THE IMPORTANCE OF PROPER HYDRATION

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Abstract
According to all the mass media campaigns we need to drink at least 2 liters of liquids a day in order to stay hydrated, but according to recent investigations there is no scientific proof that we are in any real danger. It turns out no study has conclusively proven that standard. So why are we often told to stay hydrated well the simple answer is that beverages and bottled water companies promote in their campaigns that people need to drink a lot of liquids.

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JEL classification: *I00; I11; L66; Z29*

Introduction

Beverages and bottled water companies push the idea of hydration, that individuals need to hydrate, hydrating is really important, running ads that you've to drink that much water. But if you look at the hydration panic, it's coming from individual people. It's just people spreading it. It's like, we also dramatize the bit about, "I heard it from my source, he heard it from his source."

Dehydration is way over blown the risk of dehydration is way overblown. We've become obsessed with the dangers of dehydration and people think that if they're not constantly drinking water, they risk death.

Everyone was informed by a big governmental campaign that you have to drink 2 liters of water a day but it's not true, no study has ever shown or even claimed that.

Another big myth that is being promoted is that water prevents cramps, but science says that isn't true. "Muscle cramps and heat stroke are not related to dehydration," says panel member Dr. James Winger, an associate professor in the Department of Family Medicine of Loyola University Chicago Stritch School of Medicine. (McIntosh, James. "Only drink when thirsty to avoid health risks." Medical News Today. MediLexicon International Ltd., 30 Jun. 2015)

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How much water should supposed to drink

According to **Tamara Hew-Butler** a professor of exercise science at Oakland University "you can just drink when you're thirsty" "Our bodies already possess an extremely sensitive measure of dehydration. It's called thirst. As long as we drink when we feel thirsty, we really won't dehydrate. That's how humans have done it for millions of years, and it's worked out fine. The fact is, truly dangerous levels of dehydration are incredibly rare and only occur in cases of extreme sickness or isolation. As long as you have free access to water and you drink when you're thirsty, you'll be fine." (**Tamara Hew-Butler** "Adam Ruins Everything", TV Show, TruTV, USA, 2015)

Beverage companies have spend decades drowning us in ads (fig1, fig 2, fig 3) that portrayed dehydration as a serious threat for one, simple reason-- it gets us to drink more .

Fig 1 **Fig 2** **Fig 3**

The International Bottled Water Association publishes a hydration calculator (fig 4) that can recommend you drink two liters of water a day. (source http://www.bottledwater.org/public/hydcal/i nput1.html)

