

**NATURAL HEALTH PRODUCT**  
**TURMERIC – *CURCUMA LONGA***

**Topical**

This monograph is intended to serve as a guide to industry for the preparation of Product Licence Applications (PLA) and labels for natural health product market authorization. It is not intended to be a comprehensive review of the medicinal ingredient.

**Notes**

- ▶ Text in parentheses is additional optional information which can be included on the PLA and product labels at the applicant’s discretion.
- ▶ The solidus (/) indicates that the terms and/or statements are synonymous. Either term or statement may be selected by the applicant.

**Date**

August 13, 2021

**Proper name(s), Common name(s), Source information**

Table 1. Proper name(s), Common name(s), Source information

Proper name(s)	Common name(s)	Source information		
		Source material(s)	Part(s)	Preparation(s)
<i>Curcuma longa</i>	<ul style="list-style-type: none"> <li>▶ Common turmeric</li> <li>▶ Curcuma</li> <li>▶ Indian-saffron</li> <li>▶ Jianghuang</li> <li>▶ Turmeric</li> <li>▶ Yellow ginger</li> </ul>	<i>Curcuma longa</i>	Rhizome	Dried

References: Proper name: USDA 2018; Common names: USDA 2018, McGuffin et al. 2000; Source information: PPRC 2005, ESCOP 2003, Blumenthal et al. 2000.

**Route of administration**

Topical (Paranjape 2005; Williamson 2002)

**Dosage form(s)**

Acceptable dosage forms for the age category listed in this monograph and specified route of administration are indicated in the Compendium of Monographs Guidance Document.



### Use(s) or Purpose(s)

- ▶ Traditionally used in Ayurveda to relieve pain and inflammation (Paranjape 2005; Murthy 2004; API 2001; Kapoor 2001).
- ▶ Traditionally used in Ayurveda to assist healing of minor wounds such as cuts and burns (Paranjape 2005; Murthy 2004; API 2001; Kapoor 2001).
- ▶ Traditionally used in Ayurveda to assist healing of minor skin irritations (Paranjape 2005; Murthy 2004; API 2001; Kapoor 2001).

The following combined use(s) or purpose(s) is/are also acceptable

Traditionally used in Ayurveda to relieve pain and inflammation, assist healing of minor wounds such as cuts and burns, and/or assist healing of minor skin irritations (Paranjape 2005; Murthy 2004; API 2001; Kapoor 2001).

### Note

Claims for traditional use must include the term “Herbal Medicine”, “Traditional Chinese Medicine”, or “Ayurveda”.

### Dose(s)

#### Subpopulation(s)

Adults 18 years and older

#### Quantity(ies)

Methods of preparation: Powdered, Non-Standardized Ethanolic Extracts (Dry extract, Tincture, Fluid extract)

5 - 100% of dried rhizome or extract in the finished product (Jamali et al. 2020; API 2001; Nadkarni and Nadkarni 1976)

### Note:

For dry extracts, above a concentration of 5%, the maximum extract ratio allowed is 25:1.

#### Direction(s) for use

Apply to affected area as needed.

### Duration(s) of use

No statement required.



## Risk information

### Caution(s) and warning(s)

Consult a health care practitioner/health care provider/health care professional/doctor/physician if symptoms persist or worsen.

### Contraindication(s)

No statement required.

### Known adverse reaction(s)

No statement required.

## Non-medicinal ingredients

Must be chosen from the current Natural Health Products Ingredients Database (NHPID) and must meet the limitations outlined in the database.

## Storage conditions

Must be established in accordance with the requirements described in the *Natural Health Products Regulations* (NHPR).

## Specifications

- ▶ The finished product specifications must be established in accordance with the requirements described in the Natural and Non-prescription Health Products Directorate (NNHPD) Quality of Natural Health Products Guide.
- ▶ The medicinal ingredient must comply with the requirements outlined in the NHPID.

## References cited

API 2001 [1990]. The Ayurvedic Pharmacopoeia of India, 1<sup>st</sup> edition, Part I, Volume I. Delhi (IN): The Controller of Publications; [Reprint of 1990 publication].

Blumenthal M, Goldberg A, Brinkmann J, editors. 2000. Herbal Medicine: Expanded Commission E Monographs. Boston (MA): Integrative Medicine Communications.

ESCOP 2003: ESCOP Monographs: The Scientific Foundation for Herbal Medicinal Products, 2<sup>nd</sup> edition. 2003. Exeter (GB): European Scientific Cooperative on Phytotherapy and Thieme.

Jamali N., Adib-Hajbaghery M., Soleimani A. 2020. The effect of *curcumin* ointment on knee pain in older adults with osteoarthritis: a randomized placebo trial. *BMC Complementary Medicine and Therapies* 20, 305.

Kapoor LD. 2001. *Handbook of Medicinal Ayurvedic Medicinal Plants*. Boca Raton (FL): CRC press LLC.

McGuffin M, Kartesz JT, Leung AY, Tucker AO, editors. 2000. *Herbs of Commerce*, 2<sup>nd</sup> edition. Silver Spring (MD): American Herbal Products Association.

