



# Top 8 Health Benefits of Artichokes and Artichoke Extract

Written by Mary Jane Brown, PhD, RD (UK) — Updated on January 16, 2019

Although often considered a vegetable, artichokes (*Cynara cardunculus var. scolymus*) are a type of thistle.

This plant originated in the Mediterranean and has been used for centuries for its potential medicinal properties.

Its alleged health benefits include lower blood sugar levels and improved digestion, heart health, and liver health.

Artichoke extract, which contains high concentrations of compounds found in the plant, is also increasingly popular as a supplement.

Here are the top 8 health benefits of artichokes and artichoke extract.



ADVERTISEMEN<sup>®</sup>



We include products we think are useful for our readers. If you buy through links on this page, we may earn a small commission. <u>Here's our process</u>.

### 1. Loaded With Nutrients

Artichokes are packed with powerful nutrients. A medium artichoke (128 grams raw, 120 grams cooked) contains (1°):

|            | Raw            | Cooked (boiled) |
|------------|----------------|-----------------|
| Carbs      | 13.5 grams     | 14.3 grams      |
| Fiber      | 6.9 grams      | 6.8 grams       |
| Protein    | 4.2 grams      | 3.5 grams       |
| Fat        | 0.2 grams      | 0.4 grams       |
| Vitamin C  | 25% of the RDI | 15% of the RDI  |
| Vitamin K  | 24% of the RDI | 22% of the RDI  |
| Thiamine   | 6% of the RDI  | 5% of the RDI   |
| Riboflavin | 5% of the RDI  | 6% of the RDI   |
| Niacin     | 7% of the RDI  | 7% of the RDI   |
| Vitamin B6 | 11% of the RDI | 5% of the RDI   |
| Folate     | 22% of the RDI | 27% of the RDI  |
| Iron       | 9% of the RDI  | 4% of the RDI   |
| Magnesium  | 19% of the RDI | 13% of the RDI  |
| Phosphorus | 12% of the RDI | 9% of the RDI   |
| Potassium  | 14% of the RDI | 10% of the RDI  |
| Calcium    | 6% of the RDI  | 3% of the RDI   |
| Zinc       | 6% of the RDI  | 3% of the RDI   |
| 4          |                | <b>&gt;</b>     |

Artichokes are low in fat while rich in fiber, vitamins, minerals, and antioxidants. Particularly high in folate and vitamins C and K, they also supply important minerals, such as magnesium, phosphorus, potassium,

ADVERTISEMENT

One medium artichoke contains almost 7 grams of fiber, which is a whopping 23–28% of the reference daily intake (RDI).

These delicious thistles come with only 60 calories per medium artichoke and around 4 grams of protein — above average for a plant-based food.

To top it off, artichokes rank among the most antioxidant-rich of all vegetables ( $2^{\circ}$ ,  $3^{\circ}$ ).

#### **SUMMARY**

Artichokes are low in fat, high in fiber, and loaded with vitamins and minerals like vitamin C, vitamin K, folate, phosphorus, and magnesium. They are also one of the richest sources of antioxidants.

# 2. May Lower 'Bad' LDL Cholesterol and Increase 'Good' HDL Cholesterol

Artichoke leaf extract may have a positive effect on cholesterol levels (4<sup>o</sup>, 5<sup>o</sup>).

A large review in over 700 people found that supplementing with artichoke leaf extract daily for 5–13 weeks led to a reduction in total and "bad" LDL cholesterol (6 $^{\circ}$ ).

One study in 143 adults with high cholesterol showed that artichoke leaf extract taken daily for six weeks resulted in an 18.5% and 22.9% decrease in total and "bad" LDL cholesterol, respectively (7 ).

Additionally, an animal study reported a 30% reduction in "bad" LDL cholesterol and a 22% reduction in triglycerides after regular consumption of artichoke extract (8 ).

