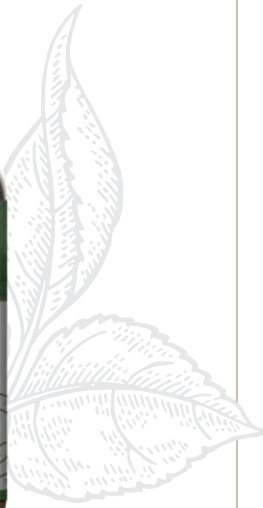




# Boswellia Joint Formula

SUPPORTS A HEALTHY INFLAMMATORY RESPONSE\*



## PRODUCT OVERVIEW

Turmeric rhizome (*Curcuma longa*) and Indian Frankincense gum resin (*Boswellia serrata*) are well-known herbs for supporting a healthy inflammatory response and healthy joint function. Cucumber is a well-known fruit commonly consumed in everyday diets, but recent studies have revealed its potential for significantly impacting joint health and mobility when concentrated in extract form. Boswellia Joint Formula highlights the clinically studied cucumber extract, CuberUp®, paired with sustainably harvested Boswellia gum resin extract and organic CurQFen®, a bioavailable formulation of curcuminoids from turmeric to support a healthy inflammatory response and healthy joint function.\*

## EVIDENCE & BACKGROUND

Acute and regular physical activity can lead to joint discomfort and stiffness in an aging population when there is an imbalance between cartilage generation and degeneration. L-citrulline is a precursor to L-arginine, which regulates nitric oxide (NO) production and release. Inflammatory joint conditions may be caused by increased NO production by stimulation of the inducible NOS (iNOS) enzymes by chondrocytes, causing a pro-inflammatory response in macrophages and leukocytes that furthers cartilage degeneration. However, stimulation of endothelial NOS (eNOS) is involved in the regulation of cardiovascular homeostasis. An increase in citrulline/arginine may be able to help regulate iNOS to limit inflammatory processes and increase eNOS to enhance vasodilation and blood flow to support cartilage nutrition. The cytokine interleukin (IL)-1β is a pro-inflammatory cytokine involved in the inflammatory joint process, which initiates cartilage degradation by matrix metalloproteinases (MMPs), especially MMP-3.<sup>1</sup> As cartilage degrades, enzymes such as cyclooxygenase (COX-2), 5-lipoxygenase (5-LOX), nuclear factor kappa B (NF-κB), tumor necrosis factor-alpha (TNF-α), interferon gamma (IFN-γ), and cytokines IL-2, -6, -8, and -12 also play a role in the inflammatory process, and the transient receptor potential cation channel subfamily V member 1 (TRPV1) plays a role in the experience of pain.<sup>2</sup>

Cucumber (*Cucumis sativus*) is a commonly consumed fruit containing amino acid derivatives such as L-citrulline and iminosugars which may help modulate the inflammatory response and support joint cartilage, as well as flavonoids and tannins with antioxidant effects. Clinical studies have shown superiority of cucumber extracts over glucosamine-chondroitin complexes for supporting joint comfort and function.<sup>3</sup> In an 8-week randomized, double-blind, placebo-controlled trial, CuberUp®, a highly concentrated cucumber extract improved joint comfort, joint and muscle function, inflammatory markers, and cartilage status compared with placebo. The study population included 55 men and women aged 42-59 with joint discomfort who were given 20mg of CuberUp® or placebo every morning for

## RECOMMENDATIONS

Adults take 2 capsules 1-2 times daily.

Not for use during pregnancy or lactation. If you have a medical condition or take medications, please consult with your healthcare practitioner before use. Use only as directed on label. Safety-sealed for your protection. Keep bottle capped at all times and store in a cool, dry place. **Store away from children.**

## Supplement Facts

Serving Size 2 Capsules Servings Per Container 30

	Amount Per Serving	% Daily Value
Total Carbohydrate	<1g	<1%*
Indian Frankincense ( <i>Boswellia serrata</i> ) gum resin extract	320 mg	†
Organic CurQFen® Organic Fenugreek seed 6:1 extract and Organic Turmeric rhizome 45:1 extract	223 mg	†
CuberUp® cucumber fruit extract	20 mg	†

\* Percent Daily Values are based on a 2,000 calorie diet.  
† Daily Value not established.

