



MILK THISTLE & YOUR HEALTH— Raise Your Glass... To Your Liver

A toast to the New Year is fun for everyone. Except your liver. Luckily there is something you can do to keep this vital organ healthy and functioning properly.

"Over the lips and past the gums, look out stomach, here it comes!" That's an old—and largely outdated—toast. It's not accurate, however. Because while everything you consume does, in fact, go into your stomach for digestion, the toxins the body doesn't need (like alcohol, excess fats and sugars) go into your liver for processing and expulsion for waste. *When overloaded, as it often is during the holiday party season, your liver works like a defensive linebacker during a critical game, trying to defend your body against a score that could make your body sick.*

This organ, the largest in the body, has many important functions including removing harmful material from the blood (like alcohol), making enzymes and bile for food digestion, and converting food into substances needed for life. If it's working too hard, your whole body can suffer with anything from mild aches and pains to a compromised immune system to chronic disease.

THREE, TWO, ONE

The countdown for liver health begins with a plant that is native to the Mediterranean, but is now widespread throughout the world: milk thistle. This stout plant usually grows in dry, sunny areas, with stem branches at the top that reach to a height of 10 feet. The leaves are wide, with white blotches or veins, the flowers are red-purple, and best of all, it works wonders on the liver.

Milk thistle, or as it is known in the science community *Silybum marianum*, has been used since Greco-Roman times as an herbal remedy for a variety of ailments, particularly liver problems. In the late nineteenth and early twentieth centuries physicians in the United States used milk thistle seeds to relieve congestion of the liver, spleen and kidneys. Today, several scientific studies suggest that active substances in milk thistle (particularly silymarin) protect the liver from damage caused by viruses, toxins, alcohol, and certain drugs such as acetaminophen (a



common over-the-counter medication used for headaches and pain that can cause liver damage if taken in large quantities or by people who drink alcohol regularly).

Many professional herbalists recommend milk thistle extract for the prevention and/or treatment of various liver disorders including viral hepatitis, fatty liver associated with long-term alcohol use, and liver damage from drugs and industrial toxins such as carbon tetrachloride.

THE STUDY OF MILK THISTLE

A comprehensive review by the U.S. Agency for Healthcare Research and Quality (AHRQ) recently identified 16 scientific studies on the use of milk thistle for the treatment of various forms of liver disease.

Five of seven studies evaluating milk thistle for alcoholic liver disease found significant improvements in liver function, even helping improve the liver function of those suffering from cirrhosis. Cirrhosis is characterized by scarring and permanent, non-reversible damage to the liver. It is often referred to as end-stage liver disease.

Hungarian researchers who studied 36 patients with chronic alcoholic liver disease in a six-month clinical trial also found significant liver function improvement in those taking silymarin.

Recent findings have shown that silymarin has the ability to block fibrosis, a process that contributes to the eventual development of cirrhosis in persons with inflammatory liver conditions secondary to alcohol abuse or hepatitis. This makes milk thistle extract potentially attractive to persons with chronic hepatitis C, particularly those that have not responded to standard drug therapy.

In fact, silymarin has been evaluated for its ability to prevent and reverse the complications of chronic infection with hepatitis C and/or to clear a hepatitis C infection. Patients aged 21 to 65 who were not using antiviral therapy participated in a study where each received 160 milligrams (mg) orally, three times a week for four weeks. Another

group received no treatment. At the end of four weeks, blood tests were administered and showed that silymarin may have a protective effect in the inflammatory response to chronic hepatitis C.

All of this makes it sound like silymarin may be a virtual wonder-therapy when it comes to treating liver problems. And in many ways, it is. This active ingredient of milk thistle actually consists of a group of compounds called flavonolignands that help repair liver cells damaged by alcohol and other toxic substances. Silymarin also keeps new liver cells from being destroyed by these same substances, reduces inflammation (important for people with liver inflammation or hepatitis), and has potent antioxidant effects.

