

VEGETARIAN FORMULAS

PRODUCT INFORMATION

Product Name:

Liv-Tox

NPN:

EN 117313

Galenic Form:

Capsules

Format:

Bottles of 60 capsules.

Ingredients:

Each capsule contains:

Milk Thistle (<i>Silybum marianum</i>) seed extract (std. to 80% silymarin, providing 120 mg).....	150 mg
Artichoke (<i>Cynara scolymus</i>) leaf 4:1 extract, equivalent to 600 mg raw herb.....	150 mg
Turmeric (<i>Curcuma longa</i>) rhizome 25:1 extract equivalent to 2500 mg (std. to 95% curcumin) ..	100 mg
Schisandra (<i>Schisandra chinensis</i>) fruit 5:1 extract equivalent to 500 mg (std. to 2% schisandrins)	100 mg
Picrorhiza (<i>Picrorhiza kurrooa</i>) root 4:1 extract equivalent to 200 mg (std. to 4% kutkin).....	50 mg
Niruri (<i>Phyllanthus niruri</i>) herb 8:1 extract equivalent to 400 mg	50 mg

Non-medicinal ingredients:

Hypromellose, stearic acid.

This product does not contain dairy, egg, gluten, shellfish, soy, sulfites, animal derivatives or artificial colours, flavours or preservatives.

Formula Rationale:

RxBalance™ Liv-tox stimulates toxin elimination with six herbal ingredients, each known for their liver cleansing properties. Liv-tox supports detoxification cycles (Phase I and II), up-regulates glutathione production and improves Superoxide Dismutase production. Liv-tox provides protection to hepatocytes (liver cells) and supports their regeneration, improves bile flow and helps modulate and protect liver enzyme integrity. It has cholorectic and anti-inflammatory effects, protects DNA and is supportive during chemotherapy.

Milk Thistle (*Silybum marianum*) is used orally for liver disorders including toxic liver damage caused by chemicals, jaundice, chronic inflammatory liver disease, hepatic cirrhosis and chronic hepatitis. Silymarin, the active constituent, has been shown to slow penetration of toxins into the liver whilst helping to regenerate liver cells.

Artichoke (*Cynara scolymus*) is used orally for treating liver dysfunction, dyspepsia, hyperlipidemia, preventing gallstones, lowering blood pressure and as a tonic. The cynarin, found in artichoke, has been found to stimulate bile secretion as well as lower triglyceride and cholesterol levels. Artichoke also has some antioxidant activity. Some researchers have highlighted the fact that artichoke may reduce alcohol induced hangover. Research has also suggested that artichoke may reduce IBS (Irritable Bowel Syndrome) symptoms.

Turmeric (*Curcuma longa*) is used orally for liver and gallbladder complaints, jaundice, hepatitis, diarrhea and kidney inflammation. Its major active component is curcumin, a yellow pigment which exhibits anti-inflammatory activity. Turmeric has also demonstrated both antioxidant and anticancer activities.

Schisandra (*Schisandra chinensis*) Orally, schisandra is used as an adaptogen for increasing resistance to disease and stress, increasing energy, liver protection and energizing RNA-DNA to rebuild cells. Schisandra improves liver function by increasing hepatic glutathione, glucose-6-phosphate, and glutathione-reductase activity. It seems to be hepatoprotective by inhibiting lipid peroxidation, increasing liver glycogen production, inducing cytochrome P450 (CYP450) enzymes, and promoting the growth of liver cells.

Phyllanthus (*Phyllanthus emblica*) is used orally for urinary tract infections and inflammation, kidney stones, jaundice, hepatitis B, as a diuretic, an antifatulent, liver tonic and blood purifier. It is thought to have multiple properties; antispasmodic, antiviral, bactericidal, antipyretic and diuretic. It is also thought that Phyllanthus reduces blood sugar and protects the liver.