Other ingredients: Vegan organic capsule (organic pullulan), organic rice hulls, organic rice extract blend (organic rice bran extract, organic rice hulls, organic gum arabic, and organic sunflower oil), and potato starch.

Mfg for Gaia Herbs, Inc., 101 Gaia Herbs Dr., Brevard, NC 28712

CurQFen® is a registered trademark of Akay Natural Ingredients Private Limited, an Oterra company.

CuberUp® is a registered trademark of Euromed S.A.

THIS BACKGROUND INFORMATION IS INTENDED FOR HEALTHCARE PRACTITIONERS' EDUCATION ONLY.

\*THESE STATEMENTS HAVE NOT BEEN EVALUATED BY THE FOOD AND DRUG ADMINISTRATION. THIS PRODUCT IS NOT INTENDED TO DIAGNOSE, TREAT, CURE, OR PREVENT ANY DISEASE.

### REFERENCES

1. Perez-pinero, et al. Appl Sci. 2022;13:485.
2. Kare S, Girish HR, Gupta A. Cureus. 2025;17(1): e77204.
3. Nash R, et al. Clin Int Aging. 2018;13: 2119-2126.
4. Lakshmi T, Rhajendron R. Int J Chemtech Res. 2013; 5(6):2913-2916.
5. Kosolapov D, et al. Crit Rev Ana Chem. 2025; 55(4):748-774.

60 days. The results showed reduced pain intensity by 69.9% compared to baseline, and results were also significant compared to placebo ( $p = 0.013$ ). Quality of life improved significantly from baseline ( $p = 0.001$ ) and compared to placebo ( $p = 0.038$ ), with the most significant difference in stiffness. Joint and muscle function were also significantly improved compared to placebo based on isokinetic and isometric dynamometry testing, timed up and go (TUG) test ( $p = 0.008$ ), and knee flexion exercises. Cytokine levels of IL-1 $\beta$  were reduced compared to placebo ( $p = 0.044$ ), and plasma levels of MMP-3 were significantly reduced in the cucumber group compared to baseline ( $p = 0.001$ ) and compared to placebo ( $p = 0.018$ ).<sup>1</sup>

### HOW IT WORKS

Boswellia Joint Formula supports joint comfort and muscle function by modulating inflammatory cytokines and supporting joint cartilage homeostasis.\*

### GAIA HERBS PRO® QUALITY DIFFERENCE

The ingredients in Boswellia Joint Formula use only water and ethanol for extraction. CuberUp uses a clean water extraction and concentration process, and both turmeric, fenugreek, and Boswellia use only ethanol and water for extraction. The majority of turmeric and Boswellia in the industry is extracted with petrochemical solvents such as ethyl acetate, hexane and methanol for extraction and concentration, which are challenging to dispose of sustainably and may leave traces in the final product. In addition, turmeric has multiple quality concerns in the industry, including contamination with heavy metals (lead and cadmium), pesticides, aflatoxins, and adulteration, so organic rhizomes are prioritized. Beta boswellic acids and pentacyclic triterpenic acids are the main active constituents in Boswellia responsible for maintaining normal inflammatory cytokines and adhesion molecules. Boswellic acids are tested with a high-performance liquid chromatography (HPLC) method based on updated guidance from the United States Pharmacopoeia (USP) instead of the previous less specific titration method. Many products fail biomarker testing using the updated tests.<sup>4,5</sup> Boswellia is a slow growing tree with great importance to the ecosystem that has become overharvested in its native India with higher market demand, and the supplier collaborates with native populations to replant trees and ensure sustainability of Boswellia for the future. Organic materials are exclusively used in the encapsulation process to maintain the intended dosage while not interfering with the active ingredients.

### KEY TAKEAWAYS

Gaia Herbs PRO® offers Boswellia Joint Formula with CuberUp cucumber extract, Boswellia, and organic CurQfen as a bioavailable curcuminoid-based formula to support a healthy inflammatory response.\*

### THE GAIA HERBS FARM

The Gaia Herbs® nearly 270-acre Regenerative Organic Certified® farm in Brevard, North Carolina grounds an integrative approach to herbal wellness. By cultivating and sourcing herbs with intention and overseeing every step in the process, they deliver herbal formulas with the integrity practitioners expect, supporting confident, consistent patient care.

