

Health Benefits of Artichokes

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August 28, 2024

STORY AT-A-GLANCE

- › Artichokes are a vegetable with the appearance of a flower, consumed for thousands of years as a medicine and versatile food, from “artichips” to pizza, dips, sauces and stir-fries
- › Artichoke extract contains many properties that can help lower cholesterol, protect your liver and fight against such diseases and disorders as Alzheimer’s, irritable bowel syndrome, high blood pressure and indigestion, to name a few
- › Folate in artichokes protects against neural damage in unborn babies; luteolin helps reduce the risk of inflammation and cancer, while antimicrobial, antifungal and antiallergic agents, including inulin, improve gut health

Editor's Note: This article is a reprint. It was originally published June 26, 2017.

You've probably tasted artichokes and enjoy them in soups and on pizza for their zesty, unique flavor. But you may not be aware there are artichoke supplements, which are helpful as a powerful probiotic and antioxidant.

The probiotic part helps your gut regain equilibrium, while the antioxidants are instrumental in fighting free radicals that cause many diseases, including cancer, heart disease and [Alzheimer's](#). A plethora of nutrients simultaneously benefit your health in many other ways.

For a little background on this interesting plant, there are two botanical varieties. The globe artichoke, suggested for culinary use, is *Cynara scolymus* and the cardoon is

Cynara cardunculus. They're beautiful plants, depicted by artists for their interesting construction and vibrant colors — pale gold on the inside, with thick rubbery "petals" in shades of pale green, sometimes tinged with purple, on the outside.

If the plant reminds you of a thistle, it's because it belongs to the same perennial family. Artichoke history springs from the Mediterranean, with a surge in popularity in the 1500s after having waned following the fall of Rome. Today, California has the perfect climate to produce most of the artichokes grown in the U.S. Organic Facts explains how the edible part of artichokes is the buds that form within the flower head before it fully blooms:¹

"Timing is key in cultivating them, as they turn hard and nearly inedible once the flower has fully bloomed. Also, one of the most sought-after parts of the thistle is the 'heart,' which is the base from which the other buds spring. It is often considered a delicacy, or at least the most delicious part of the plant, and is typically more expensive."

Artichoke — A Most Versatile Plant

One of the most sought-after aspects of this unique food is its amazing versatility. Cooked artichoke leaves can be used individually as "artichips" for dipping salsa or any creamy concoction you love instead of tortilla chips. Use them as an edible bowl, serving cold or hot soups. The hearts are great sliced up as a pizza topping or in stir-fries.

You can pickle or [ferment artichokes](#) with other veggies, and they're also good roasted, or chopped up and added to soups, casseroles or quiche.

The fact that artichoke supplements are available hints at a little-known fact — They contain silymarin (also contained in [milk thistle](#)), which provides a more potent antioxidant action than blueberries, dark chocolate and red wine, per serving.² Artichoke ranked No. 7 on the U.S. Department of Agriculture's (USDA) top 20 antioxidant-rich

foods list. Depending on which list you look at, artichokes are nearly always in the top 10 most antioxidant-rich foods.³

You've heard about artichoke hearts, which are very healthy on their own, but Self Hacked notes that artichoke leaf extracts contain more health benefits than eating the artichoke heart alone.⁴ Speaking of hearts, one study shows that the globe artichoke variety has a better balance between **potassium and sodium** than many foods, which is important for optimal health.⁵

Artichokes Benefit Blood Pressure, Brain and More

While the luteolin in artichokes reduces cholesterol, which can contribute to plaque formation in your arteries, it also increases eNOS activity, the enzyme responsible for producing nitric oxide, which acts to widen your blood vessels for decreased blood pressure.⁶ Enzymes known as metalloproteinases are major contributors to heart disease. Self Hacked explains:⁷

"These enzymes play a key role in plaque accumulation and rupture in the arteries, which can trigger heart attacks. MMP-9, a metalloproteinase, is involved in the body's natural process of tissue repair and breakdown. It breaks down proteins, which can contribute to disease progression.

