Healthy Liver®

Helps normal liver function
30 Film Coated Tablets
Pregnant or lactating women should consult a physician before using this product.

**Interaction**
No interaction with other medicinal products has been reported to date.

**Adverse effects**
No adverse effect has been reported to date.

**Precautions**
Always read the label and use only as directed. Keep out of reach of children.

**Storage**
Keep in a cool (below 25 °C) and dry place, away from direct sunlight.

### Supplement Facts

<table>
<thead>
<tr>
<th>Composition per tablet</th>
<th>RDA%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk Thistle</td>
<td>42.86 mg</td>
</tr>
<tr>
<td>Globe Artichoke</td>
<td>120 mg</td>
</tr>
<tr>
<td>Inositol</td>
<td>50 mg</td>
</tr>
<tr>
<td>Choline bitartrate</td>
<td>50 mg</td>
</tr>
<tr>
<td>Methionine</td>
<td>25 mg</td>
</tr>
<tr>
<td>Taurine</td>
<td>25 mg</td>
</tr>
</tbody>
</table>

*Recommended daily allowance (RDA) not established.

**Presentation**
30 Film Coated tablets

**Administration**
Take one tablet daily with meal.

References:
- PDR for herbal medicines by Joerg Gruenwald, ph.D
- University of Maryland, medical center, Complementary and Alternative Medicine Guide, Herb
  http://umm.edu/health/medical/altmed/herb/milk-thistle
Cynara scolymus  
Common name: Globe Artichoke  
Artichoke has been employed as a bile stimulant and diuretic. As a traditional medicine, artichoke has been used primarily for enhancing liver and gallbladder function. Among traditional healers, artichoke has been used to treat chronic liver and gall bladder diseases, jaundice, hepatitis, arteriosclerosis and high cholesterol. Italian scientists isolated a compound from artichoke leaf called cynarin which was used as a drug to stimulate the liver and gall bladder and to treat elevated cholesterol. The herb also used for non-ulcer dyspepsia and cholerisis. The Active ingredients are caffeic acid derivatives mainly cynarin. Cynarin which is responsible for bitter taste of the herb considered one of artichoke’s main biologically active chemicals. It occurs in the highest concentration in the leaves of the plant. Other documented active chemicals include flavonoids, sesquiterpene lactones and polyphenols. Artichoke is used for dyspeptic problems, prophylactic treatment against the return of gallstones and also has lipid-reducing and hepato stimulating effect.

It also use for treating conditions associated with polycystic ovary syndrome including failure to ovulate, high blood pressure, high triglycerides and high level of testosterone.

Choline bitartrate  
Choline is a vitamin-like essential nutrient and a methyl donor involved in many physiological processes, including normal metabolism and transport of lipids and methylation reactions. It functions as a component of other molecules such as the neurotransmitter acetylcholine, phosphatidylcholine (lecithine) and sphingomyelin, structural constituents of cell membranes and plasma lipoproteins. Choline deficiency causes abnormal deposition of fat in the liver, which results in a condition called nonalcoholic fatty liver disease.

Methionine  
It is used to prevent liver damage in acetaminophen poisoning and also used for treating liver disorders. It treats alcoholism and radiation side effects.

Taurine  
It is a non protein amino acid which used to treat liver disease (hepatitis). Taurine has antioxidant activity. It has hypocholesterolemic and detoxifying activities. The hypocholesterolemic effect of taurine is due to the stimulation of bile acid synthesis and enhancement of cholesterol 7 alpha-hydroxylase activity.

Contraindications  
No contraindications have been reported to date.

Pregnancy and Lactation  
This product is safe to use by pregnant or lactating women.
Healthy Liver®

Helps normal liver function

Liver is the second largest organ in the body and performs a number of essential functions related to digestion, metabolism and immunity. The major function of liver includes the production of bile and metabolism of carbohydrates, proteins, vitamins, fat and many other compounds used by the body. It also metabolizes drugs and detoxifies toxins.

The ingredients in Healthy Liver, especially Milk thistle protect the vital organ from toxin that may cause liver damage through antioxidant properties.

Indications
- Liver and gallbladder complaints
- Regenerates hepatocells
- Protects liver cells against oxidative damage and toxins
- Lipid-reducing effect

Ingredients
*Silybum marianum* (L.)
Common name: Milk Thistle
An extract of milk thistle seed is the primary botanical preparation used in Europe for supporting a healthy liver and treating liver disease. It traditionally has been used for disorders of liver, spleen and gall bladder such as jaundice and gall bladder colic. Now both oral and injectable preparations are used. The injectables are highly regarded as an effective treatment against poisoning with the potentially deadly death angel mushroom, Amanita phalloides.

The Active ingredients are mostly flavonoids, steroids and organic acids. The chief components are Silymarin and then silybin A, silybin B, isosilybin, silychristin and silydianin.

The drug is used for toxic liver damage, functional disorders of liver and gallbladder including jaundice, gallbladder colic, adjunctive treatment in chronic inflammatory liver disease, none-alcoholic fatty liver and hepatic cirrhosis.

- **Hepatoprotective Effects**
The hepatoprotective activity of the seed is from silymarin, in particular, silychristin and silydianin. The compounds seem to inhibit the entrance of toxins and block toxin binding sites through alteration of the liver cell’s outer membrane. Silibinin decreases production of superoxide radicals and nitric oxide. Silibinin also inhibits leukotriene formation by the Kupffer cells. Silymarin increases glutathione production by the liver, intestines and stomach. Glutathione is used for detoxification cells in the liver.

- **Protective Effects**
The seed exerts an anti-inflammatory effect through inhibition of leukotriene production by silymarin. Silibinin and silychristin demonstrated remarkable stimulatory effects on proliferation rate, biosynthesis of protein and DNA, and activity of the enzyme lactate dehydrogenase in kidney cells.

- **Liver Regenerative Effects**
Silymarin stimulates RNA polymerase I in the cell nucleus of the hepatocytes, resulting in an increase of ribosomal protein synthesis and the regenerative ability of the liver.