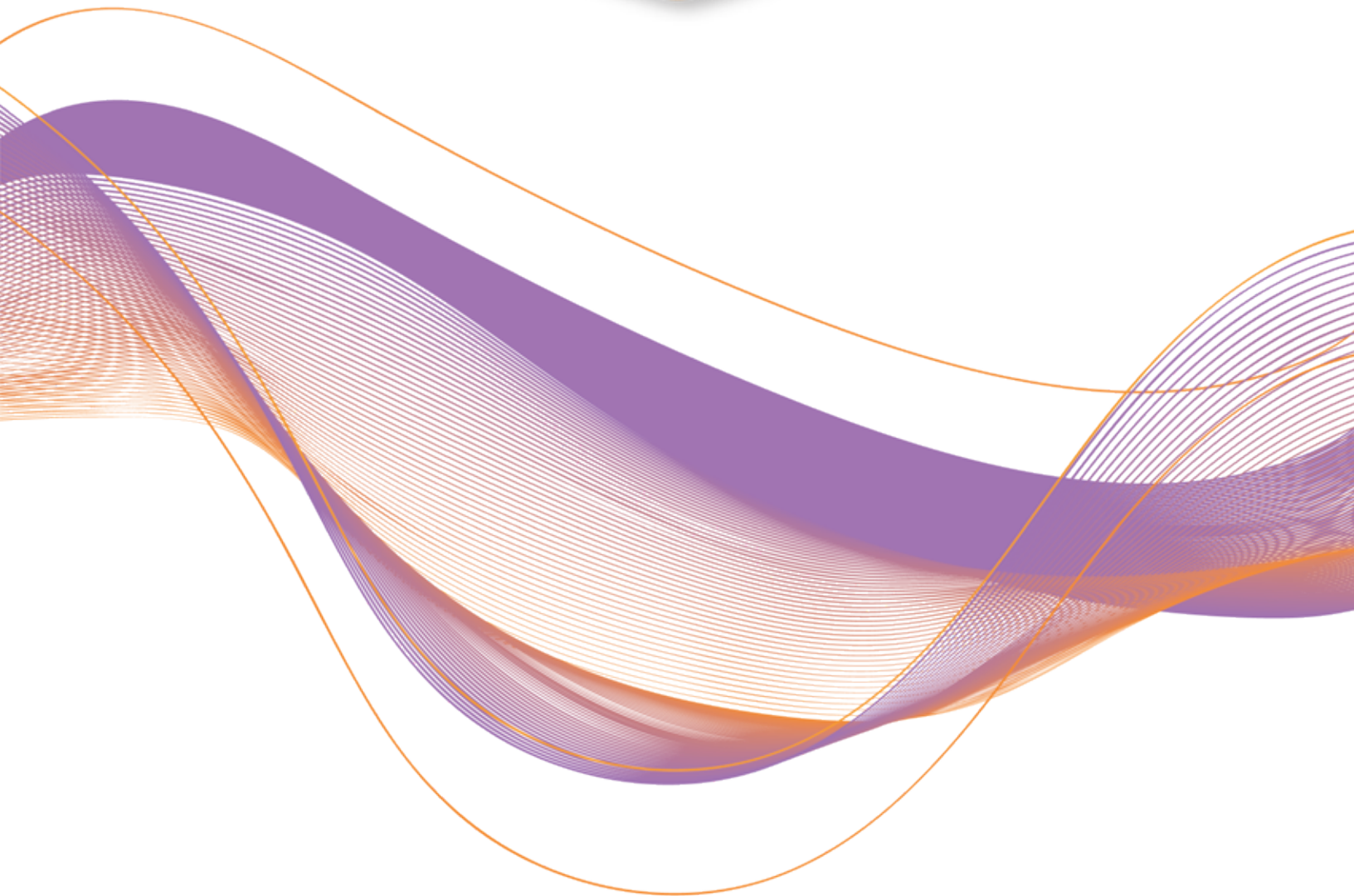




# Ortho Molecular Products

## Turiva | Complete Turmeric Matrix

Exclusive

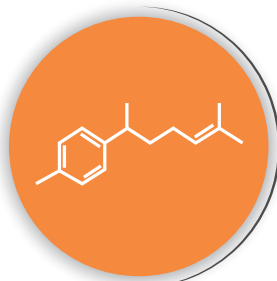


# The History of Turmeric



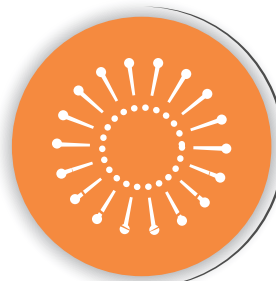
**2000 BC**

Turmeric used as a culinary spice and medicinal herb.



**1842**

A. Vogel isolates pure curcumin, initiating new research into the powerful health benefits of turmeric root. The first scientific study on curcumin is published in 1849.



**2007**

Pharmaceutical model for curcumin emerges, with enhanced delivery systems to bypass the gut and improve absorption, but this model lacks evidence of clinical efficacy.

**NON-CURCUMINOID COMPOUNDS**

**2013**

Unraveling flaws in the bioavailability model of curcumin, new research reveals the non-curcuminoid compounds of turmeric are highly active and target the gut microbiota.



**2019**

Research establishes the gut microbiota may be the primary target of turmeric and all of its compounds.