High levels of metalloproteinase 9 (MMP-9) are also correlated with heart attack and stroke. Artichoke (cardoon) extract inhibits the MMP-9 activity in rats, likely due to its antioxidant properties."

Moreover, a study⁸ on elderly individuals who were given artichoke supplements, after which researchers determined that the vitamin K they contain — 12% of the dietary reference intake (DRI) — showed they have important functions in the brain, such as sulfotransferase activity as well as the activity of a growth factor/tyrosine kinase receptor. Additionally:⁹

"The hypothesis is now proposed that vitamin K deficiency contributes to the pathogenesis of AD [Alzheimer's disease] and that vitamin K supplementation

may have a beneficial effect in preventing or treating the disease. Vitamin K may also reduce neuronal damage associated with cardiovascular disease."

Artichokes contain 107 micrograms of folate in every serving, which is more than a quarter of the DRI, helping reduce the risk of **neural tube defects** in unborn fetuses and other problems related to pregnancy and childbirth, including pre-eclampsia and congenital heart defects.¹⁰

Beneficial Compounds in Artichokes

A myriad factors (such as optimal and consistent hours of sleep, low sugar intake and regular consumption of healthy fruits and vegetables) can make or break your body's ability to fight disease. When you eat antioxidant-rich foods like artichoke, your potential for better health is improved. A number of artichoke benefits are listed below:

Improved gut health ¹¹	Lowered blood pressure
Stronger bones	Enhanced immunity
Reduced cholesterol	RNA and DNA health
Protection against lead toxicity ¹²	Weight loss ¹³
Heart protection ¹⁴	Improved skin health
Indigestion relief	Protection against pain reliever overdose ¹⁵

Some of the star players, when it comes to antioxidants, are the polyphenols, which have chemopreventive properties, meaning they can stop, slow and even reverse cancer. One study¹⁶ showed that properties in artichoke can cause programmed cell death in cancer cells, called **apoptosis**, halt the formation of new cancer cells and in breast cancer cells, may inhibit their ability to divide without harming normal cells. Further:¹⁷

"Artichoke leaf extract also has antitumor effects in mesothelioma (a type of cancer caused by asbestos in tissues that line the lungs, stomach or heart) cancer cells. It reduced cell growth and migration."

The polyphenols in artichokes come largely from quercetin and rutin, two specific antioxidant types that studies have revealed can **reduce your risk of developing cancer**. Of the multiple clinical findings reporting on the presence of rutin and quercetin in artichokes, one noted their ability to exhibit "mitigating radiation-induced mortality and cytogenetic damage, which may be attributed to the scavenging of radiation-induced free radicals."¹⁸

Liver function is important for anyone wanting a healthy body, and artichoke helps by boosting the production of bile, which eliminates **dangerous toxins** and digestive fats due to its cynarin content. Additionally, the aforementioned silymarin, which Health Fitness Revolution¹⁹ explains "hinders the process of lipid peroxidation from occurring in the cell membranes of liver tissues."

Another study²⁰ showed rutin to be an antimicrobial, antifungal and antiallergic agent.²¹ It can also help "exhibit significant antidiabetic activity, presumably by inhibiting inflammatory cytokines, improving antioxidant and plasma lipid profiles."²²

Rutin was found to have clinical benefits for neurodegenerative disorders, and may help improve endothelial function, increase thyroid iodide uptake without significantly affecting thyroid function, induce bone formation, improve renal function and show therapeutic potential for cognitive deficits, and that's only part of the benefits scientists have uncovered.²³

Gut Health – An Important Advantage of Artichoke Intake

One comprehensive review on artichokes began by saying that artichoke leaf extract was one of the few **herbal remedies** where both "clinical and experimental trials have complemented each other." While deemed inconclusive in 2015, the study asserted that mentioning the artichoke's digestive and bowel advantages was justified, and that eating

it helped to accelerate "gut movement," and supported both fat digestion and vitamin absorption.²⁴

