# **TURIVA**





#### **RECOMMENDED USE**

- Used in Herbal Medicine to help relieve joint inflammation
- Source of Antioxidants

## ANTIOXIDANT SUPPORT

Turiva contains an exclusive blend of bioactive phytonutrients that make up the Complete Turmeric Matrix for increased clinical efficacy. It is a natural complex that includes standardized potencies of curcumin and turmeric essential oil as well as, turmerin protein, turmerone oil,  $\beta$ -elemene, curdione, bisacurone and calebin A, making it a comprehensive turmeric supplement.

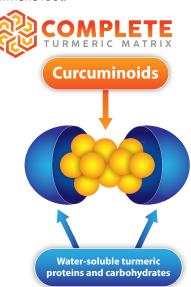
## **Overview**

Modern lifestyle choices, such as an unbalanced diet and poor nutrition, have a major impact on health determinants. Oxidative stress arises when our bodies cannot keep up with the demands of handling stress, toxin removal and cellular function preservation. Turiva provides a well-rounded blend of turmeric phytonutrients that can help support antioxidant status.

## Turmeric (Complete Turmeric Matrix)†

Whole-root turmeric and its active components have been used in traditional Ayurvedic medicine for centuries. In herbal medicine of old, practitioners used teas, tinctures and extracts of all types. In the 21st century, as research grew on the benefits of turmeric, the focus shifted to identifying and isolating one individual compound, curcumin, rather than delivering the comprehensive benefits of a matrix of turmeric bioactives. As a result, concentrating curcumin led to poor absorption and pharmaceutical methods were applied to bypass the gut and increase its bioavailability. The glaring disadvantage of applying this pharmaceutical model to botanicals is that it misses the benefits of other bioactives present within the turmeric matrix. New research on turmeric shows the additional bioactives in turmeric have additional benefits and enhance bioavailability.

The Complete Turmeric Matrix includes compounds from the entire turmeric root, all working together as nature intended to deliver better results. The Complete Turmeric Matrix formulation contains standardized amounts of 50% curcuminoids, and 3%-8% turmeric essential oil, plus other components that make up the whole turmeric root.



### Turmeric and Antioxidant Support<sup>†</sup>

Turmeric and its phytonutrients, like curcumin, have been shown to support lowering of lipid peroxidation by maintaining the activity of antioxidant enzymes such as superoxide dismutase, catalase and glutathione peroxidase at higher levels. In animal studies, curcumin was reported to decrease the release of reactive oxygen species from macrophages and inhibit histamine release



from mast cells.<sup>2</sup> The chemical structure of the curcumin molecule allows it to have a significant effect on oxidative stress.<sup>3</sup> However, several findings indicate that antioxidant and protective effects are synergistically enhanced when other turmeric components are included.<sup>7</sup> Other turmeric components such as turmerones,<sup>7</sup> curdione,<sup>8,10</sup> germacrone,<sup>9</sup> bisacurone,<sup>11</sup> calebin A,<sup>12</sup> turmerin<sup>13</sup> and  $\beta$ -elemene<sup>14</sup> all have significant impact on health.

## Turmeric Bioactivity vs. Bioefficacy<sup>†</sup>

Bioavailability is defined as delivery of a biologically active compound to a target tissue; it is not simply absorption of higher amounts of the nutrient into the blood. There has been continuous debate on the bioavailability of curcumin, and it is important to note that most clinical research of turmeric-derived compounds is focused on curcuminoid activity.3 Curcuminoids undergo extensive metabolism during and after ingestion.3 This is one of the key reasons curcumin is encouraged to be consumed with an adjuvant or made with "bioavailability enhancers" that dilute the breakdown process. However, these enhanced versions show no significant impact in human clinical studies. Studies showing increased absorption have not demonstrated increased positive clinical outcomes. Based on this, it is important to shift focus to bioefficacy, or the effectiveness of a material in a biological environment, over bioavailability. Components of the whole turmeric root have proven that the therapeutic effect of turmeric extends beyond curcuminoids alone.4

#### **Recommended Dose**

**Adults:** Take 1 capsule, 1 or 2 times a day. Consult a health care practitioner for use beyond 12 weeks.

## **Medicinal Ingredients (per capsule)**

Turmeric (Curcuma longa, Rhizome) extract......500 mg

(50% Curcuminoids, 3-8% essential oil)

## **Non-Medicinal Ingredients**

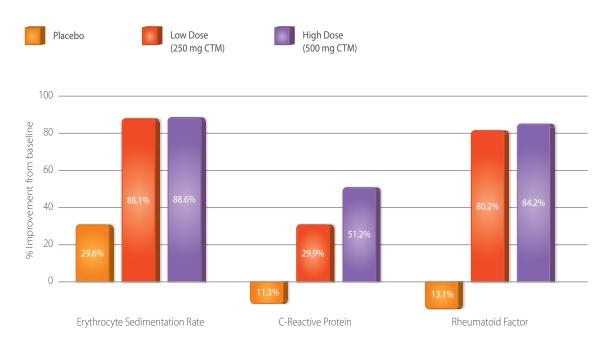
Hypromellose, Microcrystalline cellulose, Magnesium stearate, Silicon dioxide.

#### **Risk Information**

Consult a health care practitioner prior to use if you are pregnant or breastfeeding, have gallstones, a bile duct obstruction, stomach ulcers or excess stomach acid; or if you are taking antiplatelet medication or blood thinners.

To be sure this product is right for you, always read and follow the label.

## **Joint Inflammation with CTM**



LT-PDN-057CAN-A

ID# 172060CAN 60 Capsules



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