

Turmeric and Curcumin Benefits: Can This Herb Really Combat Disease?

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Turmeric, the main spice in the Indian dish curry, is argued by many to be the most powerful herb on the planet at fighting and potentially reversing disease. The health benefits of turmeric are incredibly vast and very thoroughly researched.

Currently, there are [over 12,500 peer-reviewed articles](#) published proving turmeric benefits, especially one of its renowned healing compounds, curcumin. Curcumin is the active ingredient in turmeric responsible for so many of its benefits. In fact, turmeric is even good for dogs thanks to this ingredient.

This puts turmeric on top of the list as one of the most frequently mentioned medicinal herbs in all of science. It has a long history of use, particularly in Ayurvedic medicine and other traditional forms of medicine. Here's what you need to know about turmeric and curcumin benefits and more.

What Is Turmeric?

Turmeric comes from the *Curcuma longa* plant, which grows in India and other Southeast Asian countries. It is a member of the ginger family. The dried root of this plant is ground into the distinctive yellow powder, giving it the name golden spice.

Why is turmeric good for you? There are several chemical compounds found in this herb, known as curcuminoids. The active substance is curcumin. **Curcumin** is what makes turmeric a “[functional food](#),” [defined by the Mayo Clinic](#) as “foods that have a potentially positive effect on health beyond basic nutrition.”

Nutrition Facts

One tablespoon (about seven grams) of ground turmeric [contains approximately](#):

- 23.9 calories
- 4.4 grams carbohydrates
- 0.5 gram protein
- 0.7 gram fat
- 1.4 grams fiber
- 0.5 milligram manganese (26 percent DV)
- 2.8 milligrams iron (16 percent DV)
- 0.1 milligram vitamin B6 (6 percent DV)
- 170 milligrams potassium (5 percent DV)
- 1.7 milligrams vitamin C (3 percent DV)
- 13 milligrams magnesium (3 percent DV)

Benefits

Practitioners in Traditional Chinese Medicine and Ayurveda have been prescribing turmeric and its extracts as part of holistic protocols for thousands of years. Practitioners have used it in a number of different ways, for many diseases and ailments.

Here are some of the uses and health benefits of turmeric:

1. May Slow or Prevent Blood Clots

In both [lab](#) and [animal studies](#), the use of turmeric greatly reduces instances of [platelet aggregation](#) and potentially reduces the risk of blood clots forming.

One combination lab and animal study conducted in 1986 even [suggests](#) curcumin may be a preferable treatment method for people “prone to vascular thrombosis and requiring antiarthritic therapy.” However, this result still needs to be replicated in human trials.

2. May Reduce Depression Symptoms

Although few studies have been conducted on humans, dozens of research trials have proven that benefits of turmeric include being especially effective in reducing depression symptoms in laboratory animals. These results seem to be connected to the way curcumin impacts neurotransmitter function through the [brain-derived neurotrophic factor](#).

The journal *Phytotherapy Research* [published](#) the results of a study in 2014. The study took 60 volunteers diagnosed with major depressive disorder and split the group to determine how patients treated by turmeric curcumin fared against fluoxetine and a combination of the two. Curcumin was equally effective as fluoxetine in managing depression by the six-week mark.

Since that breakthrough trial, at least two other studies have observed the impact of turmeric’s major compound, curcumin, in patients with depression. The [first involved 56 individuals](#) (male and female), and the [second involved 108 male participants](#). Both used a placebo but did not compare curcumin to any antidepressant, and both studies found that curcumin effectively reduced depression symptoms more than placebo.

3. Fights Inflammation

Arguably, the most powerful aspect of curcumin is its ability to control inflammation. The journal *Oncogene* published the results of a study that [evaluated](#) several anti-inflammatory compounds and found that curcumin is among the most effective anti-inflammatory compounds in the world.

Several animal trials have been completed investigating the relationship of curcumin and Alzheimer’s disease. [In mice](#), it seems that curcumin “reverses existing amyloid pathology and associated neurotoxicity,” a key feature of the progression of this neurological disease related to chronic inflammation. This study shows turmeric curcumin may help with Alzheimer’s symptoms.