LIVERX: THE ULTIMATE HANGOVER HELPER

Alcohol-induced liver damage disrupts the body's metabolism, eventually impairing the function of other organs because the alcohol you drink is eventually broken down by the liver. However, some products generated during alcohol metabolism are more toxic than alcohol itself. The body's natural defenses against free radicals—antioxidants—can be inhibited by alcohol consumption, leading to increased liver damage. The active ingredients in LiverX help to protect the body against toxins generated during the consumption and metabolism of alcohol.

BIOSORB SILYMARIN

And guess what the primary active ingredient is? Silymarin, or in this case, BioSorb™ Silymarin. Developed by the biochemists at MRM, BioSorb Silymarin is an isolated extract from milk thistle. It has been shown to be highly effective in supporting liver function and the metabolism of cholesterol because it elicits a direct effect on liver cholesterol metabolism. Additionally, it has been shown to counteract detrimental toxins that accumulate in the liver, decrease the presence of free radicals which compromise immune health and even support prostate health. By acting as a powerful antioxidant, it also works to keep free radicals from damaging the liver.

Preliminary investigations have indicated a greater bioavailability. BioSorb silymarin concentrations remained elevated by 342 percent for 12 hours, giving this form of milk thistle five-times greater absorption capability than other products. The end result is long lasting antioxidant protection.

LiverX also includes a host of other beneficial ingredients that will help to keep you healthy. The

two most important are N-acetyl-cysteine and alpha-lipoic acid.

N-acetyl-cysteine (NAC), a variant of the amino acid L-cysteine, is converted in the body into metabolites capable of stimulating glutathione (a powerful free radical scavenger) synthesis, promoting detoxification and acting directly to attack and destroy free radicals. It has been used clinically in hospitals as an antidote for acetaminophen poisoning and as a mucolytic agent to support respiratory health.

Alpha-lipoic acid (ALA) is an antioxidant that is produced naturally in the body. Unlike other antioxidants, ALA is both a fat- and water-soluble antioxidant and is easily transported across cell membranes. Recent research has shown ALA to be an efficient free-radical scavenger, and has the ability to regenerate other antioxidants like vitamin E, vitamin C and glutathione for further use after they've eradicated free radicals.

According to one expert, "Alpha-lipoic acid has been used successfully for the maintenance of liver health and as a treatment for several toxin-related illnesses. Alpha-lipoic acid has been used extensively in Europe for years as a non-toxic nutrient to treat various chemical overdoses such as mushroom poisoning, radiation poisoning and alcoholic hepatitis. It has also been used to treat diabetic neuropathy and elevated liver enzymes. Elevated liver enzymes, which can indicate liver damage, can be a serious problem for people with life threatening diseases. For people who take oral medications such as antibiotics and/or antivirals, balanced liver enzymes are essential for these drugs to get metabolized properly. Unfortunately, these same drugs can cause increased liver enzymes. Alpha-lipoic acid may help protect the liver so that you can take certain drugs. Another benefit of alpha-lipoic acid may be its ability to elevate the levels of glutathione (GSH). Low levels of glutathione may cause oxidative stress, and cause inflammation and damage organs."

RAISE A GLASS, TO YOUR LIVER

Normal liver function is essential to life. A damaged liver can lead to various day-to-day complications that many individuals brush off as a simple cold or lack of sleep. Lack of energy, mild headaches, nagging aches and pains, as well as improper food metabolism—all can be due to liver weakness. Proper care of this hugely important organ is a necessity. So do your liver a favor. Raise a glass of water and take 2 to 4 capsules of LiverX a day. ■

—Lorin Shields-Michel



Resources

LiverX is available at health food stores and natural product supermarkets from Metabolic Response Modifiers, one of the top nutrition companies today, recognized for combining value and quality into your shopping experience. For more information or to find a store near you, call them at (800) 948-6296 (outside California) and at (949) 369-6641 (in the state of California) or visit their website at www.mrm-usa.com.