Picrorhiza (*Picrorhiza kurrooa*) is used orally for jaundice, acute viral hepatitis, indigestion, constipation, fever, allergy, and asthma. There is evidence that the constituent picroside protects against liver injury. Picroliv, a combination of picroside, kutkoside, cucurbitacin glycosides, and other unidentified constituents from Picrorhiza also appears to have hepatoprotective activity. Picroliv seems to protect the liver from hepatotoxic agents, such as ethanol and the Amanita mushroom.

Primary indication(s):

Hepatoprotectant/Liver protectant. Used in herbal medicine to increase the bile excretion by the liver (cholorectic).

Secondary indication(s):

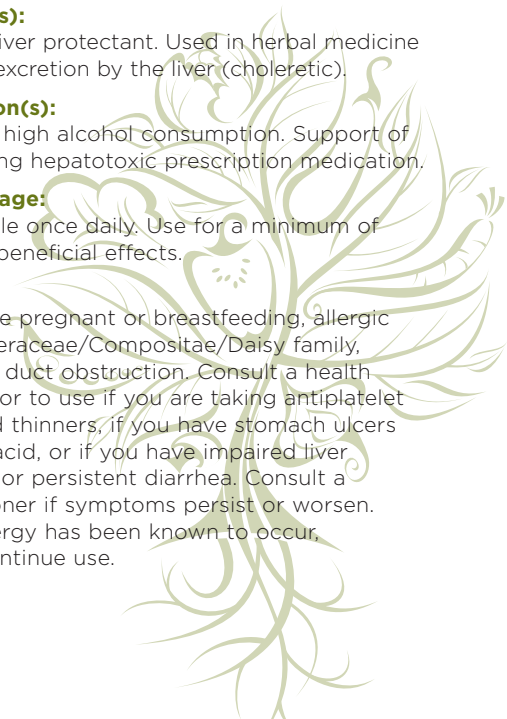
Liver protectant for high alcohol consumption. Support of individuals consuming hepatotoxic prescription medication.

Recommended dosage:

Adults: Take 1 capsule once daily. Use for a minimum of three weeks to see beneficial effects.

Caution:

Do not use if you are pregnant or breastfeeding, allergic to plants of the Asteraceae/Compositae/Daisy family, or if you have a bile duct obstruction. Consult a health care practitioner prior to use if you are taking antiplatelet medication or blood thinners, if you have stomach ulcers or excess stomach acid, or if you have impaired liver function, gallstones or persistent diarrhea. Consult a health care practitioner if symptoms persist or worsen. Hypersensitivity/allergy has been known to occur, in which case, discontinue use.



Dr. Crisafi's comments:

Two of the most solicited glands/organs of the body are the adrenal glands and the liver. One of the liver's major roles is to break down and eliminate hundreds of chemical substances that are either produced within our bodies (endogenous) or are absorbed from outside our bodies (exogenous).

Though liver dysfunction is associated with various digestive problems, the other effects of liver dysfunction or an overburdened liver should not be overlooked. These include a variety of seemingly unrelated problems from estrogen excess (PMS, endometriosis, etc.) to Alzheimer's and Parkinson's, running the gamut from physical disorders (cancer, dermatitis, fatigue, food allergies and intolerances, headaches, tinnitus, rheumatism, pain, psoriasis and vasculitis) to psychological disorders (aggressive behaviour, anxiety, fatigue, insomnia, organic mental disorders).

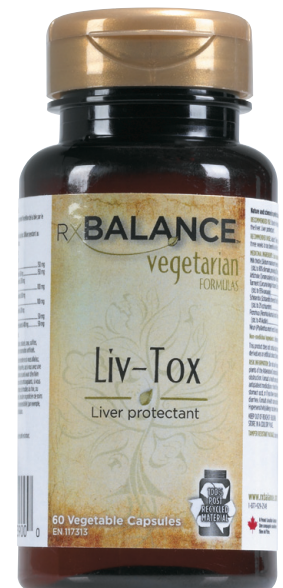
The thousands of new chemicals to which we have been exposed in the last decades have significantly increased the hepatic (liver) burden. Is it any wonder that certain diseases are on the rise?