4. Boosts Skin Health

Turmeric’s anti-inflammatory and antioxidant properties that have proven effective in treating multiple skin conditions. Benefits for skin include increasing “[glow and luster](#)” of the skin, [speeding up wound healing](#), calming the pores to decrease acne and acne scarring, and [controlling](#) psoriasis flares.

One uncontrolled pilot study involving 814 participants even [suggests](#) that turmeric paste could cure 97 percent of scabies cases within three to 15 days.

Try my [Turmeric Face Mask](#) for glowing skin. Just keep in mind that this herb can stain the skin, and it may cause an allergic reaction. Do a patch test by applying a dime-size amount to your forearm. Then, wait 24–48 hours to check for any reaction before applying turmeric to your face.

5. May Outperform Common Arthritis Drug

Because curcumin is known for its strong anti-inflammatory and pain-reducing characteristics, a study was conducted on 45 rheumatoid arthritis patients to compare the health benefits of curcumin in turmeric to the arthritis drug diclofenac sodium (an NSAID), which put people at risk of developing leaky gut and heart disease.

The study split these volunteers into three groups: curcumin treatment alone, diclofenac sodium alone and a combination of the two. The [results](#) of the trial were eye-opening:

The curcumin group showed the highest percentage of improvement in overall [Disease Activity Score] scores and these scores were significantly better than the patients in the diclofenac sodium group. More importantly, curcumin treatment was found to be safe and did not relate with any adverse events. Our study provides the first evidence for the safety and superiority of curcumin treatment in patients with active RA, and highlights the need for future large-scale trials to validate these findings in patients with RA and other arthritic conditions.

[A review](#) of available randomized, controlled trials confirmed that, of the eight studies available fitting the criteria, “these [randomized clinical trials] provide scientific evidence that supports the efficacy of turmeric extract (about 1000 mg/day of curcumin) in the treatment of arthritis.”

6. Could Treat or Prevent Certain Cancers

Of all the various topics scientists have tackled in regard to curcumin and disease reversal, cancer (of various types, including prostate cancer) is one of the most thoroughly researched topics. It may help with prostate cancer, pancreatic cancer and other forms of cancer. In the words of global authorities like [Cancer Research UK](#):

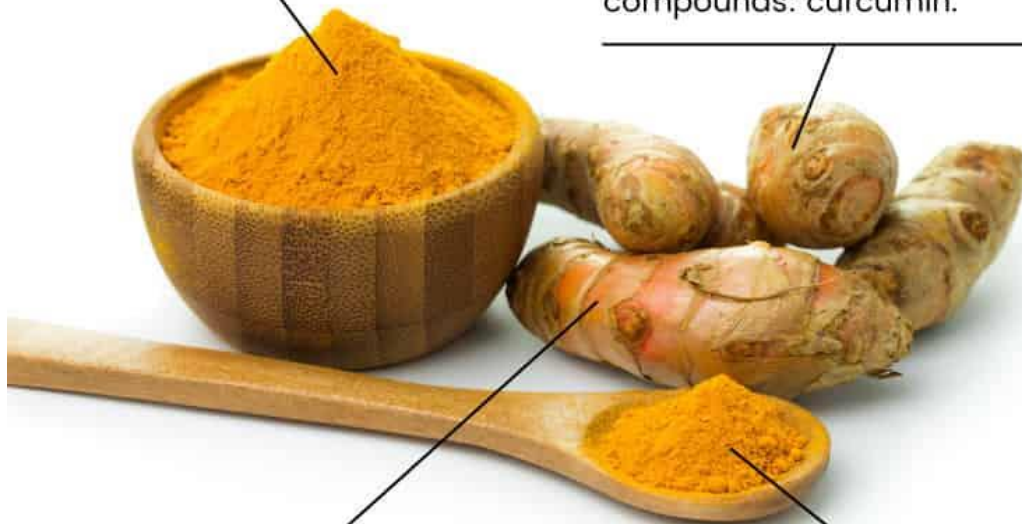
A number of laboratory studies on cancer cells have shown that curcumin does have anticancer effects. It seems to be able to kill cancer cells and prevent more from growing. It has the best effects on breast cancer, bowel cancer, stomach cancer and skin cancer cells.

