

# Everything You Should Know About Hydrogen Water and Diabetes

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Diabetes is no longer a death sentence today, thanks to the numerous strides that the medical industry has made in the last couple of years. With medication, diabetes diet tips, and healthy lifestyles for managing body weight, you can now live a long, productive life if you have diabetes.

The relationship between hydrogen water and diabetes has recently become a hot topic in the diabetic community and among researchers. With so many health and wellness trends emerging occasionally, it's easy to dismiss hydrogen water for diabetes as just another fad. However, as you'll realize from exploring hydrogen water research, the benefits of this water speak for themselves.

## The Science Behind Hydrogen Water

Before understanding the relationship between hydrogen water and diabetes, let's first understand what exactly hydrogen water is. The simplest explanation of hydrogen water is that it has a higher hydrogen concentration than normal water. But what does that mean for us?

### Properties of Hydrogen Water

In regular water (H<sub>2</sub>O), for each oxygen (O) molecule in water, there exist two hydrogen molecules (H<sub>2</sub>). However, in hydrogen water, also known as hydrogen-rich water, there are more than two hydrogen molecules per oxygen molecule. This is usually the result of enriching or infusing hydrogen gas into water.

### Antioxidant Effects and Inflammation Reduction

Oxidation happens when harmful molecules called free radicals attack your body's cells, causing damage. This damage can lead to problems like inflammation, which is your body's response to injury or infection.

Hydrogen water has properties that make it helpful in this situation. The molecular hydrogen contained in hydrogen water protects against the harmful effects caused by oxidative stress in your body. When molecular hydrogen encounters oxidative stress, it calms it down by donating its extra hydrogen molecules. This stops oxidative stress from harming your cells.

It is this antioxidant effect that makes hydrogen water and glucose beneficial in reducing inflammation. Normally, our bodies make these troublemakers when we're under stress, but too many of them can cause damage. This damage sets off alarms in our immune system, leading to inflammation. But hydrogen water helps to calm things down by reducing the damage and stopping the alarms from going off.

## The Benefits of Hydrogen Water for Diabetics

Some of the hydrogen-rich water benefits that patients with diabetes can reap include the following:

### Blood Sugar Regulation

Keeping blood sugar levels in check is vital. When your body undergoes oxidative stress, it can mess with how insulin works and how well your pancreas does its job. This can lead to problems like insulin resistance and type 2 diabetes mellitus.

In a clinical study conducted by Vet World in 2022, scientists looked at how hydrogen water could help rats with diabetes. They found that when they gave diabetic rats water with extra hydrogen, their insulin levels and glucose tolerance got better. This suggests that hydrogen water might help protect insulin and keep it working well, which is great news for patients with diabetes.

Another advantage of hydrogen water in blood sugar regulation is that it might help keep your gut healthy. Your gut is full of tiny organisms called bacteria, and having the right balance of these bacteria is essential for keeping our blood sugar levels in check. When this balance gets messed up, it can also cause diabetes.

Emerging hydrogen water studies have found that hydrogen water might regulate the composition of gut bacteria, which is crucial in glucose metabolism and insulin sensitivity. The selective effects of hydrogen on gut bacteria may promote the growth of beneficial strains while inhibiting the proliferation of harmful ones. This, in turn, could positively influence glucose metabolism and blood glucose levels in patients with diabetes.

It could be another way hydrogen water helps to control blood sugar levels in people with diabetes.

### Preventive Properties

Medical research has linked many complications, such as cardiovascular disease, neuropathy, and nephropathy, to prolonged exposure to elevated blood sugar levels due to diabetes. Hydrogen water's protective effects can help mitigate these diabetes-related complications by reducing oxidative stress and inflammation.

For instance, diabetic retinopathy, a leading cause of blindness in adults, occurs due to damage to the blood vessels in the retina caused by diabetes. High blood sugar levels cause stress and inflammation in the eyes and damage blood vessels and cells in the retina, which can eventually cause blindness. Hydrogen water, with its potent antioxidant and anti-inflammatory properties, can protect against diabetic retinopathy by addressing these underlying issues.

Some studies show that the molecular hydrogen in hydrogen water can help fight off harmful substances called reactive oxygen species (ROS) that cause stress, keeping the cells and blood vessels in the eyes healthy. It can also reduce inflammation, which further shields the eyes from harm.

Hydrogen water also improves blood flow in the eyes, ensuring they get enough oxygen and nutrients. This helps keep the eyes healthy and working properly.

Lastly, hydrogen water can help fix damaged tissues in the eyes. It works by changing how cells communicate with each other and helping them survive and grow again. This might help slow down the damage caused by diabetic eye problems and reduce the chance of losing vision.

### **Incorporate Hydrogen Water Into Your Diabetic Diet Today**

From improving insulin sensitivity to reducing oxidative stress and inflammation, hydrogen water stands out as the best water for diabetics. Incorporating it into your diabetic diet can help support better blood sugar regulation, protect against diabetes-related complications, and improve overall metabolic health.

However, it's essential to remember that you should use hydrogen water for diabetes as part of a comprehensive diabetes management plan. This plan includes monitoring metabolic parameters like blood sugar levels, avoiding high-fat diets, engaging in regular physical activity, and adhering to prescribed medications or treatments.

Need to incorporate hydrogen water into your diet? You can drink **10acity® Hydrogen Infused 4.5 ppm Natural Spring Water** right in the comfort of your home or office by contacting us to order a case of 30 pouches.