

## Ultra Liver Support† Liver Detoxification and Support†

### DESCRIPTION

Ultra Liver Support†, provided by Douglas Laboratories®, contains several lipotropic nutrients and herbal ingredients to help support liver function as well as the gastrointestinal tract.†

### FUNCTIONS

Ultra Liver Support† contains several dietary constituents that have been shown to support the function and structure of the liver. † The liver is the primary detoxification site in the body regulating conversion of harmful by products to neutral compounds. A variety of cruciferous vegetables including broccoli and wasabi may have potent liver protective activities which include induction of a detoxifying enzyme, glutathione S-transferase (GST). The conversion of oxidized glutathione disulfide (GSSG) to its reduced state (GSH) is the body's primary pathway for dealing with oxidative stress. This activity can be both liver protective and antiproliferative, likely via influencing levels of reactive oxygen species.

Broccoli sprout-derived sulforaphane is a phytochemical which has been shown through double-blind, placebo controlled human studies to be capable of activating GST.† Sulforaphane is considered to be an inducer of phase II enzyme activity in the liver and has also demonstrated a role in maintaining healthy colon cell function.† Another plant in the Brassicacea family containing phytochemicals with potential for cytoprotection is wasabi. The wasabi rhizome contains various isothiocyanates and in particular a key active compound called 6-methylsulfinylhexyl isothiocyanate (6-HITC) which has been shown to support various biological properties including the induction of nuclear factor erythroid 2-related factor 2 (Nrf2).† Nutrigenomic activation of transcription factor Nrf2, is required to turn on many genes that induce cytoprotection such as those playing key roles redox status and detoxification.

*Silybum marianum*, milk thistle, is rich in flavonoids known collectively as silymarin. Silymarin has been shown to support and enhance normal, healthy liver function through three primary actions. By binding to the outer cell membrane, silymarin inhibits unwanted toxins from entering the cell. † Silymarin further protects the liver as an important component of the liver's antioxidant defense. The liver generates potentially damaging, toxic free radicals and reactive oxygen species (e.g. peroxides) as a result of its normal metabolic and detoxifying functions. Silymarin supports healthy levels of glutathione and superoxide dismutase, two primary substances with antioxidant activity in the liver that reduce free radicals known to interfere with normal cell function.†

*Cynara scolymus*, artichoke, has been used medicinally for centuries. Similar to milk thistle, it is beneficial to the liver as it supports the liver's excretion of fats.† Extracts of artichoke can stimulate the flow of bile from the liver and support liver cells from oxidative damage.† Cynara's usefulness in liver health is thought to be due to its content of caffeoylquinic acids, e.g. cynarin, and flavonoids

Lipopolysaccharide (LPS) triggers excessive secretion of a variety of mediators including nitric oxide (NO) and prostaglandin E2 (PGE2). Luteolin and luteolin-7-O-glucoside, the active compounds with antioxidant activity from dandelion extract may support cellular protection and reduce lipopolysaccharides in animal models.†

Barberry and bilberry extracts have high antioxidant activity to support the production of glutathione.

Preclinical evidence on bilberry suggests protective effects on liver function by reduction in the levels of reactive oxygen species in stressed animals.†

### INDICATIONS

Ultra Liver Support† may be a useful dietary supplement for individuals who wish to support the function of a healthy liver and detoxification process.

## Ultra Liver Support†

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#### FORMULA (#202315)

2 vegetarian capsules contain:

Barberry Extract ( <i>Berberis vulgaris</i> , root and stem)	250 mg
Dandelion ( <i>Taraxacum officinale</i> , root)	250 mg
Bilberry Extract ( <i>Vaccinium myrtillus</i> , fruit) (standardized to provide 25% anthocyanidins)	200 mg
Milk Thistle Extract ( <i>Silybum marianum</i> ) (standardized to provide 80% silymarin)	175 mg
Artichoke Extract ( <i>Cynara scolymus</i> , leaf)	150 mg
Schisandra Extract ( <i>Schisandra chinensis</i> , fruit) (standardized to 2% schizandrins)	150 mg
Broccoli Extract ( <i>Brassica oleracea L.</i> , sprout) (standardized to 500 mcg of sulforaphane)	125 mg
<i>Wasabia japonica</i> (rhizome)	50 mg

Other Ingredients: Hydropropyl methylcellulose (capsule), ascorbyl palmitate, silica, and cellulose.  
Gluten free, Non-GMO

#### SUGGESTED USE

Adults take 2 capsules, 1-2 times daily or as directed by a healthcare professional.

#### SIDE EFFECTS

No adverse side effects have been reported. If you are pregnant, nursing, have any health condition or taking any medication, consult your healthcare professional before using this product.

#### STORAGE

Store in a cool, dry place, away from direct light. Keep out of reach of children.

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For more information on Ultra Liver Support† visit [douglaslabs.com](http://douglaslabs.com)

† These statements have not been evaluated by the Food and Drug Administration.  
This product is not intended to diagnose, treat, cure, or prevent any disease.

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