A July 2017 animal study by researchers at Baylor Scott & White Research Institute [found](#) that curcumin may even be able to break through chemo-resistance in pancreatic ductal adenocarcinoma (PDAC), an aggressive form of pancreatic cancer.

YOUR GUIDE TO TURMERIC

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There are over 10,000 peer-reviewed articles published that prove turmeric benefits, especially regarding one of its renowned healing compounds: curcumin.



Turmeric is arguably the most powerful herb on the planet at fighting and potentially reversing disease.

It is the main spice in the Indian dish curry.

OTHER MEDICINAL HERBS



Garlic



Cinnamon



Ginseng



Ginger



Milk Thistle

7. May Help Manage Diabetes

In 2009, *Biochemistry and Biophysical Research Communications* published a [lab study out of Auburn University](#) that explored the potential of curcuminoids to lower glucose levels. The study discovered that curcumin in turmeric is literally 400 times more potent than metformin (a common diabetes drug) in activating the enzyme AMPK (AMP-activated protein kinase).

One compound produced by fermentation of curcumin, tetrahydrocurcumin, activated AMPK up to 100,000 times more than metformin in certain cells. [AMPK activation](#) is considered by researchers to be a “therapeutic target” for type 2 diabetes, meaning that figuring out how to activate this enzyme has major potential for developing more effective treatments for reducing insulin resistance and reversing diabetes.

One of the most common complications of diabetes is damage to nerves known as diabetic neuropathy, which takes several forms and can cause serious symptoms throughout the body from muscle weakness to blindness.

A study conducted on rats [found](#) that supplementing with curcumin significantly reduced diabetic peripheral neuropathic pain (typically localized to feet, legs, arms and hands). Diabetic neuropathy can also lead to kidney failure.

A meta-analysis of randomized, controlled trials [confirmed](#) that, in animals, curcumin protects the kidneys of diabetic subjects from the damage of diabetic nephropathy.

8. Combats Obesity

A study published in the journal *Biofactors* [showed](#) that curcumin may help reduce proliferation (growth) of fat cells, based on lab results.

The researchers found that the anti-inflammatory properties in curcumin were effective at suppressing the inflammatory processes of obesity, therefore helping to reduce obesity and its “adverse health effects.”

9. Supports Management of Inflammatory Bowel Disease

[An in-depth analysis](#) of all the studies evaluating curcumin’s ability to manage ulcerative colitis found that one very well-designed trial tested curcumin plus mesalazine (the typical NSAID prescribed for this condition) against placebo plus mesalazine.

Patients taking only placebo and mesalazine were over four times more likely to experience a relapse or flare-up of ulcerative colitis during the six months of the study, suggesting that it may include helping to maintain remission of this chronic disease.

One small pilot study [investigated](#) the curcumin supplementation for patients with ulcerative colitis and patients with Crohn’s disease.

Although the sample size was very small, all of the ulcerative colitis patients and four out of five Crohn's patients had marked improvements over two months, suggesting the need for additional research. It shows promise for irritable bowel syndrome and other inflammatory bowel disease symptoms.

10. May Regulate Cholesterol

A study published by *Drugs in R&D* [found](#) that curcumin was comparable to atorvastatin at reducing oxidative stress and inflammation in the treatment of high cholesterol in humans. This was a follow-up on [prior animal research](#) finding similar results.

However, a 2014 meta-analysis concluded that curcumin had no effect overall on blood cholesterol (together or split into LDL vs. HDL) or on triglycerides. The study author [noted](#) that these results may be due to short study durations and poor bioavailability of the studied curcumin formulations.

Further research is needed, but there is evidence that turmeric and curcumin may help manage cholesterol levels.

