

# Molecular H2

## Effervescent Hydrogen Tablets

**Molecular H2** creates a high level of hydrogen (H<sub>2</sub>) when added to non-carbonated water, powerfully supporting antioxidant activity and redox balance.\* H<sub>2</sub> is a small, neutrally-charged, nonreactive, and nonpolar molecule, which enables it to readily pass through cellular membranes and the blood-brain barrier to deliver antioxidant protection to the body systemically.\*



#77520  
60 tablets



#77600  
60 tablets

### Key Features

- Clinically shown to protect against damage from radiation, improving appetite, taste, and quality of life\*
- Promotes healthy metabolic function and balances the immune and stress response in human studies\*
- Effectively neutralizes hydroxyl radicals (\*OH) in the cytosol and nucleus of the cell\*
- Activates the Nrf2-pathway, a mediator of cellular detoxification and antioxidant transcription\*
- Reduces excessive immune response to LPS (lipopolysaccharide)\*
- When used as directed, Molecular H2 is capable of producing supersaturated hydrogen-rich water



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Therapeutic use of molecular H<sub>2</sub> dates back to the 1940's when it was used for the prevention of decompression sickness in divers. However, as a highly flammable gas at a concentration of greater than 4% in air, its use wasn't particularly feasible until research, published in 2007, showed that a gas containing H<sub>2</sub> at a concentration below this threshold and an H<sub>2</sub>-saturated nutrient solution also were able to deliver effective amounts of H<sub>2</sub>.

Research has shown that H<sub>2</sub> may be of benefit in a wide variety of clinical settings due to its size, and its nonreactive and nonpolar properties – which enable it to traverse cellular and blood-tissue barriers with ease.\* Its benefits also lie in the fact that it neutralizes strong oxidants such as •OH and is nonreactive with other biologically important oxidants like hydrogen peroxide and nitric oxide.\* Additionally, it activates antioxidant and detoxification-related protein transcription via the Nrf2-pathway, reduces the damaging immune response to LPS, and modulates cellular signal transduction, protein activity, and genetic transcription.\* Some of the effects of H<sub>2</sub> have been demonstrated to persist long after it is no longer present in circulation.

Cellular, animal, and human studies have shown that H<sub>2</sub> acts as a neuroprotectant.\* H<sub>2</sub> has been shown to reduce dopaminergic neuron loss; improve cognition, memory, and brain function; and protect against the cellular damage associated with impact or ischemia/reperfusion injury.\* It also helps balance the response to stress, improving mood, learning, and resilience in stressful settings.\*

Numerous animal models have demonstrated H<sub>2</sub> helps protect against cellular and organ damage associated with radiation, the majority of which is mediated by the •OH radical.\* Pretreatment with H<sub>2</sub> has been shown to help protect against lymphocyte, enterocyte, cardiomyocyte, and germ cell damage associated with radiation treatment.\* Humans supplemented with H<sub>2</sub>-rich water during radiation therapy had an improved quality of life, appetite, taste, and antioxidant status compared to those receiving placebo water while the therapeutic response to radiation was unaffected.\*

The antioxidant and related actions of H<sub>2</sub> also have shown to help balance the immune response.\* In humans, supplementation with H<sub>2</sub> has been shown to improve joint and skin symptoms associated with immune dysfunction, with some of the effects persisting up to a month after supplementation ceased.\*

Human and animal studies also show that molecular H<sub>2</sub> may improve aspects of metabolic dysfunction.\* Clinical studies have shown that consumption of H<sub>2</sub>-rich water supports normal cholesterol metabolism and glucose tolerance, as well as healthy levels of hepatic fat content.\*

#### References:

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## Molecular H<sub>2</sub>

### Supplement Facts

Serving Size 1 Tablet  
 Servings Per Container 60

#### Amount Per Serving % Daily Value

Magnesium (as Elemental Magnesium) 80 mg 19%

% Daily Value based on a 2,000 calorie diet.

Other ingredients: Proprietary Hydrogen Matrix (malic acid, dextrose, tartaric acid, adipic acid, sodium stearyl fumarate).

**Suggested Use:** As a dietary supplement, drop 1 tablet in 12-16 oz. of filtered water, wait for it to break down, gently stirring if desired, then drink immediately. Take one or two times daily, or as directed by a healthcare practitioner.

## Molecular H<sub>2</sub> Raspberry

### Supplement Facts

Serving Size 1 Tablet  
 Servings Per Container 60

#### Amount Per Serving % Daily Value

Magnesium (as Elemental Magnesium) 65 mg 15%

% Daily Value based on a 2,000 calorie diet.

Other ingredients: Proprietary Hydrogen Matrix (malic acid, dextrose, tartaric acid, adipic acid), natural raspberry flavor, sucralose.

**Suggested Use:** As a dietary supplement, drop 1 tablet in 12-16 oz. of filtered water, wait for it to break down, gently stirring if desired, then drink immediately. Take one or two times daily, or as directed by a healthcare practitioner.

