



# MILK THISTLE

Liver and gallbladder support

“This is my favourite liver protector. The liver processes drugs and environmental toxins, so it’s under constant assault. Anyone who drinks alcohol, takes drugs... or comes in contact with any pollutants might benefit from this herb. “ – Dr. James Duke, *The Green Pharmacy*

Although it has been used for thousands of years as a digestive aid, milk thistle’s beneficial effects on the liver have been known only since 1564, when the physician, Lonicerus, crushed the seeds and used them to treat liver disorders. However, milk thistle should not be confined to the realm of medieval folk medicine because its powerful, yet non-toxic active ingredients. Their efficacy in all sorts of liver disorders are being confirmed today through laboratory studies and extensive clinical trials.

The active ingredients in milk thistle are flavonoids comprised of silybin, silydianin and silychristin — collectively known as silymarin. Researchers are giving these flavonoids rave reviews for their ability to support liver function.

## HOW DOES MILK THISTLE WORK?

Milk thistle is used by many for numerous digestive disorders, however it shines in protecting the liver from toxins and diseases. There are three primary ways it helps the liver:

- It is a powerful antioxidant and free radical scavenger, joining that select group of nutrients which primarily includes vitamins A, C, E, and selenium. It increases the glutathione content of the liver. Glutathione detoxifies drugs and chemicals, so more of it gives the liver more ability to detoxify. “Silymarin also increases the glutathione content of the liver by over 35% in healthy subjects... Glutathione is responsible for detoxifying a wide range of hormones, drugs, and chemicals.” (Murray)
- It reduces inflammation. The active ingredient, silymarin, inhibits the formation of leukotrienes. When formed, these substances damage the liver. (Mowrey)
- By stimulating protein synthesis. Milk thistle generates the production of new liver cells to replace damaged ones. (Mowrey)

## THE RESEARCH

“Extensive clinical trials have clearly substantiated the ability of milk thistle to reverse the symptoms of many liver disorders, both acute and chronic, ranging from acute

viral hepatitis to cirrhosis.” (Mowrey)

When the liver is damaged by alcohol, drugs, or disease its regenerative capacity slows down or even stops, milk thistle’s restorative ability is unsurpassed.

## IF MY LIVER WORKS WELL, WHY DO I NEED MILK THISTLE?

The liver is our prime defence against toxins, and life in the industrial age with its environmental hazards has exposed us to many more toxins than ever before whether we’re sitting in traffic, breathing second-hand smoke, or working in a big city office complex. These toxins go directly to the liver, which now must cleanse them from the body. For many, the liver is already overwhelmed by toxins and could benefit from any help. Milk thistle effectively counteracts the effects of pollutants from workplace chemicals, auto exhaust, pesticides, heavy metals, to other toxins that are a consequence of living in the industrial age. No one can afford not to know about milk thistle’s protective ability.

## HOW SHOULD I TAKE MILK THISTLE?

A handful of crushed milk thistle seeds was the prescription in former times. But with the increase in research, standardized milk thistle extracts that guarantee potency are superior. “Milk thistle standardized extract is an excellent example of how some modern phytomedicines offer new classes of preventive and therapeutic agents that modern conventional pharmaceutical drugs are lacking-in this case liver protectants. It also offers a good example of how the chemical standardization and concentration of an herbal product will increase its availability and thus its efficacy. Research has demonstrated that silymarin in relatively low concentrations is poorly absorbed from the GI tract, thus necessitating the higher concentrations (normally 70-80%) available in most standardized extracts.” (Blumenthal) When buying a milk thistle extract look for 80% silymarin in a base of the whole herb.

## SAFETY AND DOSAGE

Tests in animals showed that even large doses of milk thistle had no toxic effects, nor produced allergic reactions or side-effects. Human tests show that milk thistle is also very well-tolerated.

“The standard dose of milk thistle is based on its silymarin content (70-210 milligrams three times daily). For this reason, standardized extracts are preferred. The best results

are achieved at higher dosages, that is, 140 milligrams of silymarin three times daily. The dosage for silymarin bound to phosphatidylcholine is 100 milligrams to 200 milligrams twice daily." (Murray)

The German Commission E recommends the use of milk thistle for toxic liver damage, as a supportive treatment in chronic inflammatory liver disease and hepatic cirrhosis. According to their milk thistle monograph, there are no known contraindications, side-effects and no known interactions with other drugs.

### **HERBAL FACTORS MILK THISTLE EXTRACT**

Herbal Factors Milk Thistle Extract capsules are unique in that it contains 80% silymarin in 250 mg of milk thistle extract, one of the highest potencies available in the marketplace. Most potencies are 70% or less.

Researchers at Herbal Factors have gone an extra step and included milk thistle in a base of dandelion and turmeric. Historically, dandelion and turmeric have been used to treat liver disorders. "Dandelion is regarded as one of the finest liver remedies, as both food and medicine. Studies in humans and laboratory animals have shown that dandelion enhances the flow of bile, improving such conditions as liver congestion, bile duct inflammation, hepatitis, gallstones, and jaundice." (Murray) Turmeric also contains components which prevent liver damage and has been widely used for centuries.

To include these supportive herbs guarantees a powerful and effective remedy which can help to protect us from environmental and lifestyle damage.

### **KEY REFERENCES**

Blumenthal M., "Popular Herbs in the US Market: Therapeutic Monographs, *American Botanical Council*; 1997

Mowrey D.B., "Next Generation Herbal Medicine: guaranteed potency herbs," *Keats Publishing*; 1990

Murray M., "The Healing Power of Herbs: the enlightened person's guide to the wonders of medicinal plants," revised and expanded 2<sup>nd</sup> ed, *Prima Publishing*; 1995