

10 Reasons To Use Molecular Hydrogen

This newly recognized antioxidant can help with everything from aging to autoimmune disease

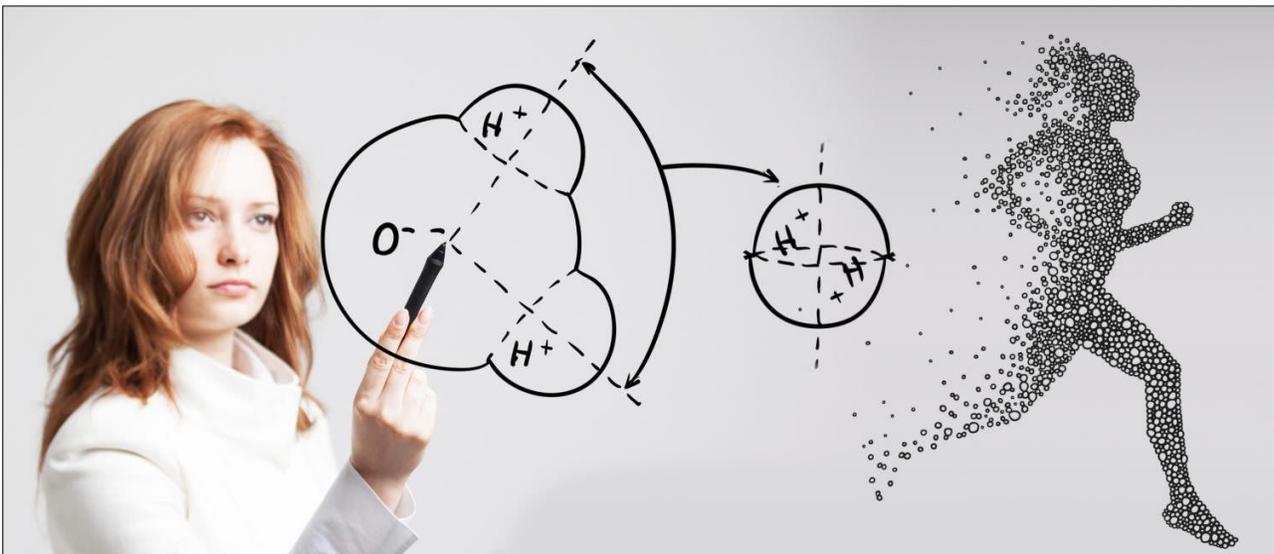
REVOLUTION!

A few years ago, the thought of molecular hydrogen might have conjured some strange sort of superhero power. Today, this antioxidant is being touted for its power to heal.

Molecular hydrogen (H₂) is a tasteless, odorless, flammable gas that [research](#) links to helping battle aging and more than five dozen diseases including cancer, primarily by reducing oxidative stress.

“Hydrogen is a unique and superior molecule, because it can also activate the Nrf2 (life sustaining) pathway and increase the endogenous levels of glutathione and other antioxidants if they are lower than they should be,” says Tyler LeBaron, founder and executive director of the Molecular Hydrogen [Foundation](#).

“Molecular hydrogen improves cellular communication and provides a cell modulating property to the body to help prevent the formation of free radicals,” says Ed Wunder, researcher with the Molecular Hydrogen Foundation.



Wunder compares the work of molecular hydrogen to a cleanup operation in a factory belching out black smoke. The black smoke represents toxic free radicals, and the factory represents cell mitochondria functioning poorly.

“Molecular hydrogen will not only clear up the black smoke by neutralizing the free radicals, but it will also go into the factory and fix what is wrong so that the black smoke will not be produced.”

A 2015 study reports that H₂ may significantly help keep us better hydrated. A 2012 [study](#) concluded that drinking molecular hydrogen water was an effective fluid hydration strategy for athletes. This is significant considering [studies](#) show two of three people are partially dehydrated. Even light dehydration of no more than 2 percent of total body weight disturbs physiological functions and decreases the body’s efficiency. Metabolism and energy levels are directly affected, and this extends even further to mood and mental alertness.

There are several ways to get molecular hydrogen into your system including drinking hydrogen infused water, H₂ inhalation, taking an H₂ bath, or putting H₂-saline into the eyes. The easiest and probably most efficient method is by simply dropping an H₂ tablet in water and then drinking it. In all cases, molecular hydrogen enters the bloodstream and is transported throughout the body.

