

Turmeric

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Curcuma longa

Principal Proposed Uses

- [Dyspepsia](#) (Indigestion)

Other Proposed Uses

• [Alzheimer's Disease](#); [Cancer Prevention](#); [Cataract Prevention](#); [Chronic Anterior Uveitis](#); [High Cholesterol](#); [Lichen Planus](#); [Liver Protection](#); [Menstrual Pain](#); [Multiple Sclerosis](#); [Osteoarthritis](#); [Rheumatoid Arthritis](#); [Ulcerative Colitis](#)

Turmeric is a widely used tropical herb in the ginger family. Its stalk is used both in food and medicine, yielding the familiar yellow ingredient that colors and adds flavor to curry. In the traditional Indian system of herbal medicine known as [Ayurveda](#), turmeric is believed to strengthen the overall energy of the body, relieve gas, dispel worms, improve digestion, regulate menstruation, dissolve gallstones, and relieve arthritis, among other uses.

Modern interest in turmeric began in 1971 when Indian researchers found evidence suggesting that turmeric may possess anti-inflammatory properties. Much of this observed activity appeared to be due to the presence of a constituent called curcumin.¹ Curcumin is also an [antioxidant](#).² Many of the studies mentioned in this article used curcumin rather than turmeric.

What Is Turmeric Used for Today?

Turmeric's antioxidant abilities make it a good food preservative, provided that the food is already yellow in color, and it is widely used for this purpose.

Turmeric has been proposed as a treatment for [dyspepsia](#). Dyspepsia is a catchall term that includes a variety of digestive problems, such as stomach discomfort, gas, bloating, belching, appetite loss, and nausea. Although many serious medical conditions can cause digestive distress, the term dyspepsia is most often used when no identifiable medical cause can be detected.

In Europe, dyspepsia is commonly attributed to inadequate bile flow from the gallbladder. While this has not been proven, turmeric does appear to stimulate the gallbladder.⁸ More importantly, one [double-blind, placebo-controlled study](#) suggests that turmeric does reduce dyspepsia symptoms.⁹

Another double-blind, placebo-controlled study suggests that, when taken along with standard medications, curcumin can help maintain remission in people with [ulcerative colitis](#).⁴⁰

Based on [test tube studies](#), [animal studies](#), and some preliminary human trials, curcumin and turmeric are frequently described as anti-inflammatory drugs and recommended for the treatment of such conditions as [osteoarthritis](#) (OA) and [menstrual pain](#).^{3,17,18} In a 2011 study, researchers investigated the efficacy and safety of turmeric for treating knee OA.⁴⁵ One hundred and seven people were randomized to receive ibuprofen (800 mg

daily) or turmeric (2 grams daily) for 6 weeks. Both groups experienced a similar degree of improvement in their symptoms, and the side effects did not differ between the groups. Although this study is far from conclusively, some advocates suggest that curcumin is superior to standard medications in the ibuprofen family because, at standard doses, there is comparatively little evidence of harm to the stomach.^{4, 5} Contrary to some reports, turmeric does not appear to be effective for *treating* ulcers.^{6,7}

Animal and test tube studies suggest (but definitely do not prove) that turmeric might help prevent cancer.¹⁹⁻²⁶

Weak evidence hints that curcumin might help prevent the heart and kidney injury potentially caused by the chemotherapy drug doxorubicin.⁴¹⁻⁴²

Some researchers have reported evidence that curcumin or turmeric might generally help protect the liver from damage.²⁸⁻³¹ However, other researchers have failed to find any liver protective effects, and there are even some indications that turmeric extracts can damage the liver when taken in high doses or for an extended period.^{32,33}

On the basis of even weaker evidence, curcumin or turmeric have also been recommended for preventing Alzheimer's disease, cataracts, chronic anterior uveitis (an inflammation of the iris of the eye), fungal infections, multiple sclerosis, and treating high cholesterol.^{12,34-39},46

One preliminary study failed to find curcumin helpful for lichen planus, a disease of the skin and mucous membranes.⁴³

A 6-month, double-blind, placebo-controlled study of 36 seniors failed to find that consumption of curcumin (at a dose of up to 4 g daily) led to improvements in cholesterol profile.⁴⁴

What Is the Scientific Evidence for Turmeric?

Dyspepsia

A double-blind, placebo controlled study performed in Thailand compared the effects of 500 mg curcumin 4 times daily against placebo, as well as against a locally popular over-the-counter treatment. A total of 116 people were enrolled in the study. After 7 days, 87% percent of the curcumin group experienced full or partial symptom relief from dyspepsia as compared to 53% of the placebo group, and this difference was statistically significant.²

Ulcerative Colitis

Ulcerative colitis is a disease of the lower digestive tract marked by alternating periods of quiescence and flare-up. Curcumin has shown some promise for helping to maintain remission and prevent relapse. In a double-blind, placebo-controlled study, 89 people with quiescent ulcerative colitis were given either placebo or curcumin (1 g twice daily) along with standard treatment.⁴⁰ Over the six-month treatment period, relapse rate was significantly lower in the treatment group as compared to the placebo group.

Dosage

For medicinal purposes, turmeric is frequently taken in a form standardized to curcumin content, at a dose that provides 400 to 600 mg of curcumin 3 times daily.

Safety Issues

Turmeric is on the FDA's GRAS (generally recognized as safe) list, and curcumin, too, is believed to be fairly nontoxic.^{1,16} Reported side effects are uncommon and are generally limited to mild stomach distress.

However, there is some evidence to suggest that turmeric extracts can be toxic to the liver when taken in high doses or for a prolonged period of time.^{32,33} For this reason, turmeric products should probably be avoided by individuals with liver disease and those who take medications that are hard on the liver.

In addition, due to curcumin's stimulating effects on the gallbladder, individuals with gallbladder disease should use curcumin only on the advice of a physician. However, safety in young children, pregnant or nursing women, and those with severe kidney disease have also not been established.

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