

Functional Foods

TURMERIC

"The Golden Spice"

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1. Turmeric is a native of Southeast Asia and is grown commercially in India.
2. It is used as a culinary spice and in traditional medicine to treat disorders of the skin, common cold and abdominal pain, and to improve liver function.
3. It is a deep golden-orange spice that adds color, flavor and nutrition to foods ¹.

What is in turmeric?

The active ingredient in turmeric is **curcumin**, which has both anti-inflammatory (substances that can reduce pain or tenderness, or block substances that cause them) and antioxidant (protects cells from damage) properties.

What do studies say about the health benefits?

Obesity: Experiments using turmeric combined with physical activity prevented undesirable weight gain, and improved metabolism. These are feasible lifestyle changes compared to restrictive diets or the use of appetite depressants. ^{2***}

Diabetes: Curcumin supplements (synthetic form) helped maintain blood sugar and prevented fat synthesis in the liver. ^{3***}
Dried powder (natural form) is commonly used. However, bioavailability from the natural form was less than synthetic preparations. ^{4***}



Polycystic ovarian syndrome (PCOS):

When women with the syndrome, were given curcumin for 12 weeks, they showed improved blood sugar control and fat mobilization, and an increase in good fat. ^{5***}

Cardiac health: Atherosclerosis is a condition resulting from long-term inflammation and injury to the blood vessels due to fat deposition. Curcumin in turmeric is known to clear unsafe fat from the blood ^{6**}.

Kidney function: A recent study demonstrated that curcumin significantly reduced protein loss in the urine, in patients with chronic kidney disease ^{7***}

Research is ongoing to further support this.

Strength of evidence

*** Strong ** Moderate * Basic

How is turmeric traditionally used?

Turmeric is traditionally known to have other health benefits that offer relief in:

- Arthritis
- Respiratory health
- Skin
- Digestive disorders
- Depression allergies and
- Inflammatory bowel disease

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How much turmeric is safe to consume?

5 grams/day, which is about 1 tsp per day

- Culinary dosages (a few pinches) are safe.
- Usage of supplements or concentrated extracts should be under your doctor's guidance.
- Functional foods, including turmeric, are not meant to substitute for a healthy diet, nor should they be used to replace prescribed medication.
- Effects may vary from person to person.

How to use turmeric?



Tea: Bring 2 cups of water to a low boil. Lightly crush 1 tsp of turmeric powder and add to the boiling water. Simmer on low for five minutes. Add a few pieces of ginger and remove from the heat. Squeeze lime for extra flavor. Strain into a teapot and enjoy.

Dishes inspired by Indian cooking:

Rice, pasta, lentil or meat soups flavored with turmeric, as well as sautéed

vegetables are a few suggestions for incorporating turmeric in the diet.

Resources

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4. Pathomwichaiwat T, Jinatongthai P, Prommasut N, et al. Effects of turmeric (*Curcuma longa*) supplementation on glucose metabolism in diabetes mellitus and metabolic syndrome: An umbrella review and updated meta-analysis. Mahmoodi MR, ed. *Plos One*. 2023;18(7):e0288997. doi:10.1371/journal.pone.0288997
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6. Yang C, Zhu Q, Chen Y, et al. Review of the Protective Mechanism of Curcumin on Cardiovascular Disease. *Drug Design, Development and Therapy*. 2024;Volume 18:165-192. doi:10.2147/DDDT.S445555
7. Sadeghian M, Rahmani S, Jafarieh A, Jamialahmadi T, Sahebkar A. The effect of curcumin supplementation on renal function: A systematic and meta-analysis of randomized controlled trials. *Journal of Functional Foods*. 2023;100:105396. doi:10.1016/j.jff.2022.105396

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