What's more, regularly consuming artichoke extract may boost "good" HDL cholesterol in adults with high cholesterol (5 $^{\circ}$ ).

Artichako avtract affacts chalastoral in two primary wave ADVERTISEMENT

First, artichokes contain luteolin, an antioxidant which prevents cholesterol formation (9 $^{\circ}$ ).

Second, artichoke leaf extract encourages your body to process cholesterol more efficiently, leading to lower overall levels (8 $^{\circ}$ ).

### **SUMMARY**

Artichoke extract may reduce total and "bad" LDL cholesterol while increasing "good" HDL cholesterol.

## 3. May Help Regulate Blood Pressure

Artichoke extract may aid people with high blood pressure.

One study in 98 men with high blood pressure found that consuming artichoke extract daily for 12 weeks reduced diastolic and systolic blood pressure by an average of 2.76 and 2.85 mmHg, respectively ( $10^{\circ}$ ).

How artichoke extract reduces blood pressure is not fully understood.

However, test-tube and animal studies indicate that artichoke extract promotes the enzyme eNOS, which plays a role in widening blood vessels  $(9^{\circ}, 11^{\circ})$ .

In addition, artichokes are a good source of potassium, which helps regulate blood pressure (12 $^{\circ}$ ).

That said, it is unclear whether consuming whole artichokes provides the same benefits, as the artichoke extract used in these studies is highly concentrated.

#### **SUMMARY**

Artichoke extract may help lower blood pressure in people with already elevated levels.



Artichoke leaf extract may protect your liver from damage and promote the growth of new tissue (13 $^{\circ}$ , 14 $^{\circ}$ , 15 $^{\circ}$ ).

It also increases the production of bile, which helps remove harmful toxins from your liver (9 $^{\circ}$ ).

In one study, artichoke extract given to rats resulted in less liver damage, higher antioxidant levels, and better liver function after an induced drug overdose, compared to rats not given artichoke extract ( $16^{\circ}$ ).

Studies in humans also show positive effects on liver health.

For example, one trial in 90 people with non-alcoholic fatty liver disease revealed that consuming 600 mg of artichoke extract daily for two months led to improved liver function (17 ).

In another study in obese adults with non-alcoholic fatty liver disease, taking artichoke extract daily for two months resulted in reduced liver inflammation and less fat deposition than not consuming artichoke extract (18).

Scientists think that certain antioxidants found in artichokes — cynarin and silymarin — are partly responsible for these benefits (14 $^{\circ}$ ).

More research is needed to confirm the role of artichoke extract in treating liver disease.

#### **SUMMARY**

Regular consumption of artichoke extract may help protect your liver from damage and help relieve symptoms of non-alcoholic fatty liver disease. However, more research is needed.

ADVERTISEMENT

X

## 5. May Improve Digestive Health

Artichokes are a great source of fiber, which can help keep your digestive system healthy by promoting friendly gut bacteria, reducing your risk of certain bowel cancers, and alleviating constipation and diarrhea (23, 24°, 25°).

Artichokes contain inulin, a type of fiber which acts as a prebiotic.

In one study, 12 adults experienced an improvement in gut bacteria when they consumed an artichoke extract containing inulin each day for three weeks  $(26^{\circ}, 27^{\circ})$ .

Artichoke extract may also provide relief from symptoms of indigestion, such as bloating, nausea, and heartburn (28°, 29°).

A study in 247 people with indigestion determined that consuming artichoke leaf extract daily for six weeks reduced symptoms, such as flatulence and uncomfortable feelings of fullness, compared to not taking artichoke leaf extract ( $29^{\circ}$ ).

Cynarin, a naturally occurring compound in artichokes, may cause these positive effects by stimulating bile production, accelerating gut movement, and improving the digestion of certain fats (9 , 28 ).

#### **SUMMARY**

Artichoke leaf extract may maintain digestive health by boosting friendly gut bacteria and alleviating symptoms of indigestion.