**2020**

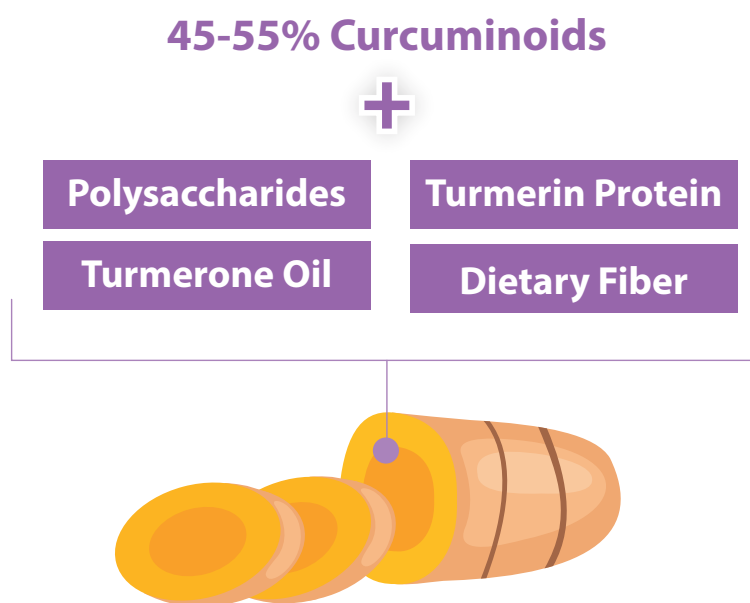
Ortho Molecular Products launches Turiva, which contains an exclusive blend of bioactive phytonutrients that make up the Complete Turmeric Matrix for increased clinical efficacy.

# Re-Framing Bioavailability

## More Absorption Doesn't Always Equal Better Efficacy

Botanicals are amazing! They have many different compounds working in unison to help patients achieve their best results. In herbal medicine of old, practitioners used teas, tinctures, and extracts of all types. In the 21st century, as pharmaceutical methods have been applied to botanicals, much of the focus has turned to isolating a single compound and defining the botanical's health benefits based on that individual compound. In some ways, these advances have been positive, allowing the confirmation of botanical origin, identity, and purity. However, one of the glaring disadvantages of applying the pharmaceutical model to botanicals is this approach misses the benefits of all the other bioactives in botanicals.

