



Available in 60 capsules

- Helps to support liver function
- Used in Herbal Medicine to help relieve digestive disturbance/dyspepsia
- Provides antioxidants for the maintenance of good health
- Helps to prevent selenium deficiency
- Hepatoprotectant/liver protectant

Discussion

The liver is the body's major metabolic organ. It processes, packages, stores, and ships out carbohydrates, fats, proteins, and micronutrients. It is responsible for the breakdown and elimination of alcohol, toxins, hormones, and medications, as well as for the synthesis of vital proteins, such as albumin, prealbumin, and clotting factors. It may be stated that the health of the body depends on the health of the liver. Research suggests that providing targeted nutrition supplementation may help support liver function and health.*^[1]

N-Acetyl-Cysteine (NAC) An acetylated derivative of the sulfur-containing amino acid L-cysteine, NAC promotes the synthesis of glutathione—a tripeptide that is active in detoxification and antioxidant systems. Glutathione also supports a healthy defense against hepatotoxic environmental pollutants, gamma-radiation, and other potential toxins.*^[1,2]

Alpha-Lipoic Acid Sometimes referred to as thioctic acid, alpha-lipoic acid is both water- and fat-soluble. It supports glutathione, helps regenerate antioxidant vitamins C and E, helps maintain the ratio of reduced to oxidized CoQ10 in the mitochondria, and helps support healthy levels of nitric oxide in the liver and kidney.^[3] The redox couple of lipoic acid and dihydrolipoic stabilizes NF-kappaB transcription and may help support healthy immune functions in the body.*^[4,5]

Milk Thistle Seed Extract Silymarin, the active component in milk thistle, has a history of use in promoting liver health. It supports antioxidant activity, neutralizes toxins, and also may protect hepatocytes' genetic material. Like alpha-lipoic acid, silymarin supports production of cellular glutathione. Its actions in the liver include maintaining normal levels of fat peroxidation and fibrous tissue formation; supporting a healthy immune response and the natural response to inflammation; and promoting protein synthesis and normal regeneration of liver tissue.^[6] A randomized placebo-controlled study of 103 individuals suggested that silymarin yielded statistically positive results and was well tolerated.*^[7] **Selenium (as selenomethionine)** An important coenzyme for the glutathione

peroxidase detoxification system, selenium also appears to support the endogenous antioxidant defenses of hepatocytes by upregulating their manganese superoxide dismutase (MnSOD) expression. At the same time, selenium appears to support healthy cytokine balance by affecting interleukin-6 (IL-6) transcription in Kupffer cells (liver-based macrophages).^[8] Kupffer cells play a crucial role in maintaining normal structure and function in the liver. Supporting their function and the body's normal inflammatory response in turn supports liver health overall.*^[9]

Upon studying targeted nutrition support for liver health, physician and researcher Dr. Burton M. Berkson chose to combine alpha-lipoic acid, silymarin, and selenium to obtain a balanced and low-cost approach to liver support.^[10] These three ingredients plus NAC are all present in Liver Protect™ to support liver health, antioxidant activity, and the body's natural immune defenses.*

Liver Protect™

Medicinal Ingredients (per vegetarian capsule)

Milk thistle (<i>Silybum marianum</i> , Seed)(80% Silymarin)	262.5 mg
DL-alpha-Lipoic acid.....	200 mg
Selenium (Selenomethionine).....	100 mcg
N-Acetyl-L-cysteine	200 mg

Non-Medicinal Ingredients

Hypromellose, stearic acid, microcrystalline cellulose, magnesium stearate, silica.

Recommended Dose

Adults: Take 1 capsule 2 times a day. Take with meals providing protein. Use for a minimum of 3 weeks to see beneficial effects.

Consult a healthcare practitioner for use beyond 6 months. Consult a healthcare practitioner prior to use if you are pregnant or breastfeeding, have diabetes or a history of non-melanoma skin cancer. Consult a health care practitioner if symptoms persist or worsen. Consult a healthcare practitioner prior to use if you are taking antibiotics or nitroglycerin. Consult a healthcare practitioner prior to use if you have cystinuria. Hypersensitivity, such as an allergy, has been known to occur; in which case, discontinue use.

If you experience sweating, paleness, chills, headache, dizziness and/or confusion, discontinue use and consult a healthcare practitioner.



References

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Additional references available upon request

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