

Sport Drink versus Water

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Sport drink manufacturers advertise that their products improve athletic performance. The question they cleverly avoid answering is “How much?”.

Maybe I am looking in the wrong places, but in my many hours of research, I have yet to find a scientific study that demonstrates any performance benefit for youth soccer players from consuming sport drinks.

Yet kids all over the country gulp these beverages day in and day out believing it will somehow make them play better. The reality is this:

Whether endorsed by professional athletes or not, there is no performance-boosting miracle in a bottle of sport drink.

Reported benefits of sports drinks:

- Flavored drinks can entice youngsters to drink more and hence stay better hydrated.
- Carbohydrate supplementation during intense exercise lasting longer than 60 to 90 minutes can help maintain performance – exactly how much isn’t clear for youth soccer players.
- Consuming carbohydrates immediately after intense exercise can help with muscle recovery.

The other side of sports drinks:

The basic ingredients in commercial sport drinks are water, sugar, salt, artificial and natural flavors, colors, emulsifiers and preservatives.

Consider Billy, a 15-year-old competitive soccer player who has learned from television commercials featuring professional athletes performing superhuman feats, that he should always drink a sports drink when playing soccer.

He trains three times per week and has one or more games on weekends. Including summer camps and indoor soccer, he takes part in about 100 practices and half that many games over the course of a year.

Billy dutifully drinks one 32-ounce bottle of sport drink for each game and training. That adds up to over 37 gallons in one year and a couple of hundred dollars. From his sport drink he ingests the equivalent of 2,100 teaspoons (18-1/2 pounds) of sugar – most in the form of high fructose corn syrup made from genetically modified corn. (Google “GMO health risks” to learn more about GMO foods)

In a Nutshell

- Despite the marketing hype, there is no miracle in a bottle.
- In most soccer situations, young players should just drink water.
- Avoid alcohol and caffeine or stimulant-laden drinks as they can dehydrate you.
- Sport drinks should only be used for their intended purpose and not as a casual beverage.

The American Heart Association recommends that added sugar should be limited to about 28 pounds per year for adult males, and 20 pounds for adult women. You can bet that with twenty pounds of sugar coming just from sport drinks, Billy will far exceed the recommended “healthy” sugar limit.

The long-term, ill effects of excess sugar consumption have been presented in a previous article (*How Sweet It’s Not*) so they won’t be detailed here. Blood sugar problems, fatigue, mood issues, chronic inflammation, weak bones and body fat are just a few.

The artificial sweeteners and colors in sport drinks are also troubling. For example, yellow dye #5, Tartrazine, is a known asthma trigger. Citric acid is commonly used to preserve and add tartness to sport drinks. It noted for its propensity to decay teeth.

Some sport drinks contain brominated vegetable oil (BVO) to keep the ingredients from separating in the bottle. Apart from disrupting hormones and causing acne and reproductive problems, BVO is also a flame retardant. It is banned in food in Europe and Japan.

In summary, after 100 practices and 50 games, Billy, our young, sport-drink-guzzling soccer player is likely to end up a chubby, moody, tired, sore, pimple-faced, rotten-toothed, hormonal, weak-boned wheezing asthmatic who won’t spontaneously combust!

But joking aside. The main point to take away from this discussion is that most commercial sports drinks are fundamentally unhealthy and should only be used in limited quantities for their intended purpose, that being for intense exercise that lasts longer than 60 to 90 minutes in heavy-sweat conditions, or as a recovery drink when playing multiple games in a day.

Sport drinks are basically just diluted soda without fizz. It makes no sense that we parents and coaches chastise young players for drinking soda but then supply them with sport drink by the gallon.

Water is usually sufficient for a well-fed, well-conditioned soccer player participating in one game or practice per day in average temperatures. Multiple sessions per day of intense exercise on hot, humid days can drain the body of carbohydrates and electrolytes such as magnesium, potassium, sodium and chloride. These can be replaced by food or by sport drinks.

But unless playing in extreme temperatures or conditions or playing multiple games in one day, the duration and intensity of children’s soccer games is rarely enough to warrant the use of sport drinks.

In most soccer situations, young players should just drink pure water.

Nutrition Facts	
Serving Size	8 fl oz. (240 ml)
Servings Per Container	2.5
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Amount Per Serving	
Calories	50
<hr/>	
% Daily Value	
Total Fat	0 g 0%
Sodium	110 mg 5%
Potassium	30 mg 1%
Total Carbohydrate	14g 5%
Sugars 14g	
Protein	0 g

Commercial sport drink nutrition label. Note: there are 14 grams of sugar per serving and 35 grams per container.

If you drink a sport drink as a daily casual beverage, as many athletes mistakenly do, stop now. Your body is nearly 70% water and that is what it needs to be healthy, not sugar water laced with health-compromising chemicals.

Sport Drink Quality

- Avoid those containing high fructose corn syrup (HFCS) and artificial flavors, colors and sweeteners. HFCS may also be listed as “glucose-fructose syrup.”
- Avoid drinks that contain stimulants such as caffeine and/or Guarana.
- Much has been written about sport drinks with added protein improving on-field performance. Most studies do not support that claim.

It is easy and inexpensive to make your own “healthy” sport drink. Most serious endurance athletes do just that to avoid the additives and chemicals in the commercial products. There is a recipe in the *Soccer Nutrition Handbook* and many can be found online.

Energy drinks

Just say no. Now let me shout that so all the kids hear: JUST SAY NO! The serious and dangerous side effects of these cleverly-marketed products is just now coming to light. JUST SAY NO!

Summary

I remember when Gatorade was invented, it tasted like sweat and few of us players ever bothered to drink it. Now it tastes like soda and it is a multi-billion dollar, world-wide industry. Sport drinks are so cleverly and relentlessly marketed to young athletes that most players think they can't play soccer without them. In most instances, they can and should.

Many top athletes do not use sport drinks. They rely on real food instead of a sugar and chemical-laced beverage. I have played competitive soccer for most of my life without using sport drinks.

Now, after thirty plus years of coaching, I can honestly say that I have not been able to detect a difference in the on-field performance of players who use sport drinks and those that drink water.

Please keep that in mind the next time you reach for a bottle of sport drink.

Until next time – Be Well, Play Well.

About the Author

Curt Thompson is a practicing nutritionist and the author of the *Soccer Nutrition Handbook* (www.NutritionCoaches.com). He is also a nationally licensed soccer coach and runs the Advanced Training Program at FC Boulder in Colorado.