount you need to drink is related to the amount you sweat, but general guidelines suggest hydrating regularly with sports drinks throughout the 42-kilometre distance.

As for after the marathon, hypertonic drinks refuel and repair tired muscles and make the day after feel just a bit better.

Explaining the hydration and energy needs at these two opposite ends of the exercise spectrum is pretty easy. It's everything else in between that gets a bit complicated.

Contrary to the pitch of energy-drink manufacturers, the bulk of fitness enthusiasts who work out for less than 60 minutes taking fitness classes, going for bike rides, running around the neighbourhood, swimming laps in the local pool or playing old-timers hockey don't need to drink anything more than water before, during and after a workout.

The only exception to the 60-minute rule is exercisers who work out at a high intensity for less than an hour (weightlifters, athletes). They may benefit from consuming a post-workout hypertonic drink that replenishes energy stores and helps rebuild muscle.

This infusion of carbs and protein aids recovery in anticipation of the next workout or game, which is especially critical if it occurs within the next 24 hours or less. Keep in mind that food can offer the same benefits, but for best results (be it liquid or solid) make sure to refuel within 45 minutes of the end of your workout.

#### **DRINK SMART**

The reason all of this is important isn't just to dispel any confusion about what to drink and when, but to help exercisers make smart choices. Isotonic drinks carry a significant calorie load that is fine for exercisers who need them. But for those who don't, the approximately 130 calories per 500ml serving found in most commercial products (which are sold in bottles holding at least two servings) may be unwanted. Or in terms you can better understand, if you've burned 300 calories during a 45-minute workout, finishing off with a sports drink can negate almost all of your hard-earned calorie burn.

Hypertonic drinks like chocolate milk often carry an even heavier caloric load. As for caffeine-laden energy drinks, there's no science to suggest that they offer any more pep than a cup of coffee, which is less expensive and contains fewer calories than an overly sweet energy drink. Parents should also take heed of recent warnings from health officials that energy drinks are unsuitable for children and youth.