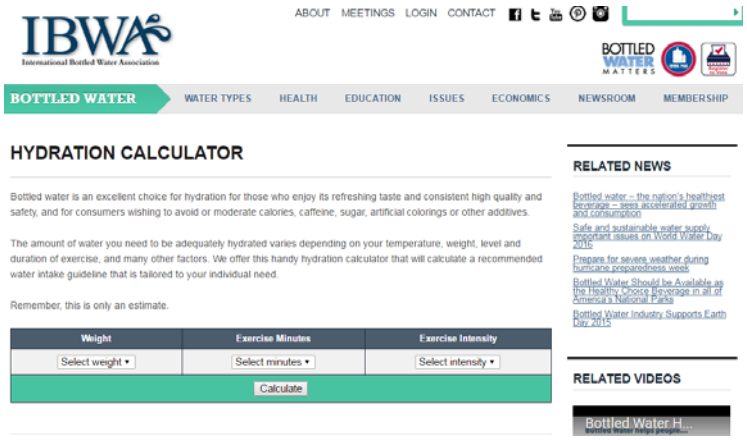


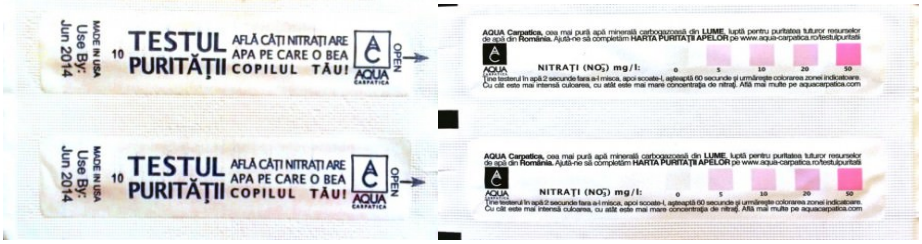
Fig 4

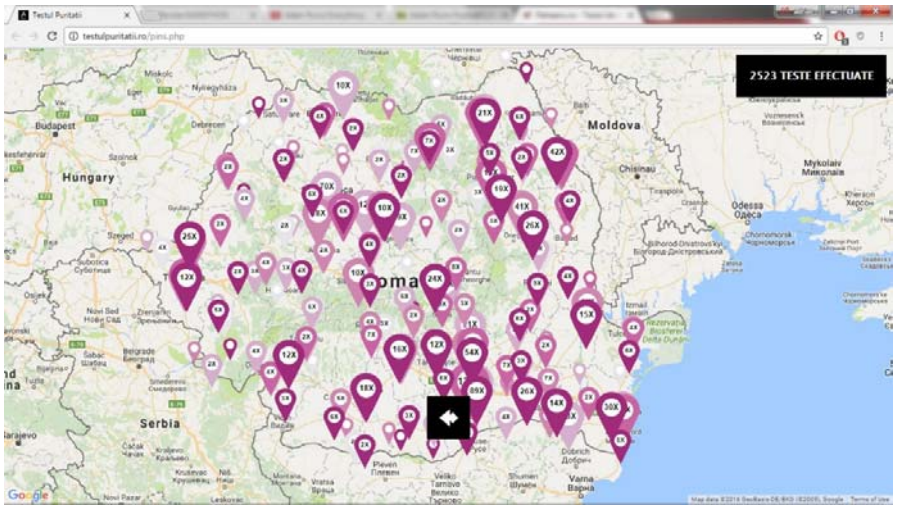
In "Runner's World" magazine, Gatorade ran an ad masquerading as an article titled "Hydration 101." (Gatorade Sports Science Institute: Hydration 101. Advertisement. Runner's World. June 2002: Print.)

The ad was sponsored by the Gatorade Sports Science Institute, which was founded by Gatorade in 1985, in order to discover exciting new reasons people should drink their product. Gatorade also sponsors sports science research at universities across America, and this can influence their findings. (Eig, Jonathan. "Gatorade's Formula For Staying On Top: A Blitz of Research. "Wall Street Journal. News Corp, 5 May 2000. Web)

The American College of Sports Medicine once recommended. “When exercising, you should drink as much as tolerable”. “It is the position of the American College of Sports Medicine that adequate fluid replacement helps maintain hydration and, therefore, promotes the health, safety, and optimal physical performance of individuals participating in regular physical activity. This position statement is based on a comprehensive review and interpretation of scientific literature concerning the influence of fluid replacement on exercise performance and the risk of thermal injury associated with dehydration and hyperthermia” (Convertino, Victor A., et al. "American College of Sports Medicine position stand. Exercise and fluid replacement." Medicine and science in sports and exercise 28.1 (1996): i-vii.)

In Romania companies like Aqua Carpatica launched in 2014 an campaign convincing users that tap water is bad for consumption providing testers and a special web site all paid by them.





And, after decades of bad science and marketing, we now believe dehydration is a dire threat. All of this scare mongering over dehydration has created an entirely different problem: overhydrating.

When making exercise it stops you from urinating by putting your body in water conservation mode. And if you overhydrate then, all that extra fluid has nowhere to go. It's called exercise associated hyponatremia, and it can be deadly. In a study of the 2002 Boston Marathon, nearly one-sixth of the runners studied were found to have hyponatremia. These runners drank so much liquid during the race, that by the finish line, they had actually gained weight. this is a serious problem in sports. (Almond, Christopher SD, et al. "Hyponatremia among runners in the Boston Marathon." **New England Journal of Medicine** 352.15 (2005): 1550-1556.)

Too much water or sports drinks can lead to a condition called exercise-associated hyponatremia (EAH), whereby the kidneys are unable to excrete the excess water in the body completely. As a result, the sodium in the body becomes diluted, causing dangerous swelling in cells. The new 2015 EAH Consensus Guidelines, published in the **Clinical Journal of Sport Medicine**, suggest that there is a simple

way for athletes to avoid these risks - just follow the natural thirst stimulus when it comes to drinking.

"Using the innate thirst mechanism to guide fluid consumption is a strategy that should limit drinking in excess and developing hyponatremia while providing sufficient fluid to prevent excessive dehydration," (McIntosh, James. "Only drink when thirsty to avoid health risks." Medical News Today. MediLexicon International Ltd., 30 Jun. 2015)

At least 12 athletes have died from overhydration. Timothy Noakes, professor of exercise and sports science at the University of Cape Town, South Africa, who has spent the last 30 years researching the topic, says that the dangers of dehydration during endurance exercise have been exaggerated, with the result that cases of EAH are on the rise. He says runners need to be warned that overconsumption of fluids (whether water or sports drinks) before, during, or after exercise can have a potentially fatal outcome. “There is not a single report in the medical literature of dehydration being a proven, direct cause of death in a marathon runner,” adds Prof Noakes. “But EAH, caused by drinking excessively, has resulted in at least 12 deaths among sportsmen and women.” As well as Rogers in 2007, fatalities include a female US marathoner in 1993 and an American footballer, Paul Allen, in 2010. “In addition,” says Noakes, since 1981, “there have been over 1,600 documented cases of EAH worldwide.” (Winter, George. "Over-drinking can be deadlier than dehydration." The Telegraph. Telegraph Media Group, 26 Mar. 2012. Web.)

Conclusion

Drink when you’re thirsty, and don't treat these ads as science.

You really won't dehydrate, the fact is, truly dangerous levels of dehydration are incredibly rare and as long as you have free access to water and you drink when you're thirsty, you'll be fine.

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