

# Hepasil DTX™

Comprehensive liver support formula that promotes and balances the body's detoxification processes\*

## Health Basics

- Milk-thistle extract provides dual action, stimulating liver enzymes and protecting against oxidative stress\*
- Additional antioxidants from green-tea extract, olives, and turmeric provide further antioxidant protection\*

The liver is the body's second largest organ and its largest gland. It manufactures many important blood proteins; assists in the conversion of fats, amino acids, vitamins, and minerals into more usable forms; makes important structural components, including cell membrane compounds; filters toxins from the blood; and stores many vitamins and minerals, including iron and B12. The **Hepasil DTX™** supplement was formulated to provide a unique blend of antioxidants to help support healthy liver function.\*

## Milk-Thistle Extract

Used as a natural remedy to support liver health for more than 2,000 years, milk thistle is used by the liver to protect against oxidative stress. Additionally, it stimulates liver detoxification pathways and has strong antioxidant properties thought to help strengthen and protect liver cells.<sup>1,2\*</sup>

As an antioxidant, milk thistle helps increase the amount and the activity of several antioxidant enzyme systems that are involved in the detoxification process, such as superoxide dismutase (SOD) and the glutathione peroxidase system. The active phytochemicals in milk thistle may also stimulate protein synthesis in liver cells, which helps to regenerate them.<sup>1-5\*</sup>

## Alpha Lipoic Acid

Alpha lipoic acid is easily transported across cell membranes to provide support to the important enzymes both inside and outside the cell. Because it is both water- and oil-soluble, it is thought to help regenerate both water- and oil-soluble antioxidants.\*



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ITEM# 135

## Turmeric Extract

Turmeric, the powdered root of the plant *Curcuma longa L.*, is a member of the ginger family native to India and Southeast Asia. It contains curcumin and related compounds known as curcuminoids, which have significant antioxidant properties.<sup>6-9\*</sup>

## Betaine

Betaine, also known as trimethylglycine, supports healthy liver function by donating methyl groups necessary for detoxification reactions. Betaine also helps to maintain cell volume and fluid balance, further protecting liver cells from environmental stress.<sup>10\*</sup>

## N-Acetyl-L-Cysteine

N-acetyl-L-cysteine is an essential precursor for glutathione. Glutathione is an important antioxidant that scavenges free radicals inside and outside the cell and promotes detoxification. Its extra-cellular activity helps protect the liver from free radicals and toxins.<sup>11\*</sup>

## Why Hepasil DTX™?

The unique formulation of **Hepasil DTX** helps to combat oxidative stress in the liver with a powerful blend of antioxidants, including green-tea extract and broccoli concentrate. It also includes USANA's patented Olivol® for more complete antioxidant support. With 240 mg of high-quality, highly bioavailable milk-thistle extract, **Hepasil DTX** provides comprehensive support for the liver.\*

## References

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4. Medina J, et al. *Drugs* 2005;65(17):244-61.
5. Flora K, et al. *Am J Gastroenterol* 1998;93(2):139-43.
6. Somparn P, et al. *Biol Pharm Bull.* 2007 30:(1)74-78.
7. Nair S, et al. *J Assoc Physicians India* 1998;46(8):708-10.
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9. Maheshwari RK, et al. *Life Sci* 2006;78(18):2081-7.
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11. Kelly GS. *Altern Med Rev* 1998;3(2):114-27.



- Cardiovascular
- Cellular Metabolic
- Skeleton/Structural
- Endocrine
- Brain/Nervous

# Optimizers: Cellular Metabolic

DIRECTIONS: ADULTS TAKE THREE (3) TABLETS DAILY, PREFERABLY WITH MEALS.

## Supplement Facts

Serving Size 3 Tablets

	AMOUNT PER SERVING	%DV*
MILK THISTLE EXTRACT ( <i>SILYBUM MARIANUM</i> L., FRUIT, STANDARDIZED TO CONTAIN 80% SILIMARIN)	240 mg	†
GREEN TEA EXTRACT-DECAFFEINATED ( <i>CAMELLIA SINENSIS</i> HUNT, LEAVES)	45 mg	†
OLIVOL® (OLIVE EXTRACT, <i>OLEA EUROPAEA</i> L., FRUIT)**	45 mg	†
TURMERIC EXTRACT ( <i>CURCUMA LONGA</i> L., ROOT)	45 mg	†
BROCCOLI CONCENTRATE ( <i>BRASSICA OLERACEA</i> V. <i>BOTRYTIS</i> L., FLOWER)	75 mg	†
ALPHA-LIPOIC ACID	120 mg	†
N-ACETYL L-CYSTEINE	150 mg	†
BETAINE (TRIMETHYLGLYCINE)	900 mg	†

\*PERCENT DAILY VALUES ARE BASED ON A 2,000 CALORIE DIET.

† DAILY VALUE NOT ESTABLISHED.

\*\*OLIVOL IS A TRADEMARK OF USANA HEALTH SCIENCES, INC., AND IS

PROTECTED UNDER US PATENTS 6,358,542 OR 6,361,803

OTHER INGREDIENTS: MICROCRYSTALLINE CELLULOSE, MODIFIED CELLULOSE, ASCORBYL PALMITATE, COLLOIDAL SILICON DIOXIDE, DEXTRIN, CROSCARMELLOSE SODIUM, DEXTROSE.

LABORATORY TESTED, QUALITY GUARANTEED. MEETS USP SPECIFICATIONS FOR POTENCY, UNIFORMITY, AND DISINTEGRATION, WHERE APPLICABLE.