

What to Look for in Your Sports Beverage

Numerous niche sports beverages are fighting for shelf space wherever fluids are sold. With so many options to choose from, you might wonder what to look for in a sports drink. Here is a brief summary:

The Basics

- **Good taste.** If you like the flavor, you'll drink more and be less likely to become dehydrated.
- **Carbohydrate.** Look for beverages with about 50 to 70 calories of carbohydrate (13 to 18 g of carbohydrate per 8 oz. or 240 ml). Too much carbohydrate slows absorption; too little leaves you lagging in energy. For long, hard, intense exercise, such as bike racing or marathon running, carbohydrate from a variety of sources (glucose, fructose, and sucrose--or dried fruit, bagels, and gummy bears) might be better absorbed and offer an energy advantage.
- **Sodium.** Important for maintaining fluid balance, sodium stimulates thirst and enhances fluid retention. If you have significant sweat losses, the sodium found in sports drinks helps replace some of the sodium lost in sweat.

Add-Ins With Questionable Value

- **Vitamins.** The vitamins in sports drinks are not incorporated quickly enough during exercise to be of any benefit.
- **Ginseng, guarana, and other herbs.** There are only minimal data to support any claimed benefits and probably too little of the substances in the water to make any difference.
- **Caffeine.** Because of individual responses, caffeine might enhance endurance or cause side effects of anxiety, jitters, and irritability.
- **Protein.** The addition of protein may alter the taste (less desirable) and slow gastric emptying. More research is needed to determine if protein in a sports drink (more so than just the additional calories when protein is added to a carbohydrate drink) offers a performance benefit during exercise (Saunders, Kane and Todd 2004). The benefits noticed after exercise is reduced muscle soreness. You can get this same benefit by eating protein before exercise (let's say, by having a preexercise snack of cereal with skim milk) if you prefer to not consume protein during exercise.
- **Potassium, calcium, magnesium, and other minerals.** In most cases, too little of these minerals is lost in sweat to create problems. The minerals can be easily replenished with fruits, vegetables, and wholesome foods.

What You May Not Want

- **Carbonation.** Bubbles can make you bloated and fill you up sooner.
- **Plastic bottles.** They litter the environment if not recycled. How about having just one bottle that you fill up daily?

Reference: **Nancy Clark's Sports Nutrition Guidebook, 4th Edition.**

A LOOK AT SOME PRODUCTS....

Sports drinks contain fluid (water), electrolytes (sodium, potassium), and carbohydrates (fructose, glucose, maltodextrin, sucrose).

Product (8oz)	Carbohydrate	Sodium	Potassium
Original Gatorade	14 g	110 mg	30 mg
Powerade ION4	14 g	100 mg	25 mg
AllSport Body Quencher	16 g	55 mg	60 mg

All of the above meet the recommendations for the “Basics” in a sports drink. None contain caffeine.

Energy Drinks differ from sports drinks with regard to caffeine content (too high), carbohydrate content (too high) and other ingredients (unnecessary--vitamins, amino acids, herbs, etc).

Product (8oz)	Calories	Caffeine	Carbohydrate	Other
Red Bull	110	80 mg	28 g	Vitamins B3, B5, B6, B12
Monster	100	160 mg	27 g	Vitamins B3, B6, B12, Taurine, Guarana, and more
Rockstar	140	80 mg	31 g	Vitamins B2, B3, B5, B6, B12, Taurine, Ginko Biloba Leaf Extract, Guarana Seed Extract, and more
Amp	120	75 mg	32 g	Vitamins B2, B3, B5, B6, B12, and phosphorous

By comparison, the caffeine content in an 8 oz. cup of coffee is 100 mg, Coke--35 mg, Pepsi--38 mg, and Mountain Dew--55mg. While it's true that caffeine can enhance performance, athletes need to realize that some sports governing groups (NCAA, for example) can disqualify them from competition if there is too much caffeine in their system. Most people who drink caffeinated beverages know that once the effects of caffeine wear off, they feel even more sluggish than before.

The carbohydrate concentration of these **energy drinks** is in the range of 11-15%. The **sports drinks** mentioned above contain between 6-7%. This higher sugar content slows gastric emptying, potentially causing stomach cramps--something you definitely won't want during competition.

Finally, the “other” ingredients are just not necessary or at least, not necessary while you are exercising. An adequate sports diet will provide enough vitamins/minerals for good health and performance.

One added ingredient to definitely watch out for is “bitter orange” which is an herbal source for the drug synephrine. Some manufacturers are adding bitter orange in place of ephedra, since ephedra was removed from the market in 2004.

Protein-Containing Sports Drinks / Recovery Drinks also making the shelf. While these can be convenient, the question remains “are they necessary”?

You definitely want to refuel soon after exercising with a carb-protein combination. While you may hear the recommendation for a particular ratio of carbohydrates to protein (3 or 4:1) after a hard workout, you need not be exact. The goal is to **not** consume a heavy amount of protein that sits in the stomach and slows digestion. If you prefer a recovery drink because it is convenient, go ahead (see below for some suggestions). The only thing they will likely hurt is your wallet. You can easily and adequately refuel with chocolate milk, yogurt, a sandwich, hummus with pita or with a bit more effort, pasta with meat sauce.

Product (8 oz)	Carbohydrate	Protein	Caffeine
Accelerade	15 g	4 g	no
Gatorade Recover	7 g	8 g	no
Endurox R4	35 g	9 g	no

A final word on sports/energy/recovery drinks--

Be sure to carefully read the label. It is easy to get confused. Many of these products have a complete line of beverages with different ingredients (some are low calorie or no calorie). The manufacturers are continually changing and updating their product line to make it more exciting and interesting to you, the consumer. It is a big business. What a product has in it today, may be different tomorrow. Be sure to know what you are buying and what you are putting into your body!!