TURMERIC

Curcuma longa

Turmeric is a popular traditional spice with an established and confirmed reputation for reducing digestive upsets and inflammatory problems

COMMON NAME: Turmeric | **LATIN NAME:** Curcuma longa | **SANSKRIT:** haridra, haldi, kanchanara
PART USED: Roots (rhizomes) | **PLANT FAMILY:** Zingiberaceae

Key points

1. An ancient remedy for improving digestion and reducing inflammation.
2. Curcumin, its most commonly researched constituent, is very poorly absorbed.
3. Both turmeric and curcumin are likely to work mainly in the gut, affecting mechanisms to reduce inflammatory problems elsewhere in the body.

What conditions would you recommend it for?

- Everyday anti-oxidant protection
- Digestive health and liver support: indigestion, gas, bloating, irritable bowel syndrome
- Inflammatory bowel disease, Crohn's disease, ulcerative colitis
- Joint and muscle pain and recovery after exercise
- Heart health and cholesterol regulation
- Fluctuating blood sugar problems associated with increased resistance to insulin
- Low mood, depression and dementia

Sourcing organic practitioner-grade turmeric

Turmeric is a member of the ginger family and its root is used therapeutically. The quality of turmeric available varies widely due to challenges in cultivation and the supply chain, so it is important to source carefully.[1] Turmeric is a 'hungry' plant and in non-organic farming is grown using fertilisers, fungicides and other chemicals. Pukka works with organic Indian farming co-operatives to increase the amount of land producing our practitioner-grade organic turmeric. It is often grown in an agroforestry system, with coconut trees occupying the top canopy, banana and cacao trees in the middle and ginger and turmeric on the ground. This naturally replenishes the soil - the leaves of the trees and plants providing soil fertility as they fall and smother weeds.

How turmeric works

Most turmeric research has focused on curcuminoid constituents, particularly curcumin. Curcumin has been shown to have anti-inflammatory activity through the suppression of cell signalling pathways. However, most studies have involved tissue cultures and animal research, but curcumin is very poorly absorbed from the digestive tract in humans. Rigorous reviews of the evidence have yet to find reliable and consistent mechanisms for curcumin reducing inflammation in humans. However, both turmeric and curcumin have been shown to be active in the gut. They are thought to have a prebiotic effect, reducing local inflammation and improving gut wall integrity. Many inflammatory problems originate in the gut, through upset bowel flora (known as dysbiosis). Metabolites, pathogens and immunoactive agents produced here can cross a leaky gut wall and contribute to inflammatory problems elsewhere in the body. Turmeric and curcumin are likely to reduce such risks. There are also benefits from the non-curcumin constituents of turmeric, which are more easily absorbed. Pukka's Wholistic Turmeric has a wider range of curcuminoids and other constituents than other extracts and is likely to be close to the absorption profile of the whole turmeric root, on which traditional reputations are based. Studies have also shown that whole turmeric powder led to higher blood levels of curcumin than curcumin alone.[2]

Turmeric by body system

- **Digestive:** Turmeric and curcumin increase local blood flow on the gut lining (like other warming spices), have prebiotic effects, reduce inflammation, improve gut wall integrity and increase bile flow. All these contribute to supporting many digestive issues.[3,13]
- **Microbiome:** Turmeric has been shown to have prebiotic effects,[4,5] with relatively more Lactobacillus and Bifidobacter populations and fewer pro-inflammatory Enterobacteria and Enterococci.[6]
- **Metabolic:** Turmeric helps the body manage fluctuating blood sugar problems associated with increased resistance to insulin (an early step towards type 2 diabetes) and the inflammatory problems linked to too much fat in the tissues.
- **Circulatory:** Turmeric improves blood flow through the tissues, reduces cholesterol and encourages anti-platelet activity. All of which lower the risk of atherosclerosis and plaque build-up in the arteries.
- **Immune:** Most of the immune system resides within the digestive tract, as this is where the body encounters most foreign material. Turmeric and curcumin reduce many immunological threats to the rest of the body.[12,13,14,15,16]
- **Musculoskeletal:** Turmeric has long been used for managing arthritic problems and related inflammatory conditions, and this is now backed up by research. [7] Even exercise can be inherently inflammatory and there is good reason to take turmeric to improve performance.[8]
- **Nervous:** There is good evidence that turmeric has a positive effect on mental health, probably from its effects on the gut-brain axis. Research supports turmeric's actions on the inflammatory causes of mental health disorders such as depression. [9] An in-depth analysis of six clinical trials supported that curcumin was effective in reducing depressive symptoms, with no side effects reported.[10]

