



# MILK THISTLE

Silybum marianum 150 mg standardised extract

## Nutritional Information One Tablet provides:

Milk Thistle fruit extract	150 mg
Providing: Silymarin (of which	105 mg
Silybin and Isosilybin	45 mg)
Equivalent to 7500 mg of herb powder	

Take one tablet daily with food. Swallow with water.



- A medium potency herbal extract
- Supports phase 2 liver detoxification
- With 105 mg silymarin and 45 mg of silybin and isosilybin
- Hepaprotective

#### DESCRIPTION

Milk thistle fruit extract containing a efficient dose of silymarin which supports phase 2 liver detoxification pathways and has traditionally established liver protective and choleretic (promotes bile secretions) properties. Milk thistle extract may help to support conditions associated with the liver, gall bladder and alcohol related disorders.

## HOW DOES MILK THISTLE SUPPORT DETOXIFICATION AND LIVER HEALTH?

**Hepaprotective:** Silymarin, the active agent in milk thistle has hepaprotective properties and has been shown to decrease the liver enzymes Alanine transaminase (ALT) and Aspartate transaminase (AST). These enzymes when high, indicate damage or distress of the liver cells<sup>1</sup>. Silymarin protects the liver cells from damage as toxins are being eliminated from the body tissues during detoxification<sup>2</sup>. Any released toxins from tissues need to go back through the liver before being processed and excreted.

**Phase 1 and phase 2 detoxification pathways:** In phase 1 liver detoxification pathway, toxins are unbound. In phase 2 liver detoxification pathway, the free toxins are bound to amino acids in a process called conjugation. Problems can occur when phase 1 pathway is quicker than phase 2, as this leaves many unbound toxins in the liver. Milk thistle speeds up phase 2 liver detoxification pathway which prevents a backlog of unbound toxins<sup>3</sup>.

**Anti-inflammatory:** Silymarin inhibits inflammation in the liver by inhibiting the synthesis of the inflammatory markers leukotrienes<sup>4</sup>. Chronic portal inflammation, which can lead to hepatic hypertension and potentially life threatening complications.

## **MILK THISTLE AND DIABETES**

**Antioxidant protection:** Milk thistle has antioxidant properties, which have a beneficial effect on the damaged beta cells of the pancreas. Oxidative damage to the pancreas cells is often implicated in complications of diabetics, often making diabetes more aggressive. Silymarin may restore glycaemic control in diabetics and reduce HBA1- $c^5$ .

**Increasing the function of pancreatic beta-cells:** In most patients with diabetes type 2, amyloid deposits develop in the pancreatic beta-cells and play a large role in decreasing the capability to produce insulin. Silybin helps to protect the function of these cells and therefore decrease further complications<sup>6</sup>.

## HOW SHOULD MILK THISTLE BE TAKEN?

Take one tablet daily with food. Swallow with water.

# ARE THERE ANY PRECAUTIONS BEFORE OR WHILE TAKING MILK THISTLE?

Milk thistle is intended exclusively for adults and is not recommended for:

- Children
- Pregnant woman

Consult your health professional before using during breastfeeding.

### **FEATURES**

- Medium potency
- 105 mg silymarin
- 45 mg of silybin and isosilybin
- Equivalent to 7500 mg of herb powder

#### **HEALTH NEEDS**



DETOX AND CELL PROTECTION



SPECIALIST HEALTH

**SCIENTIFIC REFRENCES** 

- 1. World J Hepatol.2013;5:3.
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- 3. Molecular and cellular Biochemistry. 2013:377j1-2; 163-176
- 4. Hepatology. 2009 Mar;49(3):809-20.
- 5. Phytother Res. 2006 Dec;20(12):1036-9.
- 6. Rev Diabet Stud. 2014 Summer; 11(2): 167–174.





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