

TURMERIC

"The Golden Spice"

Angeline Jeyakumar
Nutrition Specialist; Extension; Department of
Nutrition; University of Nevada, Reno.

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

Functional Foods

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

1. USDA. Scientific Report of the 2025 Dietary Guidelines Advisory Committee, C. 2025;Parr D(Chapter 8).
2. Liu Q, Wang C, Guo X, Du Q, Keshavarzi M. Curcumin and its nano-formulations combined with exercise: From molecular mechanisms to clinic. *Cell Biochemistry and Function*. 2024;42(4):e4061. doi:10.1002/cbf.4061
3. Marton LT, Pescinini-e-Salzedas LM, Camargo MEC, et al. The Effects of Curcumin on Diabetes Mellitus: A Systematic Review. *Frontiers in Endocrinology* 2021;12:669448. doi:10.3389/fendo.2021.669448
4. Pathomwachaiwat 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
5. Jamilian M, Foroozanfard F, Kavossian E, et al. Effects of curcumin on body weight, glycemic control and serum lipids in women with polycystic ovary syndrome: A randomized, double-blind, placebo-controlled trial. *Clinical Nutrition ESPEN*. 2020;36:128-133. doi:10.1016/j.clnesp.2020.01.005
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

Contact: ajeyakumar@unr.edu

Phone: 775-336-0275

Copyright © University of Nevada, Reno; Extension

"A partnership of Nevada counties; University of Nevada, Reno; and the U.S. Department of Agriculture."

The University of Nevada, Reno is committed to providing a place of work and learning free of discrimination on the basis of a person's age (40 or older), disability, whether actual or perceived by others (including service-connected disabilities), gender (including pregnancy related conditions), military status or military obligations, sexual orientation, gender identity or expression, genetic information, national origin, race (including hair texture and protected hairstyles such as natural hairstyles, afros, bantu knots, curls, braids, locks and twists), color, or religion (protected classes).

Where discrimination is found to have occurred, the University will act to stop the discrimination, to prevent its recurrence, to remedy its effects, and to discipline those responsible.