

# MAFES Dawg Tracks

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Water vs. Sports Drinks

I don't like to think of repeating these newsletters dealing with the benefits of water as a cop out for exploring new subjects. We feel that repeating each year will get some attention that, in our culture, water is the best choice for maintaining hydration. Obviously, water with ice is still cheaper than Gatorade or other power drinks. Most of our agriculture work, in my opinion, comes in the class of normal, heated work, and cold water suffices to keep us hydrated.

The paper from March 6, 2015 gives all the right reasons for water and how it helps the body with most all of its functions. This week we share with you the positive selling points of water vs. sports drinks.

Dr. Robert Roberge, a University of New Mexico sports physiologist, has done extensive research on this subject. He wrote an article on the web page of the university's campus paper, [www.dailylobo.com](http://www.dailylobo.com), on the effects of water vs. sport drinks. His study ran from 1999 through 2004, researching Gatorade's claim that it is superior to water in the ability to hydrate the body. If the weights are the same, it is obvious that Gatorade isn't retained in the body any better than water. The reason that Gatorade is thought to hydrate better is because of the carbohydrates in the drinks, which help the small intestine in absorbing water in the body. The body absorbs water seven times faster with carbohydrates but, according to Dr. Roberge, there is no evidence that the body is able to retain the water.

During the study where the subjects drank water and Gatorade, the subjects ran to the bathroom just as fast with each beverage. 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. Dr. Roberge stated that there is no need for people to ingest a drink that is basically water. You can make the same drink out of Kool-Aid and sugar and then add table salt. It is just as effective and is only one-fifth of the cost.

Gatorade's Sport Science Institute website states that water quenches the thirst but it isn't an effective hydrator because it prematurely satisfies thirst. The study showed that most people don't drink enough water during exercise and the fluids in their body are constantly depleted during urination. The salt in Gatorade maintains their desire to keep drinking it. Dr. Roberge says that the same argument used by the company against water applies to sports drinks – the argument is valid for both water and Gatorade. Dr. Roberge surmises that exercise scientists are improving in integrity and science.

Mr. Peter Lui, representing [www.soko.com](http://www.soko.com) health and fitness link, stated 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 those electrolytes decreases 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. These drinks boast that they can 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 are planning to take part in an extreme exercise program for long periods of time, like triathlons or marathons.

**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 of sports drinks is that water has no taste. Sugar and flavoring added to sports drinks increases their appeal. They also boast that people tire of drinking water because of the lack of taste. Water does not contain the calories of sports drinks. This may be the reason that sports drink manufacturers 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 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 to stay active. The fact is: water does the same thing.

**THE VERDICT:** While Gatorade, Powerade, Propel, and all the other off-shoots boast superiority to water in some way or another, drinks that contain electrolytes are only most effective during periods of intense exercise. Water is a much better substitute for normal periods of exercise. If you normally exercise for a period of one hour or more, you can easily replenish and rehydrate your muscles by drinking water. If your body mostly contains water in the first place, why replace the 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 better will continue. It's just best to know the facts, regardless of which drink you prefer. The University of California's San Francisco Department of Nutrition's website 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 when playing sports. 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 that I have read use sports and exercise for their research comparisons. Normal field work compares closely to agricultural work and exercise.

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Excerpts: [www.soko.com](http://www.soko.com) / [www.dailylobo.com](http://www.dailylobo.com)  
[www.ucsf.edu/sfsharenutrition.html](http://www.ucsf.edu/sfsharenutrition.html)  
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**QUENCH YOUR THIRST WITH  
WATER FIRST  
LEAD THE WAY WITH  
WATER TODAY**

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**WHEN IT'S HOT OUTSIDE!!  
DEPOSIT MORE WATER INSIDE!!**