

Milk Thistle 150 mg Softgels



Product Summary:

The body's filtration system, the liver, can be burdened by diseases, environmental toxins, alcohol consumption and other factors. Milk Thistle helps promote the elimination of toxins from the body, through cleansing of the liver, lower intestines and bowels to improve overall health and digestive function.

Properties/Uses:

The claim as approved by the *Natural Health Products Directorate* (NHPD): Traditional herbal medicine to protect the liver. Used in herbal medicine to help support liver function.



DIGESTIVE



Pharmacology:

The liver is the body's central detoxification organ. Modern life (such as alcohol and acetaminophen consumption) places a significant toxic burden on the liver. As toxin accumulation occurs, the liver becomes sluggish and a host of health problems can occur. These symptoms can include fatigue, inflammatory disorders, weight gain, allergies, and many more.^{1,2}

Milk thistle (*Silybum marianum*) has been used for centuries to treat liver disease. It is used in herbal medicine as a liver protectant and to help support liver function.³ In Europe, it is used for the treatment of alcoholic liver disease.⁴ Some of the mechanisms that account for milk thistle's efficacy include antioxidant activity, anti-inflammatory activity, toxin blockade at the hepatocyte membrane level, and increased numbers of ribosomes with enhanced synthesis of proteins.^{1,5} The flavonoid antioxidants found in milk thistle help alleviate the oxidative stress placed on our bodies in today's busy lives.

Milk thistle stimulates production of glutathione, which is a potent antioxidant that spares liver tissue from the caustic nature of the phase 1 generation of free radical detoxification metabolites, thus managing the risk for liver damage. Toxin blockade at the hepatocyte membrane level also preserves liver cells, minimizing loss of capacity. Milk thistle also stimulates the liver to regenerate injured cells and regenerate hepatocytes, returning lost performance capacity to the detoxification process. Milk thistle has a choleric effect, providing enhanced bile production and excretion for toxin removal.⁶ Applying milk thistle is a central component in any attempt to address toxin accumulations via augmented liver output. Milk thistle constituents are being investigated for use as a kidney damage protectant.



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Manufactured product information:

Manufacturer:

WN Pharmaceuticals® Ltd.

Size/UPC:

90's 7 77747 10267 9

NPN:

80003585

Expiry Date:

36 months from date of manufacture

Active Ingredient:

Each softgel contains:

Milk Thistle (Silybum marianum) (seed) (60% silymarin) 50 mg

Non-Medicinal Ingredients (in descending order):

Softgel capsule (gelatin, glycerin, purified water), soybean oil, yellow beeswax, lecithin

Appearance:

Brownish yellow suspension of powder in oil (slightly viscous suspension at room temperature) encapsulated in a clear oval soft gelatin shell.

Packaging:

175 cc white round bottle with safety seal under a 38 mm white induction sealed cap with vented interior seal and a label applied to the bottle. Lot number and expiry date are printed on label applied to exterior of bottle.

Storage:

Store in well closed containers in a cool, dry place. Protect from sunlight.





Dose:

Most clinical trials have used daily dosages of 420 to 480 mg silymarin, divided into two or three doses daily.⁶

Directions:

(Adults): 1 softgel, 3 times daily, or as recommended by a physician. Use for a minimum of 3 weeks to see beneficial effects.

Caution:

The caution as approved by the *Natural Health Products Directorate* (NHPD): KEEP OUT OF THE REACH OF CHILDREN. Consult a physician if symptoms persist or worsen. Consult a physician prior to use if you are pregnant. Hypersensitivity, such as allergy, has been known to occur, in which case discontinue use. STORE AT ROOM TEMPERATURE IN A DARK, DRY PLACE. DO NOT USE IF SEAL UNDER CAP IS BROKEN OR MISSING.

Deficiency Symptoms:

N/A

Drug Interactions/Contraindications:

Theoretically, the silymarin components of milk thistle could enhance the clearance of estrogen by inhibiting the action of intestinal bacteria beta-glucuronidase.⁷

Use milk thistle cautiously or avoid it in patients taking drugs that are metabolized by P450 enzymes CYP3A4 or CYP2C9.⁸

Toxicity/Adverse Reactions:

Orally, milk thistle is usually well-tolerated; however, it can cause an occasional laxative effect.⁷ Hypersensitivity, such as allergy, has been known to occur in individuals allergic to the Asteraceae/Compositae family, which include ragweed, chrysanthemums, marigolds, daisies, and many other herbs; in which case, discontinue use.³



Allergen Content/Ingredient Sensitivity:

NO	YES
Artificial Colors	Lecithin
Artificial Flavors	Soy Products
Artificial Sweeteners	Sulphites (<10 ppm)
Corn Products	
Egg Products	
Fish	
Gluten	
Hydrolyzed Plant Protein	
Milk Products	
Peanuts	
Preservatives	
Sesame Products	
Shellfish	
Starch/Modified Starch	
Tartrazine	
Tree Nuts	
Wheat Products	
Yeast	

NOT ACCEPTABLE FOR THE FOLLOWING DIETARY RESTRICTIONS:

Free of Animal Products

Kosher





References:

1. Murray, Michael T., *The Healing Power of Herbs*, 2nd ed., Prima Publishing, Rocklin, CA, 1995.
2. Murray, Michael, Joseph Pizzorno, *Encyclopedia of Natural Medicine*, Little, Brown and Company, New York, 1998.
3. Health Canada, *Milk Thistle Monograph*, Accessed October 1, 2010 [Available from: <http://www.hc-sc.gc.ca>]
4. Zi X, Mukhtar H, Agarwal R. Novel Cancer Chemopreventive Effects of a Flavonoid Antioxidant Silymarin: Inhibition of mRNA Expression of an Endogenous Tumor Promoter TNF . *Biochem Biophys Res Commun* 1997; 239:334-339.
5. Jellin JM, *et al*, *Pharmacist's Letter/Prescriber's Letter Natural Medicines Comprehensive Database*, 3rd edition, Stocton, CA: Therapeutic Research Faculty, 2000.
6. Tainone, F. Milk Thistle. *Am Fam Physician* 2005 Oct; 72(7):1285-8.
7. *Natural Medicine Comprehensive Database, Milk Thistle Monograph*, Accessed October 1, 2010 [Available from: <http://www.naturaldatabase.com/>]

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