The solution, however, is not the classical "detox" program which tends to "whip" the liver into action. On the contrary, an appropriate detoxification requires that the liver can assume the accrued burden we are asking it to bear when we stimulate detoxification. This is why it is vitally important to ensure optimal liver function rather than stimulate detoxification if we are ever to support, rather than tire, the liver.

The herbs used in Liv-Tox are ideally suited for the requirements of this 21st century. They help protect liver cells, help regenerate liver cells (thereby increasing the liver's capacity), have anti-inflammatory effects as well as antioxidant effects with research-supported, time-proven herbs.

Selected References

- Araujo CC, Leon LL. *Biological activities of Curcuma longa L.* Mem Inst Oswaldo Cruz 2001;96:723-8.
- Asmawi MZ, Kankaanranta H, Moilanen E, Vapaatalo H. *Anti-inflammatory activities of Emblica officinalis Gaertn leaf extracts.* J Pharm Pharmacol 1993;45:581-4.
- Bhattacharya A, Chatterjee A, Ghosal S, Bhattacharya SK. *Antioxidant activity of active tannoid principles of Emblica officinalis (amla).* Indian J Exp Biol 1999;37:676-80.
- Hu JF. *[Inhibitory effects of Phyllanthus emblica juice on formation of N-nitrosomorpholine in vitro and N-nitrosoproline in rat and human].* [Article in Chinese]. Chung Hua Yu Fang I Hsueh Tsa Chih 1990;24:132-5.
- Ihanntola-Vormisto A, Summanen J, Kankaanranta H, et al. *Anti-inflammatory activity of extracts from leaves of Phyllanthus emblica.* Planta Med 1997;63:518-24.
- Kraft K. *Artichoke leaf extract- recent findings reflecting effects on lipid metabolism, liver and gastrointestinal tracts.* Phytomedicine 1997;4:369-78.
- Pittler MH, White AR, Stevinson C, Ernst E. *Effectiveness of artichoke extract in preventing alcohol-induced hangovers: a randomized controlled trial.* CMAJ 2003;169:1269-73.
- Sugiyama T, Nagata J, Yamagishi A, Endoh K, Saito M, Yamada K, Yamada S, Umegaki K. *Selective protection of curcumin against carbon tetrachloride-induced inactivation of hepatic cytochrome P450 isozymes in rats.* Life Sci. 2006 Apr 4;78(19):2188-93. Epub 2005 Nov 8.
- Szilard S, Szentgyorgyi D, Demeter I. *Protective effect of Legalon in workers exposed to organic solvents.* Acta Med Hung 1988;45:249-56.
- Vaidya AB, Antarkar DS, Doshi JC, et al. *Picrorhiza kurroa (Kutki) Royle ex Benth as a hepatoprotective agent--experimental & clinical studies.* J Postgrad Med 1996;42:105-8.
- Walker AF, Middleton RW, Petrowicz O. *Artichoke leaf extract reduces symptoms of irritable bowel syndrome in a post-marketing surveillance study.* Phytother Res 2001;15:58-61.
- www.naturaldatabase.com Artichoke Monograph (as of July 2006)
- www.naturaldatabase.com Milk Thistle Monograph (as of July 2006)
- www.naturaldatabase.com Phyllanthus Monograph (as of July 2006)
- www.naturaldatabase.com Picrorhiza (*Picrorhiza kurroa*) Monograph (as of Aug. 2006)
- www.naturaldatabase.com Schisandra Monograph (as of July 2006)
- www.naturaldatabase.com Turmeric Monograph (as of July 2006)
- Zhang F, Altorki NK, Mestre JR, et al. *Curcumin inhibits cyclooxygenase-2 transcription in bile acid- and phorbol ester-treated human gastrointestinal epithelial cells.* Carcinogenesis 1999;20:445-51.
- Zhu M, Lin KF, Yeung RY, Li RC. *Evaluation of the protective effects of Schisandra chinensis on Phase I drug metabolism using a CCl4 intoxication model.* J Ethnopharmacol. 1999 Oct;67(1):61-8.



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