

# How can Hydrogen water protect cardiac allografts from inflammation-associated deterioration

KYK Co., Ltd. | 1,500 PPB of DH | KYK Co., Ltd. (South Korea)



Molecular hydrogen has therapeutic value for disease states that involve inflammation. Drinking hydrogen-rich water (HW) daily would protect cardiac and aortic allograft recipients from inflammation-associated deterioration. Drinking HW is remarkably effective in prolonging heart graft survival and reducing intimal

hyperplasia in transplanted aortas as compared with grafts treated with RW or DW. Hydrogen treatment is also associated with increased graft ATP levels and increased activity of the enzymes in mitochondrial respiratory chain.

The most recent data from the International Society for Heart and Lung Transplantation database demonstrated that 10-year survival after cardiac transplant remains approximately 50%. Graft injury as a result of oxidation and tissue inflammation has been implicated as one non-immunologic factor driving allograft rejection and allograft vasculopathy 2.3 year after transplantation. In particular, allograft vasculopathy has a pivotal influence on late graft failure and remains an intractable obstacle to the mid-term survival of cardiac transplant recipients, accounting for 23–36% of deaths among patients who survive longer than 4 years. Although allograft vasculopathy and graft tissue inflammation are essential components of graft failure after heart transplantation, even the most promising immunosuppressive regimens have demonstrated limited overall efficacy in clinical trials, and there are no established therapeutic or preventative strategies.

## -Now comes role of Hydrogenated Water

Studies have demonstrated that hydrogen possesses antioxidant, anti-inflammatory and anti-apoptotic properties and can exert variety of cytoprotective functions.

Hydrogen is an invisible, colorless, and odorless gas, is not toxic, hazardous, or poisonous. Oral intake of hydrogen-rich water is an alternative mode of delivery for molecular hydrogen.

Drinking water containing molecular hydrogen potently

protected kidney allografts from chronic rejection by inhibition of inflammatory responses through mitogen-activated protein kinases. Likewise, drinking hydrogen-rich water prevented intimal hyperplasia in arterialized vein grafts and was associated with inhibition of inflammatory cytokines and activation of matrix metalloproteinases.

**Therefore, drinking Hydrogen-rich water on daily basis may delay, prevent inflammation-associated chronic deterioration of cardiac allografts.**



Call Now: 1800-102-0908

Website: [www.kykindia.com](http://www.kykindia.com)