MAFES Dawg Tracks

June 13, 2016



MISSISSIPPI STATE UNIVERSITY™ MS AGRICULTURAL AND FORESTRY EXPERIMENT STATION Water vs. Sports Drinks

Same song-second verse! The saga of water and its benefits versus sports drinks remains a subject that is worthy of repeating each year. Most of the information I read reveals the same information that we discuss each year on this subject matter. Water is the better choice than sport drinks. Doctors tell us that only in extreme sports and heavy work activity are sport drinks acceptable.

Dr. Robert Roberge, a University of New Mexico exercise physiologist, has done extensive research on this subject. He wrote an article in the university newspaper, *www.dailylobo.com*, on the effects of water vs sports drinks. This study ran from 1999 through 2004, researching Gatorade's claim that it is superior to water in its ability to hydrate the body. If the weights are the same, it is obvious that Gatorade isn't any better than water. The reason that Gatorade is thought to rehydrate better is because of the carbohydrates in the drinks, which aid the small intestine in absorbing water in the body. The body absorbs water <u>seven</u> times faster with carbohydrates but, according to Dr. Roberge, there is no more evidence that the body is able to retain water.

After the research where the subjects drank water and Gatorade, the subjects ran to the bathroom just as fast. The research showed that Gatorade provides the athletes with carbohydrates needed during exercise, but unless a person is going to exercise within 90 minutes, consuming carbohydrates is self-defeating. He says that there is no reason for people to ingest a drink that is basically water. You can make the same drink out of Kool-Aid and sugar and add a little table salt. It is effectively the same, but 1/5th of the cost of Gatorade.

Gatorade's Sport Science Institute's website states that water quenches the thirst, but it isn't an effective hydrator because it prematurely satisfies the thirst. The study showed that most people don't drink enough water during exercise, and that the fluids in their bodies are constantly depleted during urination. The salt in Gatorade maintains the desire of people to keep drinking it. Dr. Roberge says that the same argument against water used by the company 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 the *soko.com* health and fitness link, states that sweating is the body's mechanism for cooling down and is triggered by activity and heat. 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. It is when the body loses fluid that the debate between water and the sports drinks comes to fore.

Other variations contain fewer carbohydrates, more vitamins, more electrolytes, and caffeine. Both 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 liquid 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 going to take part in extreme exercise programs for a long period of time, like triathlons or marathons.

WATER FACTS – Water contains minerals and electrolytes as do 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 are tired of drinking water because of the lack of taste. Water does not contain the calories of sports drinks. This may be the reason that they release 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 thing.

The Verdict- While Gatorade, PowerAde, Propel, and all other off shoots boast superiority to **water** in some way or another, drinks that contain electrolytes are only at their most effective during extended periods of intensive exercise. **Water** is a much better substitute during normal periods of activity and exercise. If you normally exercise for a period of one hour or more you can easily replenish and rehydrate your muscles with **water**. If your body mostly contains **water** in the first place, why replace it 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 just best to know the facts, no matter which drink you like better.

The University of California's San Francisco Department of Nutrition's website (<u>www.uest.edu/st.share.nutrition</u>) 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 the body to absorb the fluid you need while playing sports. As long as you have a healthy diet and aren't running marathons, water will provide the needed electrolytes and is your best option. Normal field work compares close to agricultural work and exercise.

QUENCH YOUR THIRST WITH <u>WATER FIRST!</u> LEAD THEIR WAY WITH WATER TODAY!

Ted Gordon – Risk Mgmt. / Loss Control Mgr. MAFES / MSU-ES (662) 566-2201 1/28/2016 Excerpts: <u>www.soko.com</u> I www.dailylobo.com / www.ucsf.edu.stshare