Turmeric is a great example of this. Research has become hyper-focused on increasingly concentrating curcuminoids and enhancing their absorption. Claims of up to 100 times better absorption are commonly touted in the marketplace. For all this evidence, no study has ever showcased improved clinical outcomes with these products. In fact, new research on curcumin-free turmeric extracts is taking turmeric science back to its roots, showcasing improved efficacy when the complete matrix of turmeric compounds is delivered. Turiva delivers the Complete Turmeric Matrix, which includes compounds from the entire root, all working together as nature intended to deliver improved patient outcomes.



# Don't Bypass the Gut!

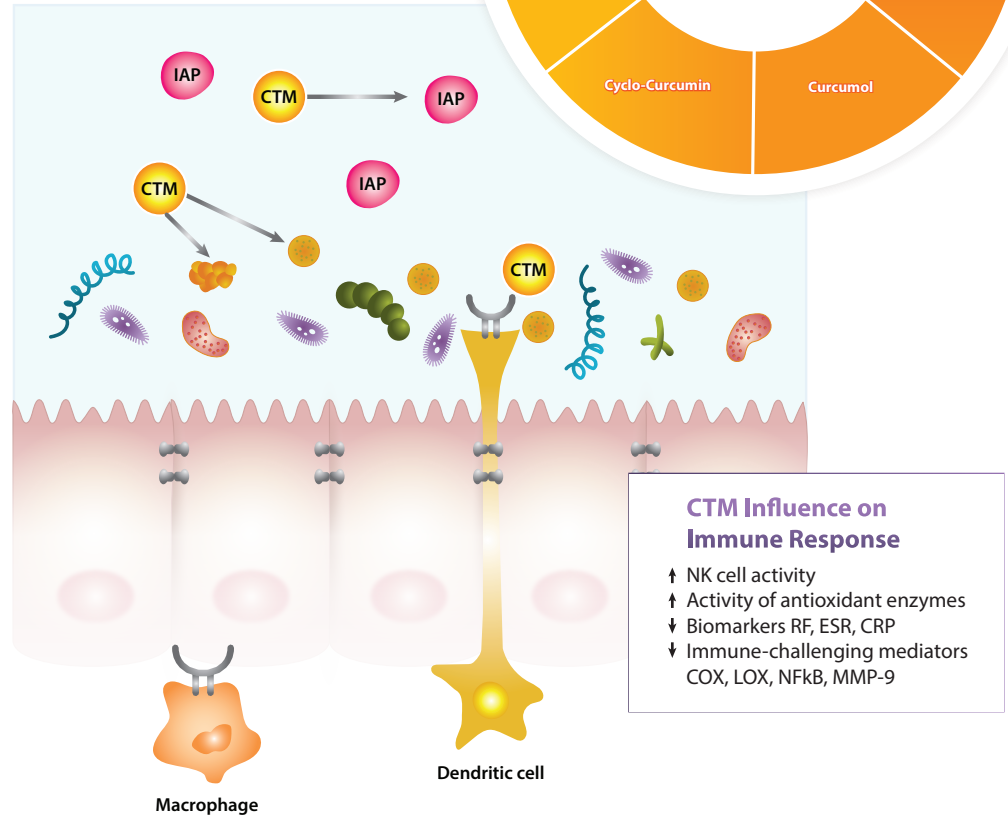
## The Microbiome as a Key Target of Turmeric

Due to the poor systemic bioavailability of curcumin, the pharmaceutical model for curcumin includes enhanced delivery systems designed to bypass the gut and improve absorption. But this model lacks clinical efficacy, and misses the primary target of turmeric: the gut microbiome. A growing number of studies show curcumin, specifically in combination with its derivatives, exerts direct regulating effects on the gut microbiota.



