

# Curry Tree

## Murraya Koenigii



Curry leaves are the foliage of the curry tree (*Murraya koenigii*). This tree is native to India, and its leaves are used for both medicinal and culinary applications. They're highly aromatic and have a unique flavor with notes of citrus .

Curry leaves are not the same as curry powder, though they're often added to this popular spice mixture and popularly used in cooking to add flavor to dishes, such as curries, rice dishes, and dals.

Aside from being a versatile culinary herb, they offer an abundance of health benefits due to the powerful plant compounds they contain.

### 1. Rich in powerful plant compounds

Curry leaves are rich in protective plant substances, such as alkaloids, glycosides, and phenolic compounds, that give this fragrant herb potent health benefits.

Research has shown that curry leaves contain many compounds, including linalool, alpha-terpinene, myrcene, mahanimbine, caryophyllene, murrayanol, and alpha-pinene .

Many of these compounds function as antioxidants in your body. Antioxidants play an essential role in keeping your body healthy and free from disease.

They scavenge potentially harmful compounds known as free radicals and suppress oxidative stress, a condition that's associated with chronic disease development.

Curry leaf extract has been shown to provide potent antioxidant effects in several studies.

For example, a study in rats demonstrated that oral treatment with antioxidant-rich curry leaf extract protected against medication-induced stomach damage and reduced markers of oxidative stress, compared with a placebo group .

Other animal studies have shown that curry leaf extract may help protect against induced oxidative damage of the nervous system, heart, brain, and kidneys .



Keep in mind that human research on the antioxidant effects of curry leaves is lacking. Nevertheless, there's no doubt that

curry leaves are packed with plant compounds that may help promote overall health by providing powerful antioxidant protection.

## 2. May reduce heart disease risk factors

Risk factors like high cholesterol and triglyceride levels may increase your risk of developing heart disease. Adding curry leaves to your diet may help reduce some of these risk factors.

Research shows that consuming curry leaves may benefit heart health in several ways. For example, animal studies have found that curry leaf extract may help reduce high cholesterol and triglyceride levels.

A 2-week study in rats with high-fat-diet-induced obesity showed that oral treatment with 136 mg of curry leaf extract per pound (300 mg per kg) of body weight per day significantly lowered cholesterol and triglyceride levels.

These results were correlated with the high amount of an alkaloid called mahanimbine in the leaves

In another 12-week study in mice on a high fat diet, mahanimbine prevented diet-induced complications, such as high blood lipids, fat accumulation, inflammation, and oxidative stress — all of which may increase the risk of heart disease .

Other animal studies have also shown that curry leaf extract reduces cholesterol levels .

Although these findings are promising, research in humans is lacking. For this reason, more studies are needed to confirm this potential benefit of curry leaves.

### 3. May have neuroprotective properties

Some research has shown that curry leaves may help protect the health of your nervous system, including your brain.

Alzheimer's disease is a progressive brain disease characterized by loss of neurons and signs of oxidative stress .

Studies have demonstrated that curry leaves contain substances that may help protect against neurodegenerative conditions like Alzheimer's disease.

A study in mice found that oral treatment with high doses of curry leaf extract improved levels of brain-protecting antioxidants, including glutathione peroxidase (GPx), glutathione reductase (GRD), and superoxide dismutase (SOD), in brain cells .



The extract also reduced the amount of oxidative damage in brain cells, as well as enzymes associated with Alzheimer's disease progression .

Another study showed that oral treatment with curry leaf extract for 15 days improved memory scores in both young and aged mice with induced dementia .

Keep in mind that human research in this area is lacking, and more studies are needed before strong conclusions can be made.

## 4. May have anticancer effects

Curry leaves contain compounds that have significant anticancer effects.

A test-tube study involving three curry extract samples from curry leaves grown in different locations in Malaysia found that they all exhibited powerful anticancer effects and inhibited the growth of an aggressive type of breast cancer .

Another test-tube study found that curry leaf extract altered the growth of two types of breast cancer cells, as well as decreased cell viability. The extract also induced breast cancer cell death .



Additionally, curry leaf extract has been shown to be toxic to cervical cancer cells in test-tube research .

In one study in mice with breast cancer, oral administration of curry leaf extract reduced tumor growth and inhibited the spread of cancer cells to the lungs .

What's more, test-tube studies indicate that an alkaloid compound in curry leaves called girinimbine induces colon cancer cell death .

In addition to girinimbine, researchers attribute these powerful anticancer effects to the antioxidants in curry leaves, including quercetin, catechin, rutin, and gallic acid .

While it's clear that curry leaves contain compounds that have the potential to fight certain cancer cells, research on its effectiveness in humans is needed.

## 5–8. Other benefits

In addition to the potential benefits listed above, curry leaves may benefit health in the following ways:

Beneficial for blood sugar control. Animal research has demonstrated that curry leaf extract may help reduce high blood sugar levels and protect against symptoms related to diabetes, including nerve pain and kidney damage .

May have pain-relieving properties. Research in rodents has shown that oral administration of curry extract significantly reduces induced pain .

Has anti-inflammatory effects. Curry leaves contain a wide array of anti-inflammatory compounds, and animal research has shown that curry leaf extract can help reduce inflammation-related genes and proteins .

Offers antibacterial properties. A test-tube study found that curry leaf extract inhibited the growth of potentially harmful bacteria, including *Corynebacterium tuberculosis* and *Streptococcus pyogenes*.

It should be noted that these benefits have been demonstrated in test-tube or animal research. Future research in humans is needed to substantiate these potential benefits.

## 9. Easy to add to your diet

Curry leaves have been used since ancient times in traditional Indian cuisine. Their unique taste is often described as carrying subtle notes of citrus with a hint of nuttiness.

The leaves are commonly added to dishes to bring about a robust, rich flavor and popularly used in meat dishes, curries, and other traditional Indian recipes.

They're sold fresh in some specialty stores but more commonly found in dried form in the spice section of grocery stores.

Curry leaves soften when cooked and are often sautéed in oil or butter before both the fat and cooked leaves are added to dishes.



Here are a few ways to use curry leaves in the kitchen:

Sauté curry leaves in ghee at high heat and then add the ghee and softened curry leaves to any dish of your liking.

Infuse broths with curry leaves for a fresh flavor.

Combine fresh or dried curry leaves with other spices, such as red chili, turmeric, and cumin seeds, to make a flavorful seasoning blend.

Top any savory dish with diced or crumbled dried curry leaves for a pop of flavor.

Cook curry leaves in hot oil and then use the infused oil as a dip or topping for crusty bread.

Add curry leaves to chutneys and sauces.

Toss chopped curry leaves into savory baked good recipes like breads and crackers.

Although the ideas listed above are some common ways to use curry leaves, they're highly versatile and can be used in many applications, so don't be afraid to experiment with this flavorful ingredient.

Curry leaves are not only highly flavorful but also packed with beneficial plant compounds that can benefit your health in many ways.

Research has shown that consuming them may help improve antioxidant defenses in your body. Doing so may likewise fight cancer cells, reduce heart disease risk factors, and protect neurological health.

The best part is that curry leaves can be added to a wide array of recipes to enhance both the flavor and health benefits of your meals.