

# Turmeric

**Turmeric** is a bright yellow-orange spice derived from the rhizome of *Curcuma longa*, a plant native to South Asia. It has been widely used for centuries in traditional Ayurvedic and Chinese medicine as well as in culinary practices. Today, turmeric is globally recognized for its anti-inflammatory and antioxidant properties.

## Key facts

- **Scientific name:** *Curcuma longa*
- **Common names:** Turmeric, Indian saffron
- **Family:** Zingiberaceae
- **Active compounds:** Curcumin, demethoxycurcumin
- **Typical forms:** Powder, capsules, teas, extracts

## Botanical characteristics

Turmeric is a perennial herbaceous plant with large green leaves and underground rhizomes that contain the characteristic yellow pigment. The rhizomes are harvested, boiled, dried, and ground into powder for culinary and medicinal use.

## Traditional and modern uses

Turmeric has long been used in traditional medicine for digestive support, wound healing, joint discomfort, and general wellness. In modern herbal medicine and nutritional science, turmeric is commonly promoted for inflammatory conditions, antioxidant support, and metabolic health.

## Mechanism and research

Curcumin, the primary active constituent of turmeric, has been extensively studied for its anti-inflammatory and antioxidant effects. Research suggests that curcumin may influence inflammatory signaling pathways, oxidative stress, and immune modulation. However, bioavailability remains a major challenge, and many supplements combine curcumin with piperine to improve absorption.

## Safety and regulation

Turmeric is generally considered safe when consumed in culinary amounts. High supplemental doses may cause gastrointestinal discomfort or interact with anticoagulant medications in sensitive individuals. Product quality and curcumin concentration can vary between supplements.

## Culinary and supplement context

Turmeric is widely used as a spice in curries, soups, teas, and functional beverages. It is also sold globally as a dietary supplement in capsules, extracts, and powdered formulations aimed at wellness and joint support.