

# Milk Thistle

## *Silybum Marianum*

Although historical references indicate extensive use of milk thistle, even going back 2000 years, its use was revitalised in Germany in the mid 19th century and again in modern practice in the 1930s. The main constituent, silymarin, has been extensively studied and has been found to be one of the most potent liver-protecting substances known.

- **LIVER PROTECTIVE** - Milk thistle prevents liver destruction and enhances liver function through its ability to prevent toxin-induced damage, and by stimulating the growth of new liver cells to replace old damaged cells. Silymarin does not have a stimulatory effect on malignant liver tissue. Silymarin has been shown to stimulate the production of glutathione, by over 35 percent. Increased glutathione levels raise the liver's detoxification potential to handle a wide range of hormones, drugs, and chemicals. Milk thistle has been shown to be protective in various types of liver insult including; cirrhosis, chronic viral hepatitis, fatty infiltration of the liver, subclinical cholestasis of pregnancy.
- **ANTIOXIDANT** - Silymarin prevents free radical damage by exerting antioxidant effects at least ten times more potent than vitamin E.
- **ANTI-INFLAMMATORY** - Silymarin helps protect cell membranes and limits the damaging inflammatory responses caused by leukotrienes release.
- **GALLSTONES** - Silymarin may also be helpful in improving the solubility of bile in treating gallstones. Results of studies using up to 420mg silymarin daily over 30 days led to a significant reduction in the biliary cholesterol concentration and bile saturation index.
- **PSORIASIS** - Milk thistle has been reported to be beneficial in reducing circulating endotoxins and improve liver function in cases of psoriasis. Silymarin has been shown to also benefit psoriasis sufferers through its effects on inhibiting inflammatory prostaglandins (leukotrienes), and also regulating cAMP and cGMP which control cell replication.

### DOSAGE

Up to 600mg silymarin (milk thistle standardised to 80% silymarin) have been used in studies of alcoholic liver disease, with positive effect. Effective results have been shown using 420mg silymarin in cases of cirrhosis. No restriction on duration of use. As silymarin possesses choleric activity, it may produce a looser stool as a result of increased bile flow and secretion. If larger amounts are used it may be useful to include a fibre supplement containing psyllium husks to prevent mucosal irritation and encourage firm stools.

### POTENTIAL APPLICATIONS

Detoxification, reducing cholesterol, digestive tonic (bitter), stimulant to milk flow in nursing mothers, drug-abuse, alcoholism, effects of long term treatment by conventional drugs, liver poisoning (notably the death cap mushroom). Shown to help stimulate adrenal function in those using long term steroid medication. Diabetic neuropathy (shown to significantly reduce sorbitol accumulation). Reduces symptoms of toxic liver damage i.e. - nausea, itching, discomfort. Shown to be preventive and exert anticancer effects against skin cancer.

## KNOWN CONTRAINDICATIONS

Milk thistle extract is virtually devoid of any side effects and may be used by most people, including pregnant and breast-feeding women. It has, in fact, been recommended as a treatment for itching due to poor gallbladder function during pregnancy. However, physician guidance is recommended in cases of pregnancy.

## INTERACTIONS

No adverse effects known.

## USE IN CONJUNCTION WITH

- **Liver / gallbladder support** - Flax seed oil, artichoke / schisandra, fibre complex, antioxidant complex, green food blend / blue food blend
- **Diet and lifestyle** - aerobic exercise, back stretching, abdominal exercise, antioxidant rich diet (e.g. green leafy vegetables), low saturated / hydrogenated fats, keep hydrated (1.5 litres water). Therapeutic fast may be advisable (seek guidance). Avoid caffeine / alcohol / refined sugar.

## NOTE

Silymarin contains a mixture of 3 compounds known as silibin, silidianin, and silichristine. Silibin is the component with the greatest biological activity.

## References

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Reference website: <http://www.organicfoodee.com/vms/milkthistle/>