# **6. May Ease Symptoms of Irritable Bowel Syndrome**

Irritable bowel syndrome (IBS) is a condition that affects your digestive

×

In one study in people with IBS, consuming artichoke leaf extract daily for

**SUBSCRIBE** 

**NUTRITION** Healthy Eating Meal Prep Vitamins & Supplements Lifes

Another study in 208 people with IBS discovered that 1-2 capsules of artichoke leaf extract, consumed daily for two months, reduced symptoms by 26% and improved quality of life by 20% ( $20^{\circ}$ ).

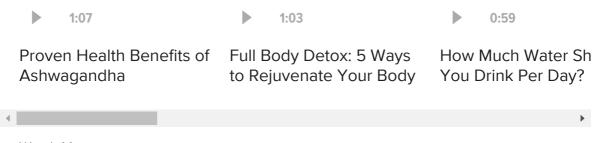
Artichoke extract may relieve symptoms in several ways.

Certain compounds in artichokes have antispasmodic properties. This means that they can help stop muscle spasms common in IBS, balance gut bacteria, and reduce inflammation (21°, 22°).

While artichoke extract seems promising for treating IBS symptoms, larger human studies are needed.

#### **SUMMARY**

Artichoke leaf extract may help treat IBS symptoms by reducing muscle spasms, balancing gut bacteria, and reduce inflammation. However, more research is necessary.



Watch More

### 7. May Help Lower Blood Sugar

Artichokes and artichoke leaf extract may help lower blood sugar levels (9<sup>©</sup>).

One study in 39 overweight adults found that consuming kidney bean and artichoke extract daily for two months lowered fasting blood sugar levels compared to not supplementing (30 $^{\circ}$ ).

However, it is unclear how much of this effect was due to the artichoke extract itself.

Another small study indicated that consuming boiled artichoke at a meal reduced blood sugar and insulin levels 30 minutes after eating. Notably, this effect was only seen in healthy adults who did not have metabolic syndrome (31).

How artichoke extract reduces blood sugar isn't fully understood.

That said, artichoke extract has been shown to slow down the activity of alpha-glucosidase, an enzyme that breaks down starch into glucose, potentially impacting blood sugar ( $32^{\circ}$ ).

Keep in mind that more research is needed.

#### **SUMMARY**

Some evidence suggests that artichokes and artichoke leaf extract may lower blood sugar levels. However, more research is



# 8. May Have Anticancer Effects

Animal and test-tube studies note that artichoke extract impaired cancer growth (33 $^{\circ}$ ,34 $^{\circ}$ , 35 $^{\circ}$ ).

Certain antioxidants — including rutin, quercetin, silymarin, and gallic acid — in artichokes are thought responsible for these anticancer effects (9 $^{\circ}$ ).

For example, silymarin was found to help prevent and treat skin cancer in animal and test-tube studies (36 $^{\circ}$ ).

Despite these promising results, no human studies exist. More research is needed.

#### **SUMMARY**

Test-tube and animal studies suggest that artichoke extract may fight the growth of cancer cells. However, no human studies exist, so more research is needed before conclusions can be drawn.

### How to Add Them to Your Diet

Preparing and cooking artichokes is not as intimidating as it seems.

They can be steamed, boiled, grilled, roasted, or sautéed. You can also prepare them stuffed or breaded, adding spices and other seasonings for an extra burst of flavor.

Steaming is the most popular cooking method and usually takes 20–40 minutes, depending on the size. Alternatively, you can bake artichokes for 40 minutes at 350°F (177°C).

Keep in mind that both the leaves and the heart can be eaten.

Once cooked, the outer leaves can be pulled off and dipped in sauce, such as aioli or herb butter. Simply remove the edible flesh from the leaves by pulling them through your teeth.



Once the leaves are removed, carefully spoon out the fuzzy substance called the choke until you reach the heart. You can then scoop out the heart to eat alone or atop pizza or salad.

