

Your liver works hard taking care of you. The right formulation of nutrients and herbs can help you to take care of it.

Looking Out for Your Liver

While you have been enjoying the celebrations and indulgences of the season, your liver has been working harder than ever. The holidays are a time of cheer, but can also be a time when we don't get enough sleep, forget to exercise, and are under a tremendous amount of stress. Combine this with rich foods, alcohol, and cold and flu season (and all the medications that go with it), and your liver is working overtime. Our livers can have a hard time keeping up with all of our frolicking. One could say that the liver is the body's underappreciated workhorse.



by Scott Olson, N.D.

Show your liver you care. Taking a supplement specifically designed to support liver function is a great way to start the New Year in good health.

WHAT DOES THE LIVER DO?

There is a joke that medical students have about their exams: If you don't know the answer to a question on any test, just write "the liver," and you will be right most of the time. Saying that the liver does everything is a bit of an overstatement, but it is close to the truth. While medical science can mimic the functioning of the kidneys with dialysis, and even make a passable heart, the many complex functions of the liver simply cannot be copied by a machine.

The liver has over 500 functions; some of the more important are:

- Whenever we eat something and the food is absorbed into our bloodstream, its first stop is the liver. The liver is largely responsible for carbohydrate, protein and fat metabolism.
- When your body is done with something, like a hormone, it goes to the liver to be broken down before being reused or eliminated from the body. Stress hormones, estrogen and other sex hormones are all eliminated by the liver. The liver also helps to regulate hormones like insulin.
- It is commonly thought that cholesterol is the result of how much fat you eat, but your liver makes most of the cholesterol in your body as well as other fats like triglycerides.
- The liver produces and regulates clotting factors. These factors are the reason our blood clots whenever we get a cut. It also creates some of the proteins necessary for our immune systems to function.
- The liver stores a large part of our energy reserve as a molecule called glycogen, which is easily turned back to glucose (sugar) for energy; it also stores many important vitamins and minerals like vitamin B₁₂, iron, copper and others.

Probably the most vital role the liver plays is in detoxification. It is the liver's job to remove harmful substances that we have encountered. This includes toxins in the foods we eat, in the air we breathe, and even those that come into contact with our skin. The liver protects us by first making toxins less harmful, and then removing them from the body.

MODERN WORLD MEETS LIVER

The liver has amazing powers to handle the large amount of junk that we throw at it—it can really handle a lot of abuse. It is the only organ in the body that regenerates itself; doctors know they can cut away over half of a person's liver, only to have it grow back.

But saying the liver is tough does not mean that you cannot damage it. The liver is particularly sensitive to things like alcohol and certain chemicals in our environment. Artificial chemicals in foods, like preservatives, coloring, and other additives, all place a load on the liver. Any drug you are taking, prescription or over-the-counter, also adds to the work of the liver.

Likewise, if you haven't been eating as well as you should, your liver pays the price. Maybe you have been tempted by too many seasonal treats and drinks. The more food you are eating, the more the liver has to work. Even being under stress and not getting enough sleep can create problems for the liver.

The modern world can make your liver work extra hard to keep up, and it needs a helping hand. Thankfully, that can be easy to provide.

PROVIDING HIGH-OCTANE FUEL FOR THE LIVER

Scientists have uncovered just what nutrients your liver needs to function optimally. Just like your car's engine needs a good-quality gas to run its best, your liver needs these nutrients.

Key among these nutrients are N-acetyl-cysteine (NAC) and alpha lipoic acid (ALA). These can be supplemented and are the perfect fuel for the liver.

NAC is actually used by emergency room physicians when people overdose on certain drugs (like acetaminophen). NAC is a powerful antioxidant, and works to supercharge the liver's abilities.

ALA is known as the "universal antioxidant" because it can work both inside and outside of cells. It has excelled in studies that focus on the liver, including alcohol-induced liver damage,

mushroom poisoning, heavy metal poisoning, and carbon tetrachloride poisoning.

A STEP BETTER

LiverX™ is a product by the nutritional pioneers at Metabolic Response Modifiers (MRM). Not only have the biochemists at MRM created a great product for supporting liver detoxification that includes NAC, ALA, and other necessary nutrients, they have also gone a step further by adding liver-supporting herbs.

Milk thistle (*Silybum marianum*) is the jewel of liver herbs. It has been prized for its beneficial effects on the liver for over 2,000 years. Modern science has backed up the amazing liver-protective abilities of this seemingly humble herb with hundreds of clinical studies. Milk thistle is known to protect the liver from damage, support liver function, act as a powerful antioxidant, and help eliminate toxins from the blood.

MRM has created a highly absorbable form of milk thistle called BioSorb™ Silymarin. Clinical studies of this form of milk thistle show that its absorption is five times that of normal extracts.

Also added to the LiverX formula are *Picrorhiza kurroa* and *Andrographis paniculata*. These two herbs come from Ayurvedic traditional medicine. *Andrographis* has strong antioxidant capabilities and liver-protecting abilities. *Picrorhiza* has likewise excelled in studies on the liver, and it may have even more powerful effects than milk thistle for protecting the liver.

A HELPING HAND

MRM is a company dedicated to bringing the best natural products to the market. Using only the finest ingredients, they strive to create formulas that are not only helpful, but also highly absorbable.

Modern life alone puts stress on your liver, and if you've spent the holidays enjoying yourself a little too much, making a resolution to support your liver is an especially good idea. Give your hard-working liver a helping hand with LiverX, now and throughout the year. ■



Resources

MRM products are available nationwide at natural health centers and from health professionals. Contact MRM directly to find a store near you. The toll-free number is 800-948-6296; online at www.mrm-usa.com.