

Turmeric, a Healthy Spice

by Ann Gerhardt, MD

5/27/09

www.drsgsmedisense.com

Bottom Line at the Top: Turmeric is a healthy spice. Use it in food whenever you can. Curcumin is the best-studied component of turmeric, but turmeric may also contain other active substances. If you take large amounts in pill form, be careful of stomach problems and drug interaction.

Turmeric, a common spice in Indian and Asian cuisine, comes from the root of an Asian perennial shrub, *Curcuma longa*. A member of the Ginger family, it gives Indian food its yellow color and “bite”. US food manufacturers use it to color mustards and other foods yellow since the often-used chemical yellow dye #5 can cause asthma.

The most-studied active component of turmeric is curcumin, a naturally occurring polyphenolic phytochemical known for its anti-inflammatory, anti-bacterial and anti-carcinogenic properties. While other spices may contain curcumin, turmeric is the most concentrated source, at 1.06% to 5.7% by weight.

As with other herbal remedies, alternative medicine practitioners claim that turmeric cures a wide range of ailments ranging from infections and arthritis to stomach, menstrual, liver and heart problems.

Real evidence for health benefits so far: People whose diets are rich in turmeric have lower rates of breast, prostate, lung and colon cancers. Experiments in test tubes, animals and humans have been promising but so far inconclusive for a benefit in cancer, heart disease, arthritis and infections. Experimentally verified activity includes reducing platelet clotting, inhibiting cyclooxygenase, reducing alcohol’s liver toxicity, and acting as an anti-oxidant.

Curcumin inhibits the development and progression of colon cancer in experimental animals and induces death of colon cancer cells in test tube experiments. A standard chemotherapy treatment, cisplatin, kills cultures of ovarian cancer cells faster if they are exposed to curcumin. Hamsters given a carcinogen known to induce lung cancer, and then fed 2% of diet as curcumin grew 75% fewer lung cancers and had half the death rate. Curcumin inhibits pancreatic cancer cell growth in laboratory experiments. Breast cancer spread less often to the lungs of mice treated with curcumin plus the chemotherapy agent Taxol than with either treatment alone.

Turmeric may have a role in the prevention and treatment of Alzheimer's disease. Villagers in India have very low Alzheimer's disease rates. Animal studies have shown that curcumin blocks the formation and accumulation of plaque that characterizes Alzheimer's.

Side effects: Turmeric and curcumin may cause heartburn, ulcers, stomach and intestinal upset with high doses. The German E Commission, which advises about herbal medicine, recommends that people with gallstone obstruction not use turmeric or curcumin. It is a member of the ginger family, and should be avoided by people allergic to ginger. Pregnant women should not take it, since it can stimulate uterine contractions. Be careful with high non-dietary doses, since it blocks drug metabolism in the liver, raising blood medication levels.

A note about names: Turmeric is a spice. Curcumin is a medicinally active compound. Curry powder is a mixture of various spices, often including cardamom, turmeric, fenugreek, cumin, fennel and other spices. In spite of the name similarity, cumin is the seed of a member of the parsley family and is not related to curcumin. Chinese herbalists use it as a stimulant, carminative (prevents or relieves gas) and anti-microbial, completely different medicinal uses than curcumin.

Dose: The standard dose turmeric/curcumin dose is 400 mg, standardized to 95% curcuminoid content, taken two to three times a day. It is not absorbed well. No one knows how much turmeric one would have to add to food to deliver health benefits.

I heard a scientist who was presenting a paper about turmeric preventing cancer in animals say that an equivalent dose was possible as a spice in the human diet. The turmeric to body weight ratio fed to his animals would translate into 2.5 teaspoons of turmeric daily, enough to turn every food bright yellow and give every food the same biting sour taste.