

'HW' – Hydrogen Water

©Arlene R. Taylor, PhD
www.ArleneTaylor.org



“I recently was convinced that alkaline water was the way to go. Now I heard there is something else: Hydrogen water. What is that—and what’s wrong with alkaline water? I know that hydrogen is important in the human body but I thought the body made all it needed.”

I would have smiled if it had been a phone call, but since the individual was standing in front of me, I decided a smile might be misunderstood.

“Nothing wrong with alkaline water that I know of. I drink it every day and carry some with me in car when I am driving around town or for short distances. And, yes, hydrogen is important in the human body. It is naturally produced by intestinal flora upon digestion of fibers. As I understand it, hydrogen functions as an antioxidant, which can help prevent inflammation and cell damage (including DNA), and fights against out-of-control cell growth. Hundreds of studies on hydrogen from bacterial production, deep sea diving, and recent medical applications have not revealed any direct noxious side effects of hydrogen administration at biologically therapeutic levels.”

The individual nodded, so I continued.

“Do you recall reading about the development of the first so-called handheld mobile phone in 1973? Its weight was said to be 2.5 lb (1.1 kg). Before long I had one in my car for use in my work at the County Health Department. Compare that to today’s mobile phones. Generation after generation has resulted in not only hand-held mobiles but some types that are even worn as a watch.”

Another nod.

“Now take that concept and apply it to research about wellness, longevity, and treatment of illnesses and diseases. About the time the mobile phone was coming into existence, Baylor University and Texas A&M published a great article in the *Journal of Science* (1975) on the potential use of molecular hydrogen in medicine. However, it wasn’t until an article was published in *Nature Medicine* (2007) which showed the selective antioxidant properties and anti-cell death (antiapoptotic) activity of molecular hydrogen. At that point the biomedical field really started taking an interest in hydrogen’s therapeutic potential.”

Now the individual actually smiled. We sat down and had a delightful visit. This is the gist of what I shared.

Research on hydrogen water, or HW as it is becoming known, is a relatively recent phenomenon and some of the emerging studies are quite interesting and seem to show promise.

- A study of soccer players found that adequate hydration with H-water pre-exercise reduces blood lactate levels and improves exercise-induced decline of muscle function, suggesting that HW may be suitable hydration for athletes. (A, in References)
- Guinea pigs were given either potable water or hydrogen water for 14 days prior to being exposed to 115 dB SPL 4 KHz Octave band noise for 3 hours. Subsequent evaluations of their hearing show that those who had received HW fared much better. The HW facilitated the recovery of hair cell function and attenuated the noise-induced temporary hearing loss. (B)
- Patients were given either regular water or HW for a period of 12 weeks. In patients who received the HW, results showed decreases in the levels of low-density lipoprotein (LDL) cholesterol as well as improvement in other markers. The conclusion was that supplementation of HW may play a beneficial role in preventing Type 2 Diabetes and insulin resistance. (C)
- Patients with Rheumatoid Arthritis (RA) were given 530 ml of high HW daily for 4 weeks. Results show that oxidative stress was reduced and the symptoms of RA were significantly reduced after drinking high HW. (D)
- Loma-Linda University reports that hydrogen has potential to help with the top 8 of 10 disease-causing fatalities as listed by the Centers of Disease Control. (E)
- Studies at the VAU of Washington report that ingestion of hydrogen-rich water was protective against neurodegenerative changes induced by traumatic brain injury in mice, reducing brain edema, and maintaining ATP levels. (F)
- A study of patients receiving radiation therapy for liver tumors show that drinking hydrogen-rich water improved “Quality of Life” and reduced oxidative markers. This novel approach of oral intake hydrogen-rich water may be applicable to a wide range of radiation-related adverse symptoms. (G)
- The results of animal studies have concluded that consumption of hydrogen-rich water may help reduce the risk for atherosclerosis, slow the progression of Parkinson’s disease, prevent or ease colitis, reduce allergic reactions, and improve kidney function in kidney transplant patients. (H)
- Persistent oxidative stress is one of the major causes of most lifestyle-related diseases, cancer, and the aging process. Studies have shown that hydrogen water not only effects against oxidative stress, but also various anti-inflammatory and antiallergic outcomes. (I)

- Based on scientific research, molecular hydrogen appears to have promising anticancer effects. It has been shown to have an antitumor effect. It may suppress cancer cell growth and invasion without compromising growth of normal cells. (J)

We wound up our conversation by talking about the so-called “miracle” water at Lourdes, France. Dr. Kim Young was able to analyze samples of the Lourdes water, comparing it to ordinary water. He found that the Lourdes water had a higher concentration of activated hydrogen than regular water, which may be responsible for restoring health to cells damaged by oxidation. (K)

Also, the brain is approximately 75 percent water and some of the neurons 86 percent water. HW may be very helpful to brain function, something I have been interested in for—well, let’s just say. . . *for a long time!*

The final question to me was, predictably, “So, what do *you* drink?”

My response: “When I am at home I drink both alkaline and hydrogen water every day. That’s become the only downside to doing so much traveling—I can’t take either machine with me! I thought alkaline water was a great advance. Now we have hydrogen water—and who knows *exactly* what that will contribute to health and longevity.

“Personally, for me, I believe it’s the way to go!” And then it was my turn to smile.

References:

- (A) Soccer Athletes (2012 study). file:///C:/Users/thebr/Dropbox/Brain%20Files/water%20-%20alkaline%20-%20hydrogen/Hydrogen%20Water/Athletes%20and%20H%20Water.pdf
- (B) Guinea Pigs and hearing (2010 study).
<http://image.sciencenet.cn/olddata/kexue.com.cn/upload/blog/file/2010/11/20101110152551442873.pdf>
- (C) Type 2 Diabetes and LDL markers.
<https://www.sciencedirect.com/science/article/pii/S0271531708000237>
- (D) Rheumatoid Arthritis - [hAttps://medicalgasresearch.biomedcentral.com/track/pdf/10.1186/2045-9912-2-27](https://medicalgasresearch.biomedcentral.com/track/pdf/10.1186/2045-9912-2-27)
- (E) Disease-causing fatalities. <https://h2waterforlife.com/hydrogen/>
- (F) TBI in mice. <https://h2waterforlife.com/hydrogen/>
- (G) Liver tumors and QOL <https://h2waterforlife.com/hydrogen/>
- (H) Animal studies <https://bottomlineinc.com/health/diet-nutrition/should-we-all-be-drinking-hydrogen-rich-water>
- (I) Inflammation Ohta. Recent progress toward hydrogen medicine: potential of molecular hydrogen for preventive and therapeutic applications. *Curr Pharm Des* 17:2241-52 (2011).
- (J) Cancer research. <https://www.cancertutor.com/hydrogen-water-cancer/>
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3386386/>
- (K) Lourdes, France (water). <https://altered-states.net/barry/newsletter708/>