

SPORTS DRINKS – AN EVALUATION

by Dr. Bruce Miller

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Here is a summary of what research shows we need in a true sports drink per 8 ounces.

1. It should be a glucose polymer which can move out of the stomach more quickly than water.
2. It should contain more than 20 grams of carbohydrate and less than 28 grams. Less than 20 grams is not enough.
3. It should contain over 100 mg of sodium. This amount has been shown to help glucose enter the blood stream quickly.
4. It should contain some or all of the main electrolytes (potassium, sodium, chloride, calcium, magnesium and phosphates).
5. It should contain fructose which is nearly four times as efficient in restoring liver glycogen as other sugars.
6. It should **not** contain sucrose (table sugar) which is cheap, but just does not work as well as the polymers.
7. It should **not** contain artificial flavors, colors, or preservatives; these chemicals do nothing for athletes. It should be all natural.
8. I am also not comfortable with aspartame because it has caused some problems such as headaches in susceptible people. I see no need for it, or other artificial sweeteners, in a drink such as this. (Acesulfame K, sucralose-Splenda, high fructose corn syrup, for instance).
9. Three carbohydrate sources are better than one or two.
10. Vitamins have no place in a drink designed for use during your sport. Your digestive system pretty well shuts down in exercise. Other added nutrients just put extra demand on the system. These include amino acids, proteins, gums, rosins, oils).

PER PORTION

FACTORS	GATOR-ADE	POWER-ADE	CYTO-MAX	PERFOR-MANCE	ACCEL-ERADE	ACCELER-ADE HYDRO	YOUR CHOICE
POTASSIUM	30mg	30mg	60mg	50mg	65mg	55mg	
CALCIUM	0	0	6mg	40mg	24mg	12mg	
SODIUM	110mg	50mg	120mg	115mg	190mg	180mg	
CHLORIDE	30mg	0	0	45mg	0	0	
MAGNESIUM	0	0	14mg	5mg	105mg	122mg	
PHOSPHORUS	0	0	0	20mg	0	0	
CARBO-HYDRATES	14g	15g	22g	25g	21g	10g	
POLYMER	N	Y	Y	Y	Y	Y	
FRUCTOSE	N	N	Y	Y	Y	Y	
HIGH FRUCTOSE CORN SYRUP	Y	Y	N	N	N	N	
ARTIFICIALS	Y	Y	Y	N	Y	Y	
# CARBO SOURCES	2	2	4	3	3	3	

