

# MAFES Dawg Tracks



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Water vs. Sports Drinks - What you need to Know



There has been a discussion as to which is better for rehydration, sports drinks, like Gatorade, Powerade, Propel, or water. Research has been and continues to be performed on the advantages of both. There are several schools on the subject. I have researched several links of studies, reports and opinions on the advantages of one over the other. I shall review in summary the findings that I discovered and will add the links that I referred to so that you can refer to these for in-depth details.

Using the link, [www.dailylobo.com](http://www.dailylobo.com), which is the University of New Mexico's Web page, Dr. Robert Robergs, a UNM exercise physiologist, has done extensive research on the subject. I shall summarize his findings and you may refer to this link to get deeper details. Dr. Robergs has spent from 1999 thru 2004 researching Gatorade's claims that it is superior to water in its ability to rehydrate the body. He states that there is nothing magical about Gatorade that hydrates the body better. You put water and Gatorade in front of an athlete, and they prefer to drink Gatorade just because it tastes better. He further stated that weighing a person before and after the drinks have been consumed will test body hydration. 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 drink, which aids the small intestine in absorbing water in the body. The body absorbs water seven times faster with carbohydrates, but Dr. Robergs says that there is no more evidence that the body is able to retain that water. After the research subjects drank the Gatorade and water, they 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 for at least 90 minutes, consuming carbohydrates is self-defeating. He also added that there is no need for people to ingest a drink that is basically sugar water. You can make the same drink out of table sugar and Kool-Aid, then add some table salt. It is effectively the same, but one-fifth the cost.

Gatorade's Sports Science Institute's Web site states that water quenches thirst, but 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 being depleted through urination. The salt in the Gatorade maintains their desire to keep drinking it. Dr Robergs says that the same argument against water used by the company also applies to its sports drink. The argument is valid for both water and Gatorade. Dr. Robergs surmises that we (exercise scientists) are improving the integrity and accuracy of science.

Mr. Peter Liu, 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, large 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 that 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 sports drinks comes to the fore.

Gatorade and PowerAde are the same drink with different flavors. 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 liquid quickens rehydration. Gatorade claims that its drink does it better than water. The real truth is that sports drinks are most effective if you're planning to take part in an extreme exercise event for long periods of time, like a triathlon or marathon runs.

**WATER FACTS:** Water contains minerals and electrolytes as Gatorade and PowerAde does. 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 the year of 2000. It has the same ingredients as Gatorade, but also included 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 and Propel, and all of their 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 preference as to what they want to drink while they exercise or work, and the debate of which is best will continue. It is just best to know the facts, no matter which drink you like better.

The University of California, San Francisco, Department of Nutrition on their web ([www.ucsf.edu/sfshare/nutrition.html](http://www.ucsf.edu/sfshare/nutrition.html)) 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 that I read use the basis of exercise and sports for their research. However, we can relay this message to our work related activities. Excessive work, over long periods of time, may qualify the use of sports drinks, but in normal fieldwork, where breaks are taken periodically, water seems to be the better fit. No article that I read completely favors sports drinks totally over water.

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Sources: [www.soko.com](http://www.soko.com)

[www.dailylobo.com/media/storage/paper344](http://www.dailylobo.com/media/storage/paper344)

[www.ucsf.edu/sfshare/nutrition.html](http://www.ucsf.edu/sfshare/nutrition.html)