Milk Thistle

By Gene Bruno, MS, MHS & Art Presser, PharmD

Latin name
*Silybum marianum*

Parts used
Fruit

Key Constituents
Flavonoids (silimarín, aka, silymarín)

Evidence Based Uses

- Regenerate liver cells
- Impede the advancement of cirrhosis
- Complement the treatment of hepatitis
- Liver protectant (occupational liver poisons, alcohol abuse, hepatotoxic pharmaceuticals, including chemotherapeutics
- Impede fatty degeneration of liver

The active component in Milk Thistle are its flavonoids collectively called silimarín; and the majority of Milk Thistle-related research has been conducted on this component. Silimarín has long been recognized for its ability to benefit people with liver disorders. Research has found that at least 420 mg of silimarín daily was beneficial for sufferers of chronic viral hepatitis.¹ Other research has suggested that silimarín may be more effective for hepatitis B as opposed to hepatitis C.² In the case of acute hepatitis, studies have shown mixed but promising results.³ ⁴ One study in 1998 demonstrated that silimarín 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.⁵

Another key benefit of silimarín is its liver protective effect against damaging agents and toxins. Clinically, the administration of silimarín either oral or IV doses has resulted in significant protection against liver damage. One of the primary protective effects of silimarín is attributed to its antioxidant and free radicals scavenging properties.⁶ ⁷

Milk thistle also provides liver protection by stabilizing liver cell membranes. It alters the structure of the outer cell membrane in such a way as to prevent the penetration of the liver by toxins into interior of the cell. Milk Thistle also increases the regenerative ability of the liver and the formation of new liver cells. Further studies concluded that other actions of silymarin include preventing the recirculation of toxins and regeneration of damaged liver cells. Other studies indicate the silimarín in milk thistle has anticancer effects, and data suggests that milk thistle may prevent liver damage from liver poisoning prescription medications.⁸ ⁹ ¹⁰ ¹¹

Other current and evidence based uses of
Milk Thistle include, but are not limited to: chemotherapy induced kidney damage\(^\text{12}\) and gallstones\(^\text{13}\).

**Dosage Range**
175 mg extract standardized to \(\geq 80\%\) silimarín (\(\geq 30.0\%\) as a sum of silybin and isosilybin), two to three times daily.

**Clinically Significant Cautions**
None known.\(^\text{14}\)

**References**


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