

Milk Thistle

This fact sheet provides basic information about the herb milk thistle—common names, uses, potential side effects, and resources for more information. Milk thistle is a flowering herb that is native to the Mediterranean region. It has been used for thousands of years as a remedy for a variety of ailments, especially liver problems.

Common Names—milk thistle, Mary thistle, holy thistle. Milk thistle is sometimes called silymarin, which is actually a mixture of the herb's active components, including silybinin (also called silibinin or silybin).

Latin Name—*Silybum marianum*

What It Is Used For

Milk thistle is believed to have protective effects on the liver and improve its function. It is typically used to treat liver cirrhosis, chronic hepatitis (liver inflammation), and gallbladder disorders. Treatment claims also include:

- Lowering cholesterol levels
- Reducing insulin resistance in people with type 2 diabetes who also have cirrhosis
- Reducing the growth of cancer cells in breast, cervical, and prostate cancers.

How It Is Used

Silymarin, which can be extracted from the seeds (fruit) of the milk thistle plant, is believed to be the biologically active part of the herb. The seeds are used to prepare capsules, extracts, and infusions (strong teas).

What the Science Says

- There have been some studies of milk thistle on liver disease in humans, but these have been small. Some promising data have been reported, but study results at this time are mixed.
- Although some studies conducted outside the United States support claims of oral milk thistle to improve liver function, there have been flaws in study design and reporting. To date, there is no conclusive evidence to prove its claimed uses.
- Recent NCCAM-funded research includes a phase II study to better understand the use of milk thistle for chronic hepatitis C. Additional research, cofunded by NCCAM and the National Institute of Diabetes and Digestive and Kidney Diseases, includes studies of milk thistle for chronic hepatitis C and nonalcoholic steatohepatitis (liver disease that occurs in people who drink little or no alcohol).
- The National Cancer Institute and the National Institute of Nursing Research are also studying milk thistle for cancer prevention and to treat complications in HIV patients.

Side Effects and Cautions

- In clinical trials, milk thistle generally has few side effects. Occasionally, people report a laxative effect, upset stomach, diarrhea, and bloating.
- Milk thistle can produce allergic reactions, which tend to be more common among people who are allergic to plants in the same family (for example, ragweed, chrysanthemum, marigold, and daisy).
- Tell your health care providers about any complementary and alternative practices you use. Give them a full picture of what you do to manage your health. This will help ensure coordinated and safe care.

Sources

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For More Information

Visit the NCCAM Web site at nccam.nih.gov and view:

- *What's in the Bottle? An Introduction to Dietary Supplements* at nccam.nih.gov/health/bottle/
- *Herbal Supplements: Consider Safety, Too* at nccam.nih.gov/health/supplement-safety/

NCCAM Clearinghouse

Toll-free in the U.S.: 1-888-644-6226

TTY (for deaf and hard-of-hearing callers): 1-866-464-3615

E-mail: info@nccam.nih.gov

CAM on PubMed

Web site: nccam.nih.gov/camonpubmed/

NIH Office of Dietary Supplements

Web site: www.ods.od.nih.gov

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