Artichoke (Cynara scolymus)

Parts used and where grown: This large thistle-like plant is native to the regions of southern Europe, North Africa, and the Canary Islands. The leaves of the plant are used medicinally; the roots and the immature flower heads may also contain beneficial compounds.1

Historical or traditional use (may or may not be supported by scientific studies): The artichoke is one of the world’s oldest medicinal plants. The ancient Egyptians placed great value on the plant, as it is clearly seen in drawings involving fertility and sacrifice. Moreover, this plant was used by the ancient Greeks and Romans as a digestive aid. In sixteenth-century Europe, the artichoke was favored as a food by royalty.2

Active constituents: Artichoke leaves contain a wide number of active constituents, including cynarin, 1,3 dicafeoylquinic acid, 3-cafeoylquinic acid, and scolymoside.3 The choloretic (bile stimulating) action of the plant has been well documented in a placebo-controlled trial involving twenty healthy volunteers. After the administration of 1.92 grams of standardized artichoke extract, liver bile flow increased by 127.3% and 151.5% at the thirty- and sixty-minute mark, respectively.4

The plant has also been employed therapeutically in the treatment of elevated lipid levels, although with mixed results. For example, a research study in the late 1970s
using cynarin at the 250 mg or 750 mg daily dose concluded that it did not alter cholesterol and triglyceride levels in patients with familial high cholesterol after three months of therapy.5 In contrast, however, a recent European study suggests that artichoke is efficacious in altering lipid values. After using a standardized artichoke extract (320 mg/capsule) at a dose of one to two capsules two to three times a day for six weeks, total cholesterol and triglyceride values decreased significantly by an average of 12.78% and 8.79%, respectively. HDL-cholesterol levels did not rise significantly.6

While scientists are not certain how artichoke leaves lower cholesterol, test tube studies have suggested that the action may be due to an inhibition of cholesterol synthesis and/or the increased elimination of cholesterol because of the plant’s choloretic action.7 In test tube studies, the flavonoids from the artichoke (e.g., luteolin) have been shown to prevent LDL-cholesterol oxidation.8 Moreover, artichoke leaves may be liver protective, as test tube results have demonstrated its effectiveness against carbon tetrachloride induced toxicity.9

**How much is usually taken?** Suggested adult dose of the standardized leaf extract is 320 mg four to six times daily for a minimum of six weeks.10 Alternatively, if a standardized extract is not available, the crude dose of the leaves is 1–4 grams three times a day.11

**Are there any side effects or interactions?** At the recommended dose and according to the German Commission E Monographs,12 there are no known side
effects or drug interactions. However, they also state that the use of artichoke is contraindicated in those who are allergic to artichokes and other members of the Compositae (e.g., daisy) family. In addition, those who have any obstruction of the bile duct (e.g., as a result of gallstones) should not employ this plant therapeutically. There have been reports of kidney failure and/or toxicity from the use of artichoke leaves.13 The plant’s safety during pregnancy and lactation has not been established.

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