Molecular hydrogen can also be applied directly to areas of the body where injury and pain occur. Nationally recognized sports nutritionist, strength and conditioning coach Brandon Mentore, believes molecular hydrogen is “extremely important to health.”

“Hydrogen is the most significant element to life itself,” Mentore says. “Hydrogen has [multiple cellular protective properties](#) in the human body and has the ability to upregulate virtually all metabolic processes.”

10 Years Of Studies And High Praise

The medicinal properties of molecular hydrogen appear to have been touted [as early as 1798](#). But it wasn’t until 1975, when *Science* published a Baylor University [study](#) on H₂ as a possible treatment for cancer, that the mainstream scientific community took notice. Then in 2007, molecular hydrogen’s profile ascended to a new level with a study published in *Nature Medicine*, which demonstrated H₂’s selective antioxidant properties. Since then, there have been hundreds of articles on molecular hydrogen’s therapeutic potential.

How It Works – A Closer Look

Scientific skepticism has played a large role in why molecular hydrogen is just now coming into its own. Researchers have had a hard time believing an inert gas with only two atoms (the minimum to form a molecule) could have health benefits. But it’s the smallness of molecular hydrogen that makes it an ideal antioxidant. It is possibly the [only antioxidant molecule that can reach inside](#) the [mitochondria](#) (power generators) of a cell.

“Hydrogen is a very small molecule, the smallest actually,” says LeBaron. “But its cell modulating properties in biological systems is what affords it with various anti-inflammatory, anti-allergy, and anti-obesity effects.”

Another important factor is that molecular hydrogen [is hydrophobic](#), meaning it is not diluted by water, which allows mitochondria access. In contrast, [vitamin C as an antioxidant is hydrophilic](#), meaning it becomes diluted in water so it has problems in trying to pass through a cell's fatty layer.

Working deep within the cellular level puts H₂ in the perfect position to neutralize free radicals and reduce oxidative stress. Once inside the mitochondria, previous studies have shown that molecular hydrogen exerts anti-inflammatory properties and protects from noxious chemicals (cytoprotective) in addition to acting as an antioxidant.

There is also [evidence](#) that H₂ can increase the production of the [ghrelin hormone](#) that protects the brain, vascular system, and liver.

All this takes place without unpleasant side effects because when H₂ neutralizes a free-radical, the byproduct is water. And there doesn't appear to be an upper limit of use. The more hydrogen infused water we consume the better, especially for those suffering from a particularly grave condition that needs to be turned around quickly.

10 Reasons To Use Molecular Hydrogen

1. Improves skin/fights aging – Molecular hydrogen is considered a novel antioxidant for combating oxidative damage in skin and promoting a youthful appearance. Japanese subjects showed significant improvements in neck wrinkles after bathing in H₂ for 90 days.

2. May help prevent diabetes – In a 2011 study, scientists tested the effects of drinking hydrogen-rich water in 30 patients with Type 2 diabetes. The patients drank 4 cups of hydrogen water each day for eight weeks. The condition of the patients generally improved and several showed no symptoms of the disease.

3. May battle cancerous tumors – Elevated rates of [reactive oxygen species \(ROS\)](#), collectively known as oxidative stress, have been detected in almost all cancers, where they promote many aspects of tumor development and progression. Molecular hydrogen tends to [erase the oxidative stress underlying tumor growth](#).

4. Fights autoimmune disease – Because of its ability to decrease excessive free radicals, H₂ can conceivably help battle lupus (SLE) and other autoimmune diseases.

5. Reduces pain associated with rheumatoid arthritis – Rheumatoid arthritis is a chronic inflammatory disease characterized by the destruction of bone and cartilage. A Japanese [study](#) proved that “Consumption of water containing a high concentration of molecular hydrogen reduces oxidative stress and disease activity in patients with rheumatoid arthritis.”

6. Corrects DNA damage – Wunder says H₂ “corrects DNA damage in the cell's mitochondria.” This would appear to be backed up by a [study](#) published in the July issue of the *International Journal of Radiation Biology* that concluded that “H₂ exerts a significant protection against radiation-induced DNA base damage.”

7. Combats allergies – An allergic reaction is an immune reaction when the immune system overreacts to a molecule thinking it's infectious. Molecular hydrogen calms this reaction.

8. Helps reduce fat – Drinking molecular hydrogen infused water decreases levels of plasma glucose, insulin, and triglyceride, similar to the effect of diet restrictions.

