Milk Thistle in Autoimmune Disease

By Elaine Moore, September 7, 2007

The herb milk thistle protects and nourishes the liver in patients with environmental sensitivities, drug hepatotoxicity, and autoimmune liver diseases. This herb is also used in traditional Chinese medicine to treat eye conditions, including thyroid eye disease because eye conditions are thought to be caused by liver dysfunction.

The herb milk thistle (Silybum marianum), which is also known as St. Mary’s thistle and lady’s thistle, has been used medicinally for more than 2,000 years. Today, milk thistle is widely used in Europe and in the United States. Milk thistle is used in both humans and pets with autoimmune disease to protect the liver and promote general health, especially in patients with autoimmune liver disorders and thyroid eye disease and to reduce environmental sensitivities and oxidative stress in autoimmune hemolytic anemia and other autoimmune conditions.

Active Ingredients

The active ingredients in milk thistle seeds include the bioflavinoid antioxidant silymarin and its three components: silibin, sidianin and silcristin. Silibin is the most active ingredient and most responsible for the medicinal effects of milk thistle. Milk thistle supplements standardized to contain 80 percent silibin are recommended.

Physiological Effects

Milk thistle exerts its protective effects by blocking the entrance of harmful toxins and helping remove these toxins from liver cells. In the case of poisoning from the potent hepatotoxin (toxic to the liver) Amanita phalloides mushrooms, milk thistle is recognized as the most efficacious cure.

Milk thistle is also reported to help regenerate injured liver cells by increasing the rate of RNA synthesis. Milk thistle also reduces collagen production, which reduces the circulatory changes that lead to fibrosis, liver cell necrosis, and cirrhosis. The bioflavinoid antioxidants in milk thistle reduce oxidative stress in autoimmune disorders, which helps reduce inflammation and promotes healing.

Medical Uses

Milk thistle is used for patients with viral and autoimmune hepatitis, fatty liver disorders, primary sclerosing cholangitis (PSC), primary biliary
cirrhosis (PBC), hyperthyroidism and thyroid eye disease, and other autoimmune conditions and to reduce the effects of chemotherapeutic agents such as methotrexate, and in varicosities. Milk thistle is also used to treat any of the disorders attributed to excess heat in traditional Chinese medicine.

**Side Effects**

Side effects are rare at recommended dosages and include mild gastrointestinal distress and rare allergic reactions.

**Dosages**

Milk thistle is sold as a capsule or tonic containing an 80 percent standardized extract or it may be combined with other herbs protective to the liver such as dandelion root, fennel seed, and licorice root. The average daily recommended dose for milk thistle is 12–15 g (equivalent to 200–400 mg of silymarin).

**Resources:**