Constituents of turmeric

A mixture of yellow pigments (3 to 6%) known as curcuminoids, with curcumin making up approximately 90% of the curcuminoid content. Essential oils (6%), including sesquiterpene

Harvesting Turmeric

ketones (65% including ar-turmerone) and zingiberene (25%).

Research highlights

So far, there are no clear explanations for the benefits of turmeric in inflammatory disease due to variations in the quality and methods used in human clinical research. Rigorous reviews of the evidence have also found there is no significant difference between turmeric and curcumin.[11] However, it is very likely that both turmeric and curcumin are mainly acting in the gut. Curcumin reduces the activity of gut wall proinflammatory factors. [12] It mends intestinal cell wall junctions, blocks gut surface enzymes, transcription factors, and growth factors, and prevents bacterial or virus infection from the intestine.[14,15]

The effects of turmeric are likely to be due to more than its curcumin content. Many studies have indicated that curcumin-free turmeric components possess numerous biological activities [16] including anti-inflammatory, anticancer, and antidiabetic activities. These are also often better absorbed and more likely to reach tissues remote from the gut.

Ayurvedic energetics

Taste: Pungent, bitter and astringent

Temperature: Warm

Doshic effect: Reduces vata and kapha, balances pitta but may aggravate pitta if taken in excess.

Energetic actions: Purifying, protective, rejuvenating

Safety, drug interactions & contraindications

- Has been safely consumed as a food item in relatively large quantities with no significant risk or adverse effect. A few people report short term digestive reactions to turmeric.
- Contraindicated in biliary tract obstruction and should be used only after seeking professional advice if gallstones are present. However, many people with gallstones have taken turmeric very safely without any harm, or prospect of harm.
- High doses (more than 15g/day) should not be prescribed at the same time as anti-platelet or anticoagulant medicines as studies suggest turmeric may increase their effects.

Dosage

Widespread culinary use of turmeric leads to average consumption levels in south Asia of several grams a day

Pukka tea containing turmeric can be drunk freely during the day

Pukka Wholistic Turmeric: 1-2 capsules daily

Therapeutic doses of between 4-8 grams a day are also recommended [17]

Turmeric at Pukka

Tea family:

Turmeric Gold

Turmeric Active

Three Ginger

Latte family

Turmeric Gold

Supplements family:

Wholistic Turmeric

Turmeric Brainwave

Turmeric Lifekind

Turmeric Active

Active 35 oil

Turmeric at home

Recipe for a sporty spice Turmeric Active mocktail

This mocktail will give you a kick; fresh ginger, lemon and orange muddled with organic honey and delicious Turmeric Active tea.

Ingredients

3 teabags: Turmeric Active

250 ml boiling water

Juice of an orange

Juice of a lemon

A good squeeze of fresh ginger juice

Sparkling water or cloudy lemonade

Organic honey

Method

Cover 3 Pukka Turmeric Active tea bags with 250ml of boiling water. Leave for an hour. Strain and leave to cool further

Muddle 50ml of the Pukka Turmeric Active tea with some ice. Add in a lick of honey. A glug of fresh orange and lemon juice and then a dash of ginger juice

Add some cloudy lemonade/sparkling water with a little organic honey

Add a slither of fresh ginger and stir gently

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