Immune & Inflammation Support

ANTI-INFLAMMATORY™

Inflammation is widely recognized as being the underlying predisposition in both acute conditions as well as in chronic degenerative diseases. If the immune system does not have the ability to suppress inflammation, illness, disease and premature aging are often imminent. A study of a generally healthy elderly population found that those individuals with the highest levels of C-reactive protein and interleukin 6 (two markers of systemic inflammation) had a 260% higher mortality rate, within a 4-year time frame. Common non-steroidal anti-inflammatory drugs (NSAID’s), as well as steroids (prednisone), interfere with the body’s immune response and can lead to serious side effects. Mountain Peak Nutritionals® recognized the need for a safe and effective anti-inflammatory that could adequately address inflammation. Our formulation includes the most clinically tested and scientifically recognized nutritional ingredients that combat the complications of inflammation, without the dangerous side effects often caused by conventional anti-inflammatory pharmaceuticals.

INGREDIENTS:

Bromelain
Bromelain is a proteolytic enzyme derived from pineapple that is a potent anti-inflammatory. Mountain Peak Nutritionals® uses 250 mg of the highest potency available of bromelain (2400GDU/gm per capsule). Bromelain blocks certain pro-inflammatory metabolites that accelerate and worsen the inflammatory process. In vitro research has shown that bromelain decreases migration of neutrophils to sites of acute inflammation, and in vivo bromelain has generated a 50-85% reduction in neutrophil migration (1). Doses of 200 mg have proven to be an efficacious alternative to NSAIDS (2). Bromelain is also approved by the German Commission E for the treatment of inflammation.

Boswellia
Boswellia (aka Indian Frankincense) is an Ayurvedic herb from a large branching tree found throughout India and Nepal. The principle constituents of Boswellia are boswellic acid, and alpha- and beta-boswellic acid, all of which have anti-inflammatory properties (3). Boswellic acids inhibit 5-lipoxygenase and leukotriene synthesis, and inhibit leukocyte elastase, which are the likely mechanisms for its anti-inflammatory properties. The Boswellia extract MPN uses in our Anti-Inflammatory™ formula is standardized to contain 65% boswellic acids.

Curcumin (Meriva®)
Turmeric’s major active constituents are curcuminoids including curcumin (diferuloylmethane), a yellow pigment. Its anti-inflammatory activity appears to inhibit cyclooxygenase-2 (COX-2), prostaglandins and leukotrienes (4). The body’s absorption of curcumin is rather weak when ingested orally (5). Anti-Inflammatory™ formula contains Meriva® which uses phytosome technology to combine curcumin with phosphatidylcholine. Pharmacokinetic comparison studies show Meriva® to have up to a 20-fold improvement in bioavailability, versus a standardized 95% turmeric extract (6).

**Supplement Facts**

<table>
<thead>
<tr>
<th>Serving size: 1 capsule</th>
<th>Servings per container: 90</th>
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</thead>
<tbody>
<tr>
<td>Amount per serving</td>
<td>%DV</td>
</tr>
<tr>
<td>Bromelain (2400 GDU/gm)</td>
<td>250 mg</td>
</tr>
<tr>
<td>Boswellia serrata extract (65% boswellic acids) (gum resin)</td>
<td>100 mg</td>
</tr>
<tr>
<td>Devil’s Claw extract (Harpagophytum procumbens) (4:1) (root)</td>
<td>100 mg</td>
</tr>
<tr>
<td>Ginger extract (Zingiber officinale) (5% gingerol) (root)</td>
<td>100 mg</td>
</tr>
<tr>
<td>Turmeric (rhizome) (Meriva®)</td>
<td>100 mg</td>
</tr>
<tr>
<td>Quercetin</td>
<td>75 mg</td>
</tr>
<tr>
<td>Protease (500,000 HUT/gm)</td>
<td>50 mg</td>
</tr>
<tr>
<td>Rutin</td>
<td>50 mg</td>
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<tr>
<td>Serrapeptase (as Serrazimes 600,000 U/gm)</td>
<td>10 mg</td>
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* Daily Value not established.

Other ingredients: vegetarian capsules (hypromelllose, purified water)

Meriva® is a trademark of Indena S.p.A.

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.
Devil's Claw
Devil's claw is a plant native to southern Africa and contains high concentrations of iridoid glycosides, including harpagide and procumbide, but primarily harpagoside. Devil's claw appears to inhibit COX-2 and nitric oxide synthetase, a modulator of inflammation (7). A study published in the journal Rheumatology compared devil's claw extract providing 60 mg harpagosides a day and 12.5 mg a day of the anti-inflammatory Vioxx (now off the market) for 6 weeks in 79 patients with active exacerbation of low back pain. Devil's claw was shown to be as effective as Vioxx in reducing pain and inflammation. A 4:1 extract of Devil's claw is utilized in our formula because harpagoside is the primary constituent and a 4:1 extract provides four times the amount of this valuable anti-inflammatory.

Ginger Root
Ginger contains active constituents known as gingerol, gingerdione and shogaol found in the rhizome and root. These constituents have a variety of pharmacological properties including anti-inflammatory, analgesic, antitussive, antipyretic, sedative, antibiotic, weak antifungal, and other properties (8). Researchers report that gingerols appear to inhibit cyclooxygenase (COX) and lipoygenase pathways (9).

Quercetin and Rutin
Quercetin and rutin are two potent flavonoids. The most common form of quercetin is rutin, in which quercetin is bound to a glucose-rhamnose moiety. The anti-inflammatory effects of quercetin are likely due to inhibition of the production and activity of leukotrienes and prostaglandins and also inhibition of histamine release by basophils and mast cells (10). Research further shows quercetin slows cyclooxygenase (COX-2) production (11). Rutin has been reported to decrease capillary fragility and permeability.

Serrapeptase and Protease
Enzymes are proteins that facilitate chemical reactions in living organisms and are required for every single chemical action that takes place in our body. Protease and serrapeptase are both potent enzymes that exhibit strong anti-inflammatory properties. Inflammation is a natural response of the body to injury. However, excessive inflammation retards the healing process. These two proteolytic enzymes reduce inflammation by neutralizing the biochemicals of inflammation (i.e., bradykinins and pro-inflammatory eicosanoids) to levels at which the synthesis, repair and regeneration of injured tissue can take place (12).

Patients: Consult with your healthcare professional for the proper dosage and use of this formula.

For more information about this and other Condition Specific Formulas® please visit our website at:

www.mountainpeaknutritionals.com

REFERENCES:
5. Mol Pharmaceutics;2007;4(6) 807-18
6. Chemother Pharmacol 2002;60: 171-77