11. Works as a Natural Pain Reliever

One of the more widely accepted properties of curcumin in scientific communities is its ability to manage pain. Breakthrough studies and reviews (some in animals, others in humans) have found that curcumin may be a beneficial [natural painkiller](#) for:

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- [Wound healing and burn pain](#)
- [Post-operative pain](#)
- [Inflammation-induced arthritic pain](#)
- [Neuropathic pain](#) caused by constriction injury
- [Orofacial pain](#) (pertaining to mouth, jaws and face, most commonly related to dental issues)
- Sciatic nerve pain from [chronic constrictive injury](#) (57)
- [Arthritis/joint pain](#)

12. Aids in Detoxification

An important benefit of turmeric is its ability to detoxify the body. Every day, you are likely exposed to environmental and dietary toxins known as xenobiotics. These chemical substances are not generally present in the human body and are often associated with increased amounts of inflammation and higher risk of cancer.

It seems that consumption of this herb and its active compound, curcumin, can help support the liver in [efficiently detoxifying the body](#) and fight off some of the effects of dangerous carcinogens. This process operates in tandem with the [antioxidant and anti-inflammatory agents](#) of turmeric.

Uses

1. Turmeric Recipes

You may be wondering how to use turmeric root powder. It can be used in variety of Indian and Pakistani dishes, of course, and nearly always is part of a curry powder mixture.

One of my favorite recipes on the site is [turmeric tea](#), sometimes referred to as liquid gold or golden milk. Be sure not to subscribe to the conventional idea that the fat from the coconut milk is unhealthy. In fact, that fat actually helps the body better absorb the turmeric.

Also, consuming [turmeric eggs](#) for breakfast and [curried carrot soup](#) is an excellent way to get more of this herb in your diet.

You can use coconut flakes, gluten-free flour and turmeric to bread chicken or sprinkle in your ground meat.

2. Turmeric Supplements

Although using turmeric frequently in your cooking is a great way to take advantage of the spice, turmeric only contains about 3 percent [absorbable curcumin](#) in the powdered form used in food. Therefore, you may also consider taking it or curcumin in supplement form — some high-quality turmeric pills contain up to 95 percent curcuminoids.

There are a few things to consider when purchasing a good turmeric supplement. For one, try to find one containing black pepper to get the maximum absorbability, as [turmeric and black pepper](#) work in tandem.

Second, consider a fermented turmeric pill or capsule — the [pre-digestion process](#) of fermentation helps you to absorb it more effectively. Next, look for a turmeric supplement with other supporting ingredients like ashwagandha, milk thistle, dandelion and peppermint.

Last, make sure that the product you get is made from organic turmeric if at all possible, with no GMOs. Note that [dosage](#) recommendations vary depending on a number of factors.

When is the best time of day to take these supplements? Research varies, but it's believed that taking antioxidant supplements [at bedtime may be most effective](#).

3. Turmeric Essential Oil

Turmeric is also available as an essential oil, which can be used alongside turmeric in food and supplement form. I personally prefer consuming a CO₂-extracted form of [turmeric essential oil](#).

Quality is key here, particularly if you're going to use turmeric essential oil internally. Always dilute in water or other liquids. For example, you can put one drop in a smoothie in the morning.

Side Effects and Precautions

What are the [side effects of turmeric](#)? Turmeric might be allergic to some, as some people have reported allergic reactions, especially after skin exposure. Typically this is experienced as a mild, itchy rash.

In addition, high doses of turmeric have been [observed](#) to cause side effects, including:

- Nausea
- Diarrhea
- Increased risk of bleeding
- Increased liver function tests
- Hyperactive gallbladder contractions
- Hypotension (lowered blood pressure)
- Uterine contractions in pregnant women
- Increased menstrual flow

If you experience these symptoms, stop using turmeric and get the medical advice of your doctor.

Final Thoughts

- The herb turmeric is one of the top nutrients in the world, whether we're talking about the powder, extract or pills. While you may just now be seeing companies advertise it, turmeric isn't new ... In fact, it has a long history of use, particularly in Ayurvedic medicine and other traditional forms of medicine.
- What turmeric does for the body is amazing. Health-wise the benefits range in everything from helping with blood clots and depression to combating inflammation, boosting skin health, regulating cholesterol and more.
- I highly recommend using turmeric in recipes and perhaps even purchasing it in supplement form to take advantage of the benefits. Make sure to add only organic turmeric to your food, and finding a high-quality supplement made from organic turmeric, coupled with black pepper and preferably prepared by fermentation.