# Silymarin: A Potent Antioxidant, Liver Protector, and Anti-Cancer Agent

Silymarin is a unique flavonoid complex—containing silybin, silydianin, and silychrisin—that is derived from the milk thistle plant. These unique phytochemicals from the milk thistle have been the subject of decades of research into their beneficial properties.

Milk thistle’s common name comes from the white markings on the leaves, its milky white sap, and its traditional use by nursing mothers to increase milk. But it is best known for its use as a liver protectant and decongestant, which can be traced to the Greeks and Pliny the Elder (23-79AD), who wrote that it was excellent for “carrying off bile.” The famous English herbalist Culpepper (1616-1654) used milk thistle to cleanse the liver and spleen, and to treat jaundice and gallstones.[1](https://www.smart-publications.com/articles/silymarin-a-potent-antioxidant-liver-protector-and-anti-cancer-agent#fn-195-1)

In the U.S., the Eclectics—a prominent group of American doctors who practiced during the 20th century—used it for liver problems, and to treat varicose veins, menstrual problems, and kidney disorders. The plant was also cultivated as a food, providing leaves for salad, seeds for a coffee-like drink, and flowers, which were eaten as artichokes are today.1

In 1968, a group of German scientists discovered the active flavonoid complex silymarin, which provides milk thistle’s medicinal benefits.[2](https://www.smart-publications.com/articles/silymarin-a-potent-antioxidant-liver-protector-and-anti-cancer-agent#fn-195-2)

Since then, hundreds of studies have been done on silymarin, and it is approved in the German Commission E Monographs (the most accurate information available on the safety and efficacy of herbs) as a supportive treatment for inflammatory liver conditions such as cirrhosis, hepatitis, and fatty infiltration caused by alcohol and other toxins.[3](https://www.smart-publications.com/articles/silymarin-a-potent-antioxidant-liver-protector-and-anti-cancer-agent#fn-195-3)

Silymarin is used to:

* Regenerate liver cells damaged by alcohol or drugs
* Decongest the liver (A liver decongestant stimulates bile flow through the liver and gallbladder, thus reducing stagnation and preventing gallstone formation and bile-induced liver damage.)
* Increase the survival rate of patients with cirrhosis[4](https://www.smart-publications.com/articles/silymarin-a-potent-antioxidant-liver-protector-and-anti-cancer-agent#fn-195-4)
* Complement the treatment of viral hepatitis[5](https://www.smart-publications.com/articles/silymarin-a-potent-antioxidant-liver-protector-and-anti-cancer-agent#fn-195-5)
* Protect against industrial poisons, such as carbon tetracholoride (a colorless gas that leaks into air, water and soil near manufacturing and waste sites)[6](https://www.smart-publications.com/articles/silymarin-a-potent-antioxidant-liver-protector-and-anti-cancer-agent#fn-195-6)
* Protect the liver against pharmaceuticals that stress the liver, such as acetaminophen and tetracycline[1](https://www.smart-publications.com/articles/silymarin-a-potent-antioxidant-liver-protector-and-anti-cancer-agent#fn-195-1)
* Antidote and prevent poisoning from the death cap mushroom, Amanita phalloides [7](https://www.smart-publications.com/articles/silymarin-a-potent-antioxidant-liver-protector-and-anti-cancer-agent#fn-195-7)[8](https://www.smart-publications.com/articles/silymarin-a-potent-antioxidant-liver-protector-and-anti-cancer-agent#fn-195-8)[9](https://www.smart-publications.com/articles/silymarin-a-potent-antioxidant-liver-protector-and-anti-cancer-agent#fn-195-9)

## **How does silymarin work?**

* As an antioxidant, silymarin scavenges for free radicals that can damage cells exposed to toxins. Silymarin has been said to be at least ten times more potent in antioxidant activity than vitamin E.[10](https://www.smart-publications.com/articles/silymarin-a-potent-antioxidant-liver-protector-and-anti-cancer-agent#fn-195-10)[11](https://www.smart-publications.com/articles/silymarin-a-potent-antioxidant-liver-protector-and-anti-cancer-agent#fn-195-11)[12](https://www.smart-publications.com/articles/silymarin-a-potent-antioxidant-liver-protector-and-anti-cancer-agent#fn-195-12)
* It increases glutathione in the liver by more than 35% in healthy subjects and by more than 50% in rats.[13](https://www.smart-publications.com/articles/silymarin-a-potent-antioxidant-liver-protector-and-anti-cancer-agent#fn-195-13) Glutathione is responsible for detoxifying a wide range of hormones, drugs, and chemicals. High levels of glutathione in the liver increases its capacity for detoxification.
* Silymarin also increases the level of the important antioxidant enzyme superoxide dismutase in cell cultures.[14](https://www.smart-publications.com/articles/silymarin-a-potent-antioxidant-liver-protector-and-anti-cancer-agent#fn-195-14)
* It stimulates protein synthesis in the liver, which results in an increase in the production of new liver cells to replace the damaged ones.[15](https://www.smart-publications.com/articles/silymarin-a-potent-antioxidant-liver-protector-and-anti-cancer-agent#fn-195-15)
* Silymarin inhibits the synthesis of leukotrienes (mediators of inflammation, which can result in psoriasis, among other things).[16](https://www.smart-publications.com/articles/silymarin-a-potent-antioxidant-liver-protector-and-anti-cancer-agent#fn-195-16)

[Thorne Research – Siliphos – Botanical Extract Complex for Antioxidant and Liver Support – 90 Capsules](https://www.amazon.com/gp/product/B001PLKZKI/ref=as_li_tl?ie=UTF8&camp=1789&creative=9325&creativeASIN=B001PLKZKI&linkCode=as2&tag=ussmart0c-20&linkId=05c82deca752ed4604db3e3bdaa293d3)

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