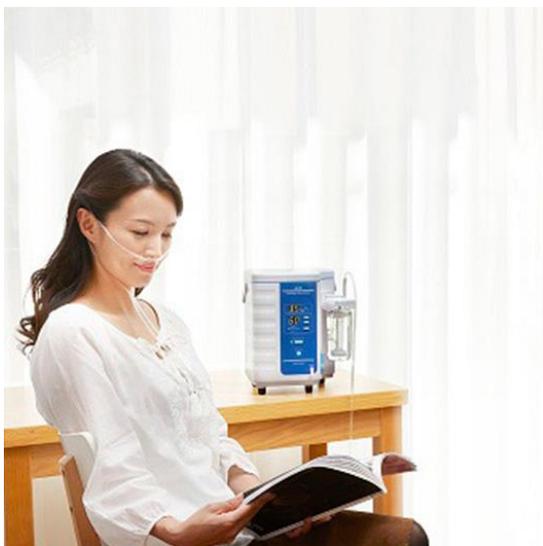
9. Improves cognitive function – Due to its ability to easily cross the blood brain barrier, molecular hydrogen may assist the well being of those with Parkinson's disease. In rat models of Alzheimer's disease, H₂ prevented neuro inflammation and improved memory.

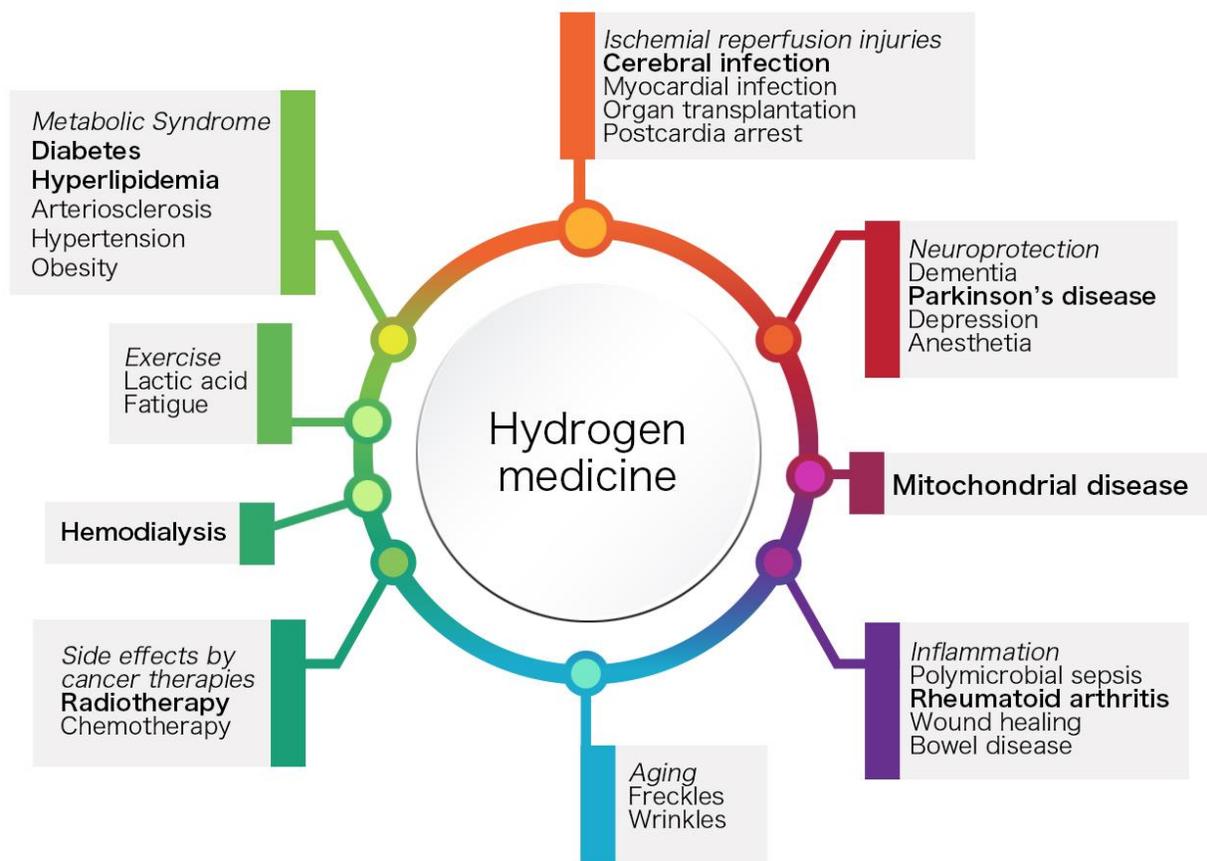
10. Faster sports injury recovery – Molecular hydrogen may have the potential to improve athletic performance and recovery. A 2012 [study](#) concluded, "Adequate hydration with hydrogen-rich water pre-exercise reduced blood lactate levels and improved exercise-induced decline of muscle function."

