



## Product Information

# Detox Pack Supports Liver and Gastrointestinal Function

### DESCRIPTION

Detoxification Factors Pack contains ingredients carefully selected to support the body's normal detoxification process.

This pack contains amino acids, vitamins, minerals and herbs as part of a 15 day detoxification regimen and can be used in conjunction with Metabolic Cleanse powder.

### FUNCTIONS

The Detoxification Pack contains vitamin, mineral, herbal and lipotropic constituents that support the function of the digestive tract and liver.

Fiber from pectin's and glucomannan can naturally stimulate the bowel and may contribute to immobilizing toxic compounds in the gastrointestinal tract. Magnesium citrate and slippery elm bark are commonly used to support regular bowel movements. As the body's main detoxification organ, the liver is responsible for removing all potentially detrimental molecules such as alcohol, drugs and air pollutants from the blood stream. 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).<sup>†</sup> 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. Studies have shown that curcumin contains antioxidant properties and can assist in the regulation of physiological responses. Researchers believe curcumin's mechanism of action is likely mediated through its ability to inhibit cyclooxygenase-2 (COX-2), lipoxygenase (LOX), and induce nitric oxide synthase. Choline, betaine, and methionine are involved in methyl group metabolism, which is essential for normal liver function. Choline, methionine and inositol are also lipotropic nutrients. A lipotropic nutrient promotes or encourages the export of fat from the liver.

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Lipotropics are necessary for maintenance of a healthy liver, and for burning the exported fat for additional energy. Without lipotropics, such as choline and inositol, fats and bile can become trapped in the liver, resulting in unfavorable conditions of the liver.

## INDICATIONS

Detoxification Pack may be a useful dietary supplement for individuals who wish to support the body's normal detoxification processes.

## FORMULA (#66866-30X)

Serving size 1 pack (5 tablets, 1 capsule per pack)

Vitamin B1 (thiamine HCl).....	12.5 mg
Vitamin B2 (riboflavin) .....	5 mg
Niacin (as niacinamide) .....	3.3 mg
Magnesium.....	150 mg (as magnesium citrate)
Biotin .....	100 mcg
Selenium (as selenomethionine).....	100 mcg
Proprietary Blend .....	1,0000 mg
Glucomannan, carrot root, celery stalk and leaf, citrus pectin, apple pectin, sodium alginate, slippery elm bark.	
N-Acetyl-L-Cysteine .....	250 mg
Methylsulfonylmethane (MSM).....	250 mg
Choline(from choline bitartrate).....	235 mg
Barberry Extract (Berberis vulgaris, root and stem).....	125 mg
Bilberry Extract (Vaccinium myrtillus, fruit).....	100 mg
Dandelion (Taraxacum officinalis, leaf) .....	141.6 mg
Garlic (bulb) .....	125 mg
Parsley (leaf) .....	100 mg
Globe Artichoke extract (Cynara scolymus, leaf) .....	100 mg
Schisandra Extract (Schisandra chinesis, fruit) (Standardized to 3% schizandrins).....	75 mg
Broccoli Extract (Brassica oleracea l., sprout) (Standardized to 500 mcg of sulforaphane).....	62.5 mg
Wasabia japonica (rhizome) (providing 100 mcg of isothiocyanates).....	25 mg
Milk Thistle Extract (Silybum marianum, fruit) (Standardized to 80% silymarin) .....	87.5 mg

Milk Thistle (seed) Silybum marianum .....	16.6 mg
Tumeric (Curcuma longa, rhizome) .....	16.6 mg
Inositol .....	50 mg
Lecithin Granulars (from soy) .....	25 mg
L-Glutathione.....	25 mg
Betaine (from Betaine HCl ) .....	19 mg L-Methionine.....
.....	11.3 mg
Other ingredients: Gelatin (capsule), hydroxypropyl methylcellulose (capsule), ascorbyl palmitate, cellulose, magnesium silicate, silica, vegetable stearate.	

## SUGGESTED USE

For a 15 day detoxification program, take 1 pack in the morning and 1 pack in the evening before meals or as directed by a healthcare professional.

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## SIDE EFFECTS

No adverse side effects have been reported, consult with a medical practitioner if taking prescription medication. **STORAGE** Store in a cool, dry place, away from direct light. Keep out of reach of children.

## REFERENCES

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**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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