### Key Targets of CTM

- 1 Helps Detoxify Endotoxins**  
CTM maintains levels of intestinal alkaline phosphatase (IAP) and helps balance endotoxin effect
- 2 Creates Microbial Balance**  
CTM supports the abundance of beneficial bacteria, including *Bifidobacteria*, *Lactobacilli* and butyrate-producing bacteria
- 3 Modulates Immune Signals**  
CTM binds to MD2 protein domain of TLR-4 and blocks the attachment of endotoxins reducing the signaling cascade of IL-6, TNF-alpha, NfKb

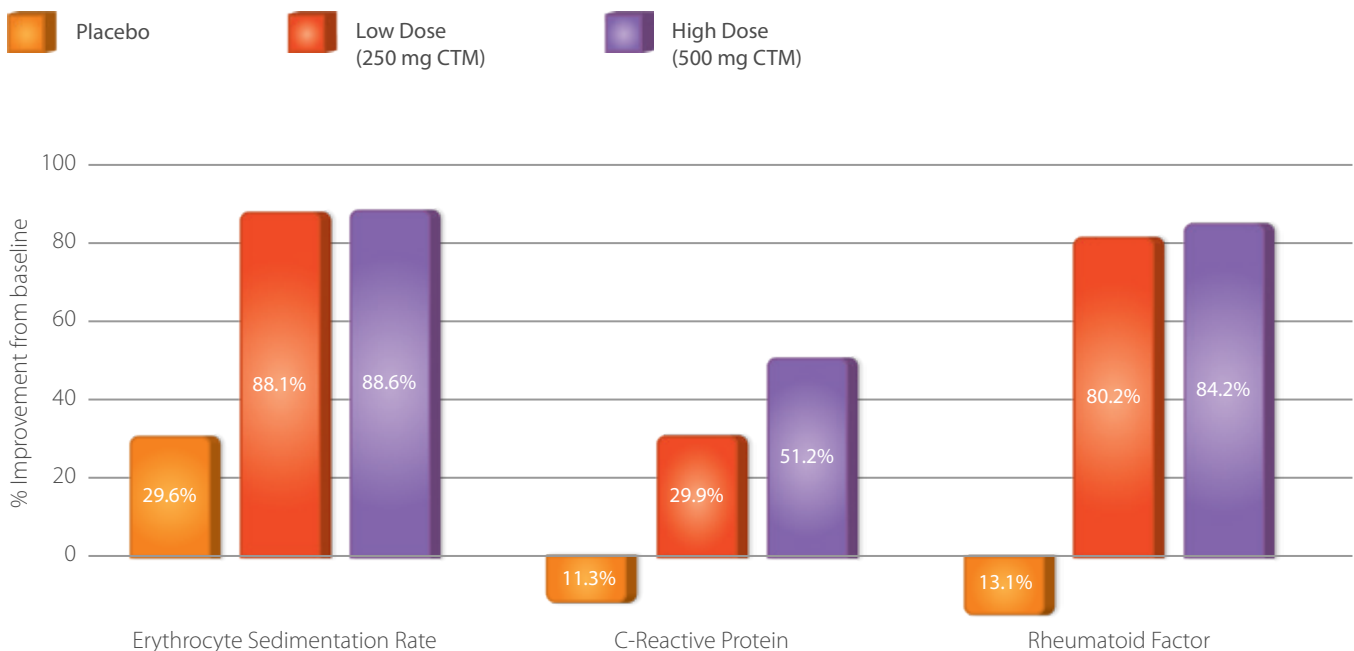


# Complete Turmeric Matrix

## Studies on CTM and Autoimmunity

Autoimmunity is on the rise globally and is connected to a myriad of health challenges. CTM is a powerful immune modulator that helps maintain normal inflammatory balance through a multidimensional approach. CTM impacts the most prominent markers of health in autoimmunity to support those with immune challenges.

