

Beverage Marketing Claims vs. Scientific Evidence

TYPE OF BEVERAGE	MARKETING CLAIMS	WHAT THE SCIENCE SAYS
SPORTS DRINKS		
Gatorade G2-Perform® (regular and low calorie)	"Replenish vital nutrients and energy"	Sports drinks are not necessary to replenish nutrients and energy if youth are not engaging in continuous, vigorous activity for more than one hour in hot weather. The salts contained in these products, primarily sodium, are already sufficient in the diet for ordinary day-to-day activities. ¹
Powerade Fruit Punch®	"Advanced Electrolyte System Helps Replenish Electrolytes Lost in Sweat"	
Gatorade G2-Perform® (regular and low calorie)	"Drink to help rehydrate, replenish and refuel and savor the sweat"	Water is the optimal beverage of choice for rehydrating for everyday activities. Sports drinks are only recommended when engaged in vigorous activity in extreme conditions for longer than an hour. ²
Gatorade G Series-Recover®	"...providing hydration and muscle-recovery benefits with its specially designed protein replenishment formula"	Water is the optimal beverage of choice for hydration. The average diet is already high in protein and adequately supports physically active adolescents' muscle rebuilding and growth. ³
ENERGY DRINKS		
Red Bull®	"Improves performance especially during times of increased stress or strain. Increases endurance"	Energy drinks should not be used for endurance activities due to the dehydrating and cardiovascular effects of their high caffeine content. ⁴
	"Increases concentration and improves reaction speed"	Studies show mixed results and indicate intake may even slow reaction speed. ⁵ Youth consuming caffeine have been reported to have a reduced ability to focus and concentrate in a learning environment. ⁶
RockStar®	"Double Strength, Double Size. Bigger. Better. Faster. Stronger. Rockstar is the world's most powerful energy drink"	Caffeine and guarana stimulate the cardiovascular and nervous system, and can have detrimental effects (such as tachycardia) when consumed in quantities as large as present in some energy drinks. ^{7,8}
Monster Energy®	"It's a wicked mega hit that delivers twice the buzz of a regular energy drink"	
Amp Energy®	"With B vitamins to help kick you into high gear"	B vitamins are involved in metabolic pathways in the body but do not provide energy. There is no evidence supporting the intake of additional B vitamins to increase the efficiency of energy production in the body. ⁹

FLAVORED WATERS

Vitamin Water®
Fruit Punch Revive

“It’s got B vitamins and potassium, some of your body’s friends”

While B vitamins and potassium are essential for body functions, they are plentiful in the food supply and in the diets of youth and need not be obtained from beverages.^{10,11}

Vitamin Water® XXX

“We only named this drink XXX because it has antioxidant vitamins A & C to help fight free radicals and help support your body”

Vitamins A, C, and E act as antioxidants, but are best obtained from natural sources. The use of supplemental forms is discouraged since there may be unknown risks associated with ingesting excess supplemental antioxidants.^{12,13}

SoBe® Lifewater
Yumberry Pomegranate

“Vitamins C and E are antioxidants that help protect the body from damaging free radicals. We’re just psyched they’re on our side!”

FRUIT FLAVORED DRINKS

V8® Splash Mixed Berry

“Vitamins A, C & E Antioxidant Plus”

Vitamins A, C and E act as antioxidants but are best obtained from natural sources. The use of supplemental forms is discouraged since there may be unknown risks associated with ingesting excess supplemental antioxidants.^{14,15}

SoBe® Strawberry
Banana

“Naturally sweetened and lizzle-drizzle with a nice peaceful blend of ginseng and yerba mate”

Yerba mate, when consumed regularly, has been shown to be associated with some cancers.^{16,17} Ginseng, when taken in conjunction with caffeine, may have synergistic effects, including heart arrhythmia and increased blood pressure.^{18,19,20} The National Institutes of Health advises against the combined intake of caffeine and ginseng due to known adverse side effects.²⁰