Watch the video below on molecular hydrogen. <https://youtu.be/X755FS68U5A>

Tulsa Natural Health Clinic offers therapeutic Hydrogen Gas Inhalation Treatments and easy to use Vital Reaction Tablets

The Vital Reaction™ 7% Inhaler produces tasteless, odorless and non-toxic molecular hydrogen gas for inhalation via cannula. Inhalation of hydrogen gas is most effective for blood, lungs, heart, eyes and brain due to molecular hydrogen's ability to saturate arterial blood, penetrate the cell membrane and cross the blood-brain barrier.





References for Hydrogen Gas inhalation treatments

Human Research Utilizing H₂ Inhalation:

A Basic Study on Molecular Hydrogen (H₂) Inhalation in Acute Cerebral Ischemia Patients for

Safety Check

<https://www.ncbi.nlm.nih.gov/pubmed/22916706>

The Effects of Hydrogen Gas Inhalation on Adverse Left Ventricular Remodeling After

Percutaneous Coronary Intervention for ST-Elevated Myocardial Infarction - First Pilot Study in

Humans.

<https://www.ncbi.nlm.nih.gov/pubmed/28321000>

Hydrogen Gas Inhalation Treatment in Acute Cerebral Infarction: A Randomized Controlled Clinical Study on Safety and Neuroprotection.

<https://www.ncbi.nlm.nih.gov/pubmed/28669654>

Feasibility and Safety of Hydrogen Gas Inhalation for Post-Cardiac-Arrest Syndrome

https://www.jstage.jst.go.jp/article/circj/80/8/80_CJ-16-0127/_pdf

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<http://www.sciencedirect.com/science/article/pii/S105230571730294X>

References To H2 Inhalation Therapy:

A possible prevention strategy of radiation pneumonitis: Combined radiotherapy with aerosol inhalation of hydrogen-rich solution

<http://www.medscimonit.com/abstract/index/idArt/881698>

Molecular Hydrogen as a Novel Antioxidant: Overview of the Advantages of Hydrogen for Medical Applications (see 7.1 for inhalation)

http://rci.rutgers.edu/~advis/pdfs/04_%20Molecular%20Hydrogen%20as%20a%20novel%20antioxidant.pdf

Hydrogen: From a Biologically Inert Gas to a Unique Antioxidant (see 5.1 for inhalation)

<https://www.intechopen.com/books/oxidative-stress-molecular-mechanisms-and-biological-effects/hydrogen-from-a-biologically-inert-gas-to-a-unique-antioxidant>

Hydrogen inhalation therapy shows promise in hospitals across Japan

<https://www.gasworld.com/h2-inhalation-research-shows-promise-in-japanese-hospitals/2010537.article>

The Vital Reaction™ Tablet



The Vital Reaction™ Tablet is an effervescent tablet that saturates any non-carbonated beverage with millions of molecular hydrogen (H₂) nanobubbles. Vital Reaction™ Tablets produce the most powerful cloud of H₂ in the least amount of time with the greatest ease of use.

Molecular hydrogen (H₂) is a unique antioxidant. It eliminates only the most harmful free radicals, reduces oxidative stress, and puts the body in balance. Owing to its small size and bioavailability, it easily crosses cell

membranes, the blood brain-barrier, and parts of the cell that other antioxidants are too large to reach. H₂ is the perfect free-radical mediator, anti-inflammatory, and cell signaling molecule.

Key Features:

- Exclusive Hydrogen Matrix
- Safe to use in open container; no sealed bottle with pressure required
- 100% natural
- Free from antibiotics, colors and preservatives
- 3rd Party Testing for purity and safety

Tulsa Natural Health Clinic

www.tulsanaturalclinic.com

2448 E 81st. St., Ste. 5125

Tulsa, OK 74137

918-551-6600