



MAFES Dawg Tracks

May 14,



Water vs.
Sports Drinks



I don't want to get a connotation of a "broken record," but I keep hearing discussions and idle talk on the subject of water vs. sports drinks. I observe my grandchildren drinking PowerAde religiously in their sports activities. Water just isn't in their vocabulary, nor is it in their friends as well. Research continues on the merits and virtues of both water and sports drinks. I have studied from several links on the opinions and reports of different scientists on these products.

Dr. Robert Roberge, a UNM exercise physiologist, has done extensive research on this subject. He wrote in the web page of the university's www.dailylobo.com a detailed article of the effects of water vs. sports drinks. His study ran from 1999 to 2004, researching Gatorade's claim that it is superior to water in the ability to rehydrate the body. If the weights are the same, it is obvious that Gatorade isn't retained any better than water. The reason that Gatorade is thought to rehydrate better is because of the carbohydrates in the drinks, which aids the small intestine in absorbing water in the body. The body absorbs water 7 times faster with carbohydrates, but according to Dr. Roberge, there is no more evidence that the body is able to retain the water. After the research where the subjects drank the water and the Gatorade, the subjects had to run to the bathroom just as fast.

The research showed that Gatorade provides athletes with carbohydrates needed during exercise, but unless a person is going to exercise strenuously for 90 minutes, consuming carbohydrates is self-defeating. He also added that there is no need for people to ingest a drink that is basically water. You can make the same drink out of sugar and Kool-Aid, and then add some table salt. It is effectively the same for 1/5th of the cost of Gatorade.

Gatorade's Sport's Science Institute's website states that water quenches thirst, but it is not an effective hydrator because it prematurely satisfies thirst. The research showed that most people don't drink enough water during exercise, and the fluids in their bodies are constantly depleted through urination. The salt in Gatorade maintains their desire to keep drinking it. Dr. Ruberg says that the same argument against water used by the company applies to its sports drink. The argument is valid for both water and Gatorade. Dr. Ruberg surmises that *(exercises scientists) are improving in integrity and accuracy of science.*

Mr. Peter Lui, representing the soko.com health and fitness link states that sweating is the body's mechanism for cooling down, which is triggered by heavy activity and heat. The higher sweat production occurs during exercise. As sweat rises to the skin, larger amounts of water, sodium chloride and potassium are brought to the surface. The loss of these electrolytes decreases the athletic effectiveness, since the loss of sodium chloride and water dehydrates the body. The most important thing to know is the amount of sweat produced is equally proportionate to the amount of energy used up. It is when the body loses fluids that the debate between water and the sports drinks comes to the fore.

Other variations contain fewer carbohydrates, more vitamins, more electrolytes and caffeine. Both drinks boast that they help the body to work harder and more effectively during exercise by replacing electrolytes as you lose them and enabling your body to drink more liquid. Drinking more liquids quickens rehydration. Gatorade claims that its drink does it better than water. The real truth is that sports drinks are more effective if you're planning to take part in an extreme exercise event for long periods of time, like triathlon or marathon runs.

WATER FACTS - Water contains minerals and electrolytes, as does Gatorade and Powerade. However, water contains calcium, nitrates, sulphates, and zinc, in addition to electrolytes. One of the selling points that sports drinks have against water is that water has no taste. Sugar and Flavoring added to sports drinks increases their appeal. They also boast that people soon tire of drinking water because of the lack of taste. **Water does not contain the calories of sports drinks.** This may be one reason why they released newer versions with fewer calories.

FITNESS WATER - Gatorade released its line of Propel fitness water in 2000. It has the same ingredients as Gatorade but also includes more vitamins and fewer calories. The selling points are the same as Gatorade. The lightly flavored water is supposed to make you drink more, while helping you to stay active. The fact is that water does the same job.

THE VERDICT - While Gatorade, PowerAde, Propel, and all other off-shoots boast superiority to water in some way or other, drinks that contain electrolytes are only at their most effective during extended periods of intensive exercise. Water is a much better substitute for normal periods of exercise. If you normally exercise for an hour or more, you can easily replenish and rehydrate your muscles with water. If your body mostly consists of water in the first place, why replace that water with some foreign liquid?

KNOWING IS HALF THE BATTLE - Athletes and workers will have their own preferences as to what they want to drink while they exercise or work, and the debate of which is the best will continue. It's just best to know the facts, no matter which drink you like better. The Univ. of California's San Francisco Department of Nutrition's website, www.ucsf.edu/stshare/nutrition, answers the question. **Isn't Gatorade the best drink for playing sports and quenching thirst?** **NO! Gatorade is not as bad as other drinks like soda, but when you are playing sports, water is probably the best. Gatorade has sugar in it, which makes it harder for your body to absorb the fluid you need while playing sports. But as long as you have a healthy diet and aren't running marathons, water will provide the needed electrolytes and is probably your best option.**

All the articles I have read use sports and exercise for their research comparisons. Normal field work compares closely to these. No information I have read totally favors sports drinks over water.

Ted Gordon - Risk Mgmt. / Loss Control Mgr.
MAFES / MSU-ES (662) 566-2201

Sources: www.soko.com -www.dailylobo.com -
www.ucsf.edu/stshare/nutrition.html-3/18/09
3/4/2012

**THE HOTTER IT GETS ON THE OUTSIDE
THE MORE WATER YOU NEED ON THE
INSIDE!
LEAD THE WAY WITH WATER TODAY!**