

# How to Read a Sports Drink Label

## Key Points

- ◆ Look for sports drinks with 14grams of carbohydrate per 8 oz to encourage rapid fluid replenishment (this is a 6% carbohydrate concentration to consume during exercise).
- ◆ Each ingredient in a sports drink (carbohydrate, water, sodium and potassium) performs an important function.

A sodium level of about 100-110 mg per 8 oz enhances the taste, facilitates absorption, and maintains body fluids. Diluted juices are severely lacking in this area. Generally speaking, lack of sodium, such as in water, and lower sodium levels in some other sports drinks may not stimulate voluntary drinking or help maintain fluid balance as does the higher sodium content in Gatorade.

Nutrition Facts	
Serving size 8 fl oz (240ml)	
Serving Per Container 2	
Amount Per Serving	
<b>Calories 50</b>	
% Daily Value*	
<b>Total Fat</b>	0g 0%
<b>Sodium</b>	110mg 5%
<b>Potassium</b>	30mg 1%
<b>Total Carbohydrate</b>	14g 5%
Sugars 14 g	
<b>Protein</b>	0g
Not a significant source of Calories From Fat, Saturated Fat, Cholesterol, Dietary Fiber, Vitamin A, Vitamin C, Calcium, Iron	
*Percent Daily Values are based on a 2,000 calorie diet.	

**INGREDIENTS:** WATER, SUCROSE SYRUP, GLUCOSE SYRUP, GLUCOSE-FRUCTOSE SYRUP, CITRIC ACID, NATURAL LEMON AND LIME FLAVORS WITH OTHER NATURAL FLAVORS, SALT, SODIUM CITRATE, MONOPOTASSIUM PHOSPHATE, ESTER GUM, YELLOW 5.

Research shows that the 6% concentration of carbohydrate in Gatorade (14g/8 oz) allows for rapid fluid replacement and contributes to improved performance. Recent studies show that Gatorade stimulates fluid absorption faster than some other sports drinks with higher carbohydrate concentrations. (Gatorade is absorbed as fast or faster than water. Water has no carbohydrate and therefore provides no energy).

The level of potassium (30mg/8 oz) as well as the sodium level should attempt to replace body losses in proportion to those levels lost in sweat.

Don't confuse the % Daily Value with the carbohydrate percentage of a beverage.

The type of carbohydrate (as well as the %) affects sweetness and can reduce fluid intake if too sweet. High fructose levels can cause gastrointestinal distress because they slow absorption. Multiple carbohydrate sources are preferred because this helps stimulate fluid absorption.

Protein: Research shows there are no immediate benefits during exercise from including amino acids<sup>1</sup> (like branched-chain amino acids) or protein in a sports drink.

Herbs and Sports Drinks: There have been no conclusive studies showing performance benefits from ginkgo biloba, ephedra and ginseng and some studies suggest these herbs may provide adverse side effects.<sup>2,3</sup> Experts question the safety and benefits of other herbal additives such as guarana.<sup>4</sup>

Vitamins and Sports Drinks: No data exist to show an immediate physiological benefit of adding any vitamins to a sports drink. In fact, some B vitamins adversely affect the taste of a beverage and could discourage adequate fluid intake.

### Calculate the carbohydrate % of any beverage:

To calculate the carbohydrate concentration of any beverage as a percentage, divide the amount of carbohydrate in one serving (in grams) by the amount of fluid in one serving (in milliliters), and then multiply by 100 (8 ounces equals 240 milliliters).

**For Gatorade:**  $\frac{14 \text{ grams carbohydrate}}{240 \text{ milliliters}} \times 100 = 5.83$  or 6% carbohydrate concentration

<sup>1</sup> Davis, J. M. et al. *Int J Sports Nutr* 20:309-314, 1999.

<sup>2</sup> Maughan, R.J. and R. Murray. *Sports Drinks: Basic and Practical Aspects*, Chapt. 9 pp. 225-255, 2001.

<sup>3</sup> Vahedi, K. et al. *Journal of Neurology, Neurosurgery, and Psychiatry* 68:112-113, 2000.

<sup>4</sup> Myerscaugh, M. *Aust Fam Physician* 11:1037-1040, 1998.