#### **SUMMARY**

The edible parts of the artichoke include the outer leaves and heart. Once cooked, artichokes can be eaten hot or cold and served with different dipping sauces.

## **Supplement Safety and Dosing**

Consuming artichoke extract is generally considered safe, with few side effects reported ( $7^{\circ}$ ,  $37^{\circ}$ ).

However, there is limited data available. Risks include:

- Potential allergies: Some people may be allergic to artichokes and/or artichoke extract. The risk is higher for anyone allergic to plants from the same family, including daisies, sunflowers, chrysanthemums, and marigolds.
- Pregnant or breastfeeding women: Pregnant or breastfeeding women are advised to avoid artichoke extract because of a lack of safety information.
- People with bile duct obstruction or gallstones: Anyone with these conditions should avoid artichokes and artichoke extract due to their ability to promote bile movement (37<sup>©</sup>).

There is currently insufficient data to establish dosing guidelines.

However, typical doses used in human research range from 300-640 mg of artichoke leaf extract three times daily ( $7^{\circ}$ ).

If you are unsure whether you should take artichoke extract, speak with your doctor for advice.

X

Side effects of artichoke extract are rare, though people with bile duct disorders and women who are pregnant or breastfeeding may wish to avoid it. Typical doses range from 300-640 mg three times daily.

#### The Bottom Line

Artichokes are an extremely nutritious, low-carb food that may provide numerous health benefits.

That said, evidence is mostly limited to studies using concentrated artichoke extract.

Regular consumption of artichoke extract may aid cholesterol levels, blood pressure, liver health, IBS, indigestion, and blood sugar levels.









FEEDBACK: (X) (C)





#### **READ THIS NEXT**

# 19 High-Protein Plant-Based Foods and How to **Eat More of Them**

Medically reviewed by Miho Hatanaka, RDN, LD

You may think you have to get your protein from meat, nuts, or eggs. These 19 veggies will prove your protein theories wrong!

**READ MORE** 

# 15 Healthy Foods That Are High in Folate (Folic



Written by Rachael Link, MS, RD

Folate, also known as vitamin B9, is a water-soluble vitamin that has many important functions in your body. Here are 15 healthy foods that are high...

**READ MORE** 

# The 21 Best Low-Carb Vegetables

Written by Franziska Spritzler

Vegetables are a very important food group on a low-carb diet. Here are 21 healthy and delicious vegetables that are low in carbs.

**READ MORE** 

# **The 14 Most Nutrient-Dense Vegetables**

Written by Rachael Link, MS, RD

Everyone knows that veggies are healthy, but some stand out from the rest. Here are 14 of the healthiest vegetables around.

**READ MORE** 

X

Written by Kelli McGrane, MS, RD

Amazon Fresh is an online grocery delivery service. This article reviews its pros and cons, how it works, its price, and how it compares with similar...

**READ MORE** 

# The 15 Best Food Subscription Boxes to Try in 2022

Written by Rachael Link, MS, RD

Food subscription boxes are a fun and convenient alternative to grocery shopping. See which services our expert picked as the best.

**READ MORE** 



## **Get our wellness newsletter**

Filter out the noise and nurture your inbox with health and wellness advice that's inclusive and rooted in medical expertise.

Enter your email SIGN UP

Your <u>privacy</u> is important to us. Any information you provide to us via this website may be placed by us on sorvers located in countries outside of the FLL If you do not agree to such ADVERTISEMENT

×

About Us Medical Affairs

Contact Us Content Integrity

Privacy Policy Newsletters

**Privacy Settings** 

**Advertising Policy** 

**Health Topics** 

© 2005-2022 Healthline Media a Red Ventures Company. All rights reserved. Our website services, content, and products are for informational purposes only. Healthline Media does not provide medical advice, diagnosis, or treatment. <u>See additional information</u>.

About | Careers | Advertise with us

#### **OUR BRANDS**

Healthline

Medical News Today

Greatist

Psych Central