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- Unnithan, V.B. & Gouloupoulou, S., 2004. Nutrition for the pediatric athlete. *Current Sports Medicine Reports*, 3(4), pp.206–11. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/15231224> [Accessed February 6, 2013].
- Ibid
- Ibid
- Meadows-Oliver, M. & Ryan-Krause, P., 2007. Powering up with sports and energy drinks. *Journal of pediatric health care : official publication of National Association of Pediatric Nurse Associates & Practitioners*, 21(6), pp.413–6. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/17980811> [Accessed December 11, 2012].
- Anderson, C. & Horne, J.A., 2006. A high sugar content, low caffeine drink does not alleviate sleepiness but may worsen it. *Human Psychopharmacology*, 21(5), pp.299–303. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/16856218> [Accessed November 7, 2012].
- Pennington, N. et al., 2010. Energy drinks: a new health hazard for adolescents. *The Journal of School Nursing : the Official Publication of the National Association of School Nurses*, 26(5), pp.352–9. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/20538866> [Accessed November 20, 2012].
- Higgins, J., Tuttle, T. & Higgins, C., 2010. Energy beverages: content and safety. *Mayo Clinic Proceedings*, pp.1033–1041. Available at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2966367/> [Accessed November 20, 2012].
- Seifert, S.M. et al., 2011. Health effects of energy drinks on children, adolescents, and young adults. *Pediatrics*, 127(3), pp.511–28. Available at: <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=3065144&tool=pmcentrez&rendertype=abstract> [Accessed November 4, 2012].
- National Institutes of Health, Vitamin B12. *Medline Plus*. Available at: <http://www.nlm.nih.gov/medlineplus/druginfo/natural/926.html> [Accessed March 5, 2013].

- Ibid
- Bailey, R.L. et al., 2012. Do dietary supplements improve micronutrient sufficiency in children and adolescents? *The Journal of Pediatrics*, 161(5), pp.837–42. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/22717218> [Accessed March 5, 2013].
- Anon, 2005. Position of the American Dietetic Association: fortification and nutritional supplements. *Journal of the American Dietetic Association*, 105(8), pp.1300–11. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/16182650> [Accessed February 6, 2013].
- National Institutes of Health, National Center for Complementary and Alternative Medicine., Antioxidants. *Medline Plus*. Available at: <http://www.nlm.nih.gov/medlineplus/antioxidants.html>
- Sacco, J.E. & Tarasuk, V., 2011. Discretionary addition of vitamins and minerals to foods: implications for healthy eating. *European Journal of Clinical Nutrition*, 65(3), pp.313–20. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/21119698> [Accessed February 5, 2013].
- Anon, (2005). op cit.
- Pittler, M.H., Schmidt, K. & Ernst, E., 2005. Adverse events of herbal food supplements for body weight reduction: systematic review. *Obesity reviews : an official journal of the International Association for the Study of Obesity*, 6(2), pp.93–111. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/15836459> [Accessed February 4, 2013].
- Loria, D., Barrios, E. & Zanetti, R., 2009. Cancer and yerba mate consumption: a review of possible associations. *Revista Panamericana de Salud Pública = Pan American Journal of Public Health*, 25(6), pp.530–9. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/19695149> [Accessed February 4, 2013].
- Torbey, E. et al., 2011. Ginseng: a potential cause of long QT. *Journal of Electrocardiology*, 44(3), pp.357–8. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/20888003> [Accessed February 4, 2013].
- Higgins, J., Tuttle, T. & Higgins, C., 2010. Energy beverages: content and safety. *Mayo Clinic Proceedings*, pp.1033–1041. Available at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2966367/> [Accessed November 20, 2012].
- National Institutes of Health, Ginseng, Panax. *Medline Plus*. Available at: <http://www.nlm.nih.gov/medlineplus/druginfo/natural/1000.html>