



Sports Health Tip

What Should You Look for in a Sports Drink?

(These tips are being provided by Dr. Tom Bartsokas)

This information will help clarify which sports drinks may actually help your athletic performance.

One area that has generated a lot of research is the science of sports drinks. The opinion of most Sports Medicine experts is that herbal products in sports drinks are too variable in content and unreliable regarding purity to be recommended. Recent findings have shown that some additives (rather than plain water) can definitely boost sports performance.

When exercising in hot weather, it is clear that preventing dehydration enhances athletic performance and helps avoid health problems. For events shorter than 30 minutes, it is recommended that athletes simply drink water (17-20 ounces, 2-3 hours before the event and 7-10 ounces, 10-20 minutes before) prior to a practice/game. In order to replace sweat losses resulting from an activity less than 30 minutes, athletes are encouraged to drink water afterward at a rate of 20 ounces for every pound of weight lost.

If exercise is going to last longer than 30-45 minutes (or is going to be particularly intense), a sports drink should be provided before, during and after the session. Recommended rates of consumption before and after these longer events are the same as those just listed for water related to shorter events.

- Consumption of carbohydrates during prolonged exercise (defined as 2-6 hours) maintains blood glucose and delays fatigue by sparing muscle glycogen stores and preserving blood volume (Coggan and Coyle, 1987).
- According to one prominent researcher, athletes should ingest 4 to 8 ounces of a 6% to 7% carbohydrate solution every 10 to 20 minutes of continuous effort (Bernadot, 2006).
- Carbohydrate concentrations higher than 8% may delay gastric-emptying and should be avoided (Sawka et al., 2007).

With regard to electrolytes in sports drinks, there is theoretical support for consuming sodium during exercise, since this electrolyte may help to improve glucose and water absorption in the small intestine. Sodium and potassium are clearly important during rehydration after exercise-especially when discussing exercise in hot weather (Shireffs et al., 2004). A good idea is to use a sports drink with moderate amounts of sodium during workouts and to reserve those products with potassium for rehydration purposes only until more research is done.

Adequate and proper hydration is not only a physiologic necessity but also improves performance and reduces risks of medical complications from fluid losses (Von Duvillard et al., 2008).

COMPARISON OF POPULAR SPORTS DRINKS

Beverage	Carbohydrate Content	Carbohydrates (grams)	Protein (grams)	Calories	Sodium	Potassium	Caffeine	High Fructose Corn Syrup
Accelerade Ready to Drink	6%	15	4	80	120	15	NO	NO
Gatorade	6%	14	0	50	110	30	NO	YES
Gatorade Endurance	6%	14	0	50	200	90	NO	YES
Gatorade G2	3%	7	0	25	110	30	NO	YES
Gatorade Tiger Focus	3%	7	0	25	135	40	NO	
POWERAde Ion4	5%	14	0	50	100	24	NO	YES
POWERAde	7%	17	0	64	53	32	NO	YES
Amino Vital	3%	8	<1 g	35	10	35	NO	NO
Cytomax	5%	13	0	50	55	30	NO	NO
Propel Fitness Water	1%	3	0	10	35	0	NO	NO
Vitamin Water – Energy	5%	13	0	50	0	70	75 mg	NO
Vitamin Water	5%	13	0	50	0	70	NO	NO
Life Water	5%	13	0	50	120	20	NO	NO
Bottled Water	0%	0	0	0	0	0	NO	NO
Soda/Cola	25%	25	0	100	?	?	YES	YES

***Note: this is ingredients per 8 oz. serving

References

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