**Applications**

- Maintains Normal Inflammatory Balance
- Improves Musculoskeletal Health
- Boosts Joint Health, Movement and Physical Function
- Enhances Workout Recovery Time

**CurcuMax Plus** is formulated specifically to support healthy inflammatory balance and musculoskeletal health. CurcuMax Plus includes the innovative ingredient, Complete Turmeric Matrix. CurcuMax Plus also includes the proteolytic enzyme, bromelain, as well as the powerful flavonoids quercetin and rutin, for full spectrum, high-intensity support to maintain a balanced cycle of inflammation.

**Overview**

Inflammation is a natural part of the body’s immune response; a cascade triggered to protect and maintain normal tissue repair. This non-specific physiological response is part of the innate immune system, a first line of defense that is mediated locally by protective mechanisms that stimulate chemokine and eventually eicosanoid and cytokine production. CurcuMax Plus provides a potent blend of phytonutrients that support healthy inflammatory signaling by balancing prostaglandin, prostacyclin, leukotriene and thromboxane metabolism and inhibit activating signals of a wide variety of compounds involved in pain and inflammation from exercise.

**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 and their positive effects on the microbiome.

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 45%-55% curcuminoids, 2%-6% turmerin protein and 3%-8% volatile oil, plus other components that make up the whole turmeric root.1,2 This matrix of bioactive compounds supports a healthy GI tract, enhances detoxification, creates a healthy microbiome, and helps maintain normal inflammatory balance. The bioactives in CTM also support the gut lining, immune system, modulates acute nervous system signaling, low mood and fatigue, and provides cardioprotective and neuroprotective activity via antioxidant mechanisms.3-5 CTM also plays a crucial role in maintaining inflammatory balance in a variety of tissues due to its strong MAPK and NFkB-modulating properties. Studies show CTM supports balanced inflammation in the joints and the GI tract.6-8 In a randomized, double-blind, placebo-controlled clinical trial published in the Journal of Medicinal Food, 36 immune joint patients received either a 250 mg dose, 500 mg dose of CTM, or placebo twice per day. Objective clinical measures and lab markers were assessed, and the results indicated that CTM improved outcome measures and maintained normal inflammatory balance.9 CTM’s

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†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.

Originally from Ortho Molecular Products Traumeric. Adapted by SOPHIA Natural Health Center.
bioactives promote advanced GI mucosal health,6-8
intestinal permeability,10 increase microbiome
diversity11 and balance immune responses to
lipopolysaccharides (LPS).12

Bromelain†
Bromelain is a mixture of enzymes found in the stem
of the pineapple (Ananas comosus) that exhibit
proteolytic characteristics. Bromelain supports
musculoskeletal health and inflammatory balance
through a variety of mechanisms.13 Cell studies
demonstrate bromelain locally modulates plasma
kinins and fibrin/fibrinogen proteins via MMP, VEGF,
bFGF, and EGF activity which all contribute to normal
vascular and blood supply to cartilage.13,14 Bromelain
also supports the chondrocyte’s normal cell cycle
via the p53, NFkB and Bcl-2 pathways, and balances IL-
1B, IL-6, INF-γ, TNF-a cytokines via PGE-2 and COX2
activity during normal local immune responses.13,14
Clinically, bromelain is ideal for normal joint health,
specifically for athletes, and age-related
musculoskeletal challenges. A randomized, double-blinded,
placebo-controlled study performed on 176 boxers
found that bromelain supported exercise recovery
with notable improvements on the face and orbits,
lips, ears, chest and arms in four days.15 A recent
randomized clinical study published in Rheumatology
and Orthopedic Medicine, compared standard medical
therapies to proteolytic enzyme therapy in
74 patients with acute joint challenges. Patients were
evaluated with joint outcome measures, acute phase
labs, and liver and kidney markers. The results showed
that bromelain supported normal inflammatory
responses and normal liver and kidney function.16
Studies have also looked at bromelain’s role in
supporting surgical procedures.17 Additional benefits
of bromelain include supporting sinus health, as well
as the health of the GI system.18,19

Quercetin†
Quercetin is a powerful antioxidant flavonoid in plants
including oak trees, onions and tea. Quercetin has
been shown to enhance the absorption of curcumin20
supports normal immune and inflammatory
responses,21,22 stimulates mitochondrial biogenesis21
and supports peripheral nerve and
spinal cord signaling.23 Cell studies show quercetin
inhibits COXs and LOX enzymes which produce
prostaglandins and leukotrienes; LPS-induced TNF-a, IL-
8, IL-1a release; prevents mast cell release of histamine
and inhibits adhesion molecules such as VCAM-1.21
Similar to turmeric quercetin has also been shown to
support barrier function in the intestines,24,25 modulate
NFkB, MAP kinases and inhibit hyaluronidases and
MMPs, which are degradatory connective tissue
enzymes.21 In mice studies, quercetin was shown to
decrease acute exercise induced pain in the muscles and
spinal cord.26,27

Rutin†
Rutin is a flavonol found abundantly in plants such as
apples, tea, buckwheat and passionflower. A number of
pharmacological activities show rutin supports a normal
inflammatory process, acts as a potent antioxidant, and
displays cytoprotective, vasoprotective, neuro-
protective, and cardioprotective activity. 28 Rutin also
synergistically enhances endogenous antioxidants such
as glutathione and exogeneous antioxidant herbs and
flavonoids in combination.29 In mice studies rutin has
also been found to stimulate mitochondrial biogenesis in
muscle via AMPK activation.30 Rutin supports connective
tissue health by inhibiting the enzymes hyaluronidase,
collagenase, LOX and COXs, which all contribute to the
degradation of connective tissue.31 A meta-analysis of six
randomized controlled trials published in the Journal of
Pain Research, compared 270 knee patients who
received a combination of rutin and bromelain (OEC) to
266 standard patients who received standard medical
therapy. The authors found OEC to be comparable for
efficacy while tolerable and safe.32

Directions
2 or more capsules per day or as recommended by
your health care professional.

Does Not Contain
Gluten, corn, yeast, artificial colors and flavors.

Caution
Do not consume this product if you are pregnant or
nursing. Consult your physician for further information.

†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


2. Gopi and George, Cell Culture Study on the Effects of Cureit - A Novel Bio Available Curcumin on Boosting Phagocyte Mediated Immunity


