





Oriental Raisin Tree (Hovenia dulcis)

Excessive alcohol consumption is one of the major causes of liver injury. Too much alcohol not only damages the liver, potentially leading to cirrhosis and liver failure, but also increases the risk of fatty liver disease.

Currently, the treatments for such diseases have significant side effects. Hence researchers are looking into natural agents with anti-inflammatory and antioxidant activities that they can use to develop into treatments for alcohol-induced liver injury.

Oriental Raisin Tree (*Hovenia dulcis*) is one such natural agent, already commonly used in Korea for alcohol-related disorders. *Hovenia dulcis* has many useful compounds, such as polyphenols, polysaccharides, and flavonoids. These compounds in *Hovenia dulcis* have antioxidant activities and act against the formation of lipids, reduce the formation of fat cells, and fight inflammation.¹

Dihydromyricetin (DHM), a component of *Hovenia dulcis*, is a popular traditional hangover remedy. New research shows it may also help people with alcohol-related harm, such as alcoholism and even liver damage.

Prevents Hangovers²

DHM helps prevent alcohol-related harm. As the liver metabolizes alcohol, it creates bad metabolites that cause headaches and nausea. Research using animal models found that DHM helps speed the metabolism of alcohol and help your body get rid of these nasty metabolites faster.

Protects Liver Against Alcohol Damage²

Recent research has found that DHM may reduce alcohol-related liver injury by affecting lipid metabolism, enhancing alcohol metabolism, and suppressing inflammation. It can prompt the liver to produce more enzymes that help break down alcohol, as well as promote the efficiency of those enzymes. DHM can also help reduce the inflammatory agents that cause liver damage because of excessive alcohol intake.

Protects Against Fatty Liver Disease³

Fatty liver disease occurs when the liver contains too much fat. Research has found that DHM helps reduce lipid accumulation in the liver. Research has found that *Hovenia dulcis* helps reduce triglyceride and free fatty acid levels, while increasing the levels of high-density lipoprotein (HDL or "good") cholesterol in the blood. It also reduces triglyceride levels within the liver cells themselves.

Protects Against Alcohol Abuse²

Alcohol is the most common form of substance abuse. Scientists at the University of Southern California believe that DHM gives people hope. It helps protect the liver and extend the life of the liver long enough for people to fix their bad drinking habits. It has the potential to restore some liver function, prevent further damage, and even delay the onset of liver disease. It may also be useful for patients with liver transplants, to help their new organ function better.

The studies referenced in this article are published in 2019 and 2020.

References:

- 1. Park N-H, Lee S-J, Mechesso AF, Boby N, Yixian Q, Yoon W-K, et al. Hepatoprotective effects of gamma-aminobutyric acid-enriched fermented *Hovenia dulcis* extract on ethanol-induced liver injury in mice. *BMC Complementary Medicine and Therapies*. 2020;20(1):75. doi:10.1186/s12906-020-2866-0.
- 2. Polakovic G. Noted hangover remedy has added benefit of protecting the liver. USC News 2020. https://news.usc.edu/166789/hangover-remedy-dhm-liver-protection-usc-study/.
- 3. Park K, Yoon H-J, Imm J-Y, Go G-W. *Hovenia dulcis* Extract Attenuates High-Fat Diet-Induced Hepatic Lipid Accumulation and Hypertriglyceridemia in C57BL/6 Mice. *Journal of Medicinal Food*. 2019;22(1):74–80. doi:10.1089/jmf.2018.4224.