What Is a Hydrogen Water Machine? Workout Life-Changer or Wellness Sham?





I recently received an email asking if I wanted to test out a hydrogen water machine to experience firsthand the amazing benefits that hydrogen water could have on my workout routine. My immediate reaction was to scoff at the notion and move on. But then I started seeing more and more mentions of the fitness trend popping up on social media and in my inbox. Maybe I was too quick to judge. So, I turned to the experts and did my own deep dive into the research in order to determine if hydrogen water is for real or just another empty fitness fad. Here's what I discovered.

What is hydrogen water?

As you probably already guessed, hydrogen water (or HW for short) is regular H₂O that has been pumped with extra hydrogen. You can do this yourself at home with your own hydrogen water machine, or you can pick up prepackaged bottles from brands like Dr. Perricone and HFactor. According to those who've tried it, HW tastes exactly the same as regular non-hydrogen-infused water. Actually, anyone who has traveled extensively or lived in Japan may already know hydrogen water by another name, "Shin'nooru solution." Residents of Japan have been drinking Shin'nooru, or HW, since the '60s, although it's only made its way westward to the U.S. in the past year or two.

What are the benefits of hydrogen water?

Some studies suggest that ingesting hydrogen water increases your body's production of antioxidants and helps fight inflammation. Purportedly, it can also boost your energy levels and speed up muscle recovery after working out, meaning you can (theoretically) decrease your downtime between hard efforts. It may also work to slow the aging of your skin, reducing the look of wrinkles and fine lines.

Can hydrogen water *really* do all that?

Unfortunately, the short answer appears to be maybe. There have been a number of studies that suggest real benefits to swapping hydrogen water in for plain tap water, but they were all performed with very small test groups and the results haven't been replicated enough or on a large enough scale to support any solid conclusions. Per Sarah L. Ash, Ph.D., a professor of nutrition at North Carolina State University, "To date most of [the data] comes from non-randomized, open-label or single-blind trials on limited numbers of people for short periods of time and for therapeutic, not general health, effects." Although she does acknowledge that the research done thus far is very interesting and could absolutely benefit from further investigation.

There's also the added complication that hydrogen, as the smallest molecule in the universe, can easily seep through and escape most containers, including the average plastic water bottle. As such, prepackaged HW needs to be sold in aluminum cans or pouches (which luckily are recyclable), but it increases their cost substantially—a 30-pack of Dr. Perricone hydrogen water will set you back \$90. This is why there are so many home machine options available, so you can infuse your own HW and drink it right away, maximizing any benefits it may provide. All you have to do is fill the bottle with tap water and add any lemon or other flavoring if you want, then push the button and the machine will do all the rest. Most come with multiple settings so you can change the amount of extra hydrogen you're adding to the water. Many are even rechargeable using a USH port so you can tote it with you to the gym or office, if you like.

And in much the same way that ingesting collagen sounds like a great way to boost your skin's elasticity, in actuality it may not be doing much of anything for those wrinkles and fine lines. The scientific benefits of ingesting extra hydrogen to help your skin are "weak at best," says Gary Goldenberg, M.D., medical director of the Dermatology Faculty Practice at the Icahn School of Medicine at Mount Sinai. "Hydrogen is an antioxidant, but drinking water enriched with hydrogen doesn't guarantee that it will be absorbed by your skin and help improve hydration, skin function or antioxidant function."

Bottom line:

Because hydrogen water is simply water infused with extra hydrogen, there's no sugar or flavoring involved, making it a healthier option compared to sports drinks like Gatorade or NOOMA, but the research is just too

limited to say for certain whether it will truly give you a notable energy boost or help your muscles recover significantly faster. If you've got cash to burn and want to test it out, it's highly unlikely to have any negative effects on your health, so sure, why not give it a try? That said, if you're hoping to cut down the amount of recovery time between hard workouts by using HW, we suggest easing your way in rather than simply upping your fitness regime immediately. It never hurts to talk with a doctor or certified trainer before you make any major changes to your routine. On the other hand, if you'd rather not rock the boat, we think you're fine to skip this trend and stick to your regular hydration methods and workout plan.