Self Hacked²⁵ notes several studies explaining different nuances regarding stomach troubles and how eating artichokes can help. Indigestion, **bloating**, nausea and heartburn are the symptoms that collectively define dyspepsia. Even irritable bowel syndrome, which has become much more prevalent, can be alleviated by artichoke consumption. Additionally, both globe and cardoon varieties have been used to help treat gout, stomach distress and diabetes.²⁶

Compounds in artichoke include luteolin, caffeoylquinic acid, chlorogenic acid, apigenin, sterols and inulin, as well as multiple hydroxybenzoic acids, hydroxycinnamic acids, lignans, flavones and flavonols, according to a study by the department of analytical chemistry at the University of Granada, Spain. Minerals include potassium, magnesium, calcium, sodium, zinc, copper and manganese.²⁷

Numerous other compounds and phytonutrients that contribute to artichokes' ability to decrease inflammation and promote gut health have been cited in studies, which in turn relates to cancer prevention, in part by binding toxins for removal from your body. Inulin, in particular, is a sweet-tasting substance that can increase the number of beneficial microorganisms in your intestines. Then there's the fiber, about which Health Fitness Revolution notes:²⁸

"Artichoke wears the crown for highest natural fiber content of any vegetable and over most grains. Many people are absolutely shocked to learn that a mere 120 grams of artichoke have over 10 grams of fiber, or nearly half of your daily requirement."

Fiber is great, but it's only beneficial if you have optimal gut health when you consume it, which you can achieve by eliminating metabolic toxins like linoleic acid from your diet first.

As it stands, the average American consumes only half of the 25 to 30 grams (just over an ounce) of dietary fiber recommended by the U.S. Department of Agriculture (USDA).²⁹

However, I believe about 25 to 50 grams of fiber per 1,000 calories consumed is ideal. A single artichoke (about 120 grams) can have a huge impact, as it provides 10.3 grams of fiber.

How to Select and Prepare Artichokes

When selecting artichokes, choose the heaviest and firmest, just as you would when choosing a cabbage; there are four sizes, ranging from baby (golf ball-sized) to jumbo (softball-sized). They should appear fresh rather than dried-out. At home, before refrigerating, carve a thin slice off the stem, sprinkle the leaves with water and store in an airtight container to use within the week.

The methods for cooking artichokes vary, and every one of them has an impressive presentation, whether they're stuffed, steamed, roasted or baked. Depending on the way you want to serve them, you may want to cook them first (or not), but use a [soft vegetable brush](#) under cold water to remove the invisible film produced as the vegetable grows.

Use a sharp knife to "top and tail," or slice the stem off (straight if you want them to sit up) as well as the top inch of the leaves so the layers of petals are exposed.

If you want, you can use sharp kitchen shears to cut off the "thorns" on the outside of the lower leaves, although they do soften with cooking. However, if you cook them, cool them completely before refrigeration. Here are more tips when cooking artichokes:

- **Steamed** – Steam artichokes, stems up, in a double boiler is one of the best ways to retain the most nutrients as they're lost to the water if you boil them. Boil water in the bottom pan and allow them to steam, covered, for about 30 minutes if they're small and 45 to 60 minutes for the jumbo variety. Check for doneness with a sharp knife inserted through the base (sort of like a baked potato).
- **Roasted or baked** – Break off the tough outer leaves and, after cutting an inch off the top, spread the petals apart and drizzle on a little coconut oil, balsamic vinegar and sea salt. Next, place them on a safe baking dish into an oven that's preheated to

425 degrees Fahrenheit. Again, the size determines the baking time, with the smallest ones baking at around 45 minutes and the jumbos for an hour and 15 minutes.

- **Raw** – To use artichokes raw, cut the top inch off the petals, then use a spoon to carefully scoop out the "fuzzy" choke without removing the artichoke heart. What's left is a pretty bowl-shaped vegetable, ready for stuffing or adding a dip.

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