### Immune Modulation with CTM



Thirty-six patients were randomized into three groups and received placebo, 250 mg or 500 mg of Complete Turmeric Matrix product twice daily for 90 days. The patients were assessed based on several biomarkers of immune health, such as C-reactive protein, erythrocyte sedimentation rate and rheumatoid factor. Study participants showed significant changes in these biomarkers, a strong indication of immune health.<sup>2</sup>

1. Lopresti, A. The Problem of Curcumin and Its Bioavailability: Could its Gastrointestinal Influence Contribute to its Overall Health-Enhancing Effects? *Adv. Nutr.* 2018;9:41-50  
2. Amalraj, A; Varma, K; Jacob, J, et al. A Novel Highly Bioavailable Curcumin Formulation Improves Symptoms and Diagnostic Indicators in Rheumatoid Arthritis Patients: A Randomized, Double-Blind, Placebo- Controlled, Two-Dose, Three-Arm, and Parallel-Group Study. *Journal of Medicinal Food* 20(10) 2017, 1022-1030

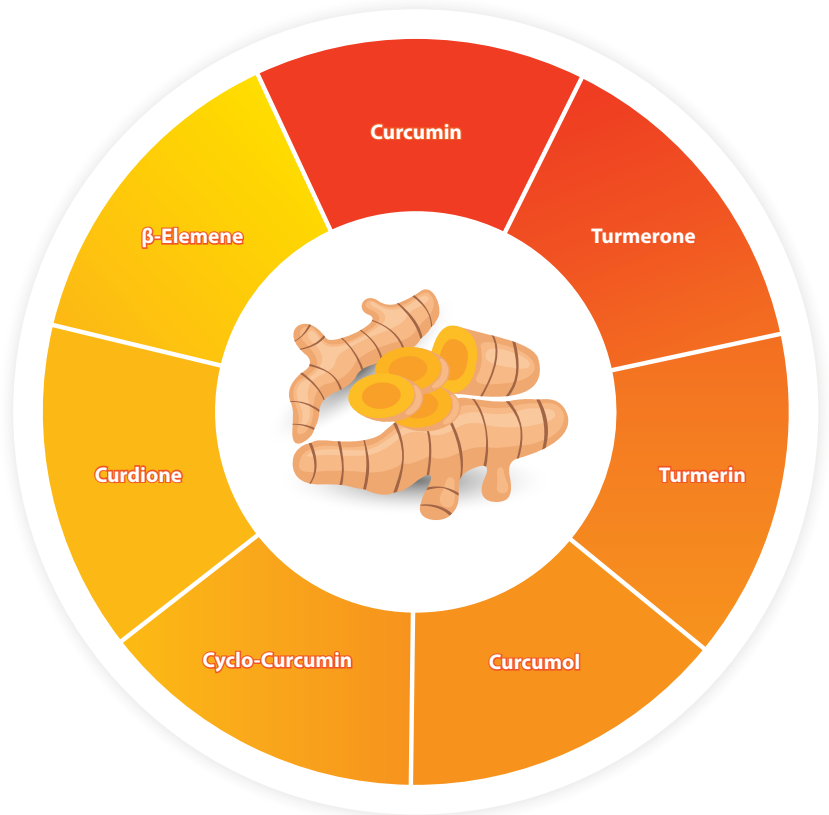
# Turiva

## Complete Turmeric Matrix

- ✓ The only full-spectrum turmeric supplement standardized to contain 45%–55% curcuminoids, 2%–6% turmerin protein and 3%–8% volatile oil
- ✓ Includes an active array of additional tumeric compounds

## Clinical Applications

- ✓ Helps maintain normal inflammatory balance
- ✓ Promotes microbiome diversity
- ✓ Supports normal intestinal barrier function
- ✓ Helps balance immune function



## Supplement Facts

Serving Size 1 Capsule  
Servings Per Container 60

	Amount Per Serving	% Daily Value
<b>1 capsule contains</b>		
Turmeric Root Extract (Complete Turmeric Matrix) (Standardized to contain 45-55% Curcuminoids, 3-8% Volatile Oil, 2-6% Turmerin)	500 mg	*

\* Daily Value not established

**ID# 172060** 60 capsules

### SUGGESTED USE:

1 capsule per day or as directed by your healthcare professional.

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