Murthy KRS. 2004. *Bhavaprakasha of Bhavmisra, Volume 1*. Varanasi (IND): Chowkhamba Krishnadas Academy.

Nadkarni and Nadkarni 1979. *Dr. K.M. Nadkarni's Indian materia medica: with Ayurvedic, Unani-Tibbi, Siddha, allopathic, homeopathic, naturopathic & home remedies, appendices & indexes*. Bombay: Popular Prakashan.

Paranjpe P. 2005. *Indian Medicinal Plants- Forgotten Healers (A Guide to Ayurvedic Herbal Medicine)*. Delhi (IND): Chaukhamba Sanskrit Pratishthan.

PPRC 2005: *Pharmacopoeia of the People's Republic of China, Volume 1, English edition 2005*. Beijing (CN): The State Pharmacopoeia Commission of the People's Republic of China.

USDA 2018: United States Department of Agriculture, Agricultural Research Service, National Genetics Resource Program. Germplasm Resources Information Network (GRIN) [online database]. *Curcuma longa* L. Beltsville (MD): National Germplasm Resources Laboratory. [Accessed 2018 June 6]. Available from: <https://npgsweb.ars-grin.gov/gringlobal/taxon/taxonomysimple.aspx>

Williamson EM, editor. 2002. *Major Herbs of Ayurveda*. Edinburgh (GB): Churchill Livingstone.

## References reviewed

Aggarwal BB, Goel A, Kunnumakkara AB. 2008. Curcumin as “Curecumin”: From kitchen to clinic. *Biochemical Pharmacology* 75:787-809.

Araújo CA, Leon LL. 2001. Abstract: Biological activities of *Curcuma longa* L. *Mem Inst Oswaldo Cruz* 96(5):723-728.

- Deodhar SD, Sethi R, Srimal RC. 1980. Preliminary studies on antirheumatic activity of curcumin (di-feruloyl methane). *Indian Journal of Medical Research* 71:632-634.
- Felter HW. 1983. *The Eclectic Materia Medica, Pharmacology and Therapeutics*. Sandy (OR): Eclectic Medical Publications [Reprint of 1922 original].
- Felter HW, Lloyd JU. 1983. *King's American Dispensatory, Volume 2, 18<sup>th</sup> edition*. Sandy (OR): Eclectic Medical Publications [Reprint of 1898 original].
- Funk JL, Oyarzo JN, Frye JB, Chen G, Lantz RC, Jolad SD, Sólyom AM, Timmermann BN. 2006. Turmeric extracts containing curcuminoids prevent experimental rheumatoid arthritis. *Journal of Natural Products* 69(3):351-355.
- Gerard J. 1975. *The Herbal or General History of Plants. The Complete 1633 Edition as Revised and Enlarged by Thomas Johnson*. NY (NY): Dover Publications.
- Grieve M. 1971. *A Modern Herbal, Volume 2*. New York (NY): Dover Publications [Reprint of 1931 Harcourt, Brace & Company publication].
- Hatcher H, Planalp R, Cho J, Torti FM, Torti SV. 2008. Curcumin: From ancient medicine to current clinical trials. *Cellular and Molecular Life Sciences* 65:1631-1652.
- Hoffmann D. 2003. *Medical Herbalism: The Science and Practice of Herbal Medicine*. Rochester (VT): Healing Arts Press.
- Jurenka JS. 2009. Anti-inflammatory properties of curcumin, a major constituent of *Curcuma longa*: a review of preclinical and clinical research. *Alternative Medicine Review* 14(2):141-153.
- Khory RN, Katrak NN. 1999. *Materia Medica of India and their Therapeutics*. Delhi (IN): Komal Prakashan.
- Kiso Y, Suzuki Y, Watanabe N, Oshima Y, Hikino H. 1983. Antihepatotoxic principles of *Curcuma longa* rhizomes. *Journal of Medicinal Plant Research* 49:185-187.
- Kohli K, Ali J, Ansari J, Raheman Z. 2005. Curcumin: a natural antiinflammatory agent. *Indian Journal of Pharmacology* 37(3):141-147.
- Kulkarni RR, Patki PS, Jog VP, Gandage SG, Patwardhan B. 1991. Treatment of osteoarthritis with a herbomineral formulation: a double-blind, placebo-controlled, cross-over study. *Journal of Ethnopharmacology* 33:91-95.
- Mills S. 1985. *The Dictionary of Modern Herbalsim*. Wellingborough (GB): Thorsons Publishers Ltd.
- Moerman DE. 1998. *Native American Ethnobotany*. Portland (OR): Timber Press.

Rivera-Espinoza Y, Muriel P. 2009. Pharmacological actions of curcumin in liver diseases or damage. *Liver International* 29(10):1457-1466.

Satoskar RR, Shah SJ, Shenoy SG. 1986. Evaluation of anti-inflammatory property of curcumin (diferuloyl methane) in patients with postoperative inflammation. *International Journal of Clinical Pharmacology, Therapy and Toxicology* 24(12):651-654.

Srimal R, Dhawan B. 1973. Pharmacology of diferuloyl methane (curcumin), a non-steroidal antiinflammatory agent. *Journal of Pharmacy and Pharmacology* 25:447-452.