Inflammatone™

designs for health
Science first.

Natural Support for Inflammatory Control

THIS INFORMATION IS PROVIDED FOR THE USE OF PHYSICIANS AND OTHER LICENSED HEALTH CARE PRACTITIONERS ONLY. THIS INFORMATION IS INTENDED FOR PHYSICIANS AND OTHER LICENSED HEALTH CARE PROVIDERS TO USE AS A BASIS FOR DETERMINING WHETHER OR NOT TO RECOMMEND THESE PRODUCTS TO THEIR PATIENTS. THIS MEDICAL AND SCIENTIFIC INFORMATION IS NOT FOR USE BY CONSUMERS. THE DIETARY SUPPLEMENT PRODUCTS OFFERED BY DESIGNS FOR HEALTH ARE NOT INTENDED FOR USE BY CONSUMERS AS A MEANS TO CURE, TREAT, PREVENT, DIAGNOSE, OR MITIGATE ANY DISEASE OR OTHER MEDICAL CONDITION.

New & Improved Inflammatone

Designs for Health made this popular and effective formula even better. Why? Compelling research convinced us to make the following changes:

- Increased dosages per capsule of the main anti-inflammatory herbs boswellia, turmeric and ginger[3,4]
- Additional ingredients with anti-inflammatory action:
  - the antioxidant/antiglycating flavonoid rutin[5]
  - the powerful antioxidant/anti-inflammatory compounds rosemary and resveratrol[6,7]
  - stronger, more targeted proteolytic enzyme mix with the addition of trypsin, chymotrypsin and Serrazymes™

Supplement Facts

Serving Size 2 capsules
Serving per container 30

Amount Per Serving	% Daily Value	Amount Per Serving	% Daily Value
n·zimes® proprietary blend	222 mg *	Ginger (*Zingiber offinale)* (root) [standardized to contain 5% gingerols]	200 mg *
Protease 6.0 (Concentrate)	50000 HUT *	Quercetin	75 mg *
Protease 4.5	40000 HUT *	Rutin	75 mg *
Trypsin 1:150	25 mg *	Rosemary (*Rosemarinus officinalis*)(aerial)	50 mg *
Serrazimes®	10000 U *	Polygonum cuspidatum root extract [standardized to contain 20% resveratrol]	15 mg *
Chymotrypsin	2 USP Units *		
Tumeric (*Curcuma longa*)(root) [standardized to contain 95% curcumin]	200 mg *		
Boswellia (*Boswellia serrata*)(resin) [standardized to contain 60% boswellic acid]	200 mg *		

*Daily Value not established

Other Ingredients: Rice bran, vegetable cellulose, and water.

Inflammatone ingredients target many metabolic pathways of the inflammatory response[1,2]:

1. Significant inhibition of the COX-2 (cyclooxygenase) enzyme, which produces prostaglandins PG-E2 (inflammatory) and thromboxanes TX-A2 (vasoconstrictive and increases platelet aggregation). The COX-2 inhibition is achieved by turmeric, ginger, quercitin and resveratrol. The PG-E2 is also known to increase cell proliferation, which may be beneficial for normal tissue growth and wound healing but not for cancer promotion. That is why inflammation was associated in many studies with the risk of cancer development and underscores the importance of keeping inflammation under control.

2. Additional inhibition of the expression of the COX-2 enzyme by antioxidant effects on NF-Kappa B, which is one of the regulators of the cytokine (inflammatory) response. This is achieved by the antioxidant action of turmeric, quercitin, rutin, rosemary and resveratrol. This is a preferred mechanism of inhibition because it acts upstream in the metabolic pathway by reducing oxidative stress, which can be one of the causes of inflammation. So this is a preventive action as opposed to blocking inflammation after it has started.

3. Inflammatone ingredients have a minimal inhibition of the COX-1 enzyme which has a maintenance function for a number of tissues in the body, including intestinal cells. This is unlike aspirin or NSAIDs which are both very irritating to the GI tract.

4. Inflammatone has a mild anti-thrombotic (blood thinning) effect which could result in increased cardiovascular risk protection, similar to that of aspirin yet without aspirin's severe GI irritation. The blood thinning effect of Inflammatone is due to the following:

- mild COX-1 inhibition by ginger and resveratrol
- mild anti-coagulating activity of turmeric and quercitin
- fibrinolytic effect of the proteolytic enzymes, especially the Serrazymes™

Cancer metastasis is known to be mediated by increased platelet aggregation, so any agent that decreases it may reduce the risk of cancer proliferation.[8]

5. Inflammatone may be superior to selective COX-2 inhibitors like VIOXX and Celebrex due to the fact that, by design, they are lacking any COX-1 inhibiting activity, which affects platelet aggregation. That is why drugs like VIOXX and Celebrex were shown in studies to increase the risk of thrombosis and overall CVD risk. This is especially important for patients with low omega-3 fatty acid stores.

6. Inflammatone may be superior to selective COX-2 inhibiting drugs due to the fact that in addition to inhibiting COX-2, some Inflammatone ingredients also inhibit the LOX (Lipooxygenase) enzyme. This enzyme is normally producing Leukotrienes (LT-4 series) which cause broncho-constriction and vasoconstriction. The LOX inhibition is achieved by boswellia, turmeric, ginger, quercitin and resveratrol.

7. Inflammatone may be superior to the typical anti-asthma drugs that are only leukotriene receptor blockers. This is because Inflammatone reduces the formation of leukotrienes (LT) in the first place as opposed to just blocking certain LT receptors, as the drugs do.

8. One other important reason Inflammatone may be better than the available selective anti-inflammatory drugs is that it combines many benefits in one, blocking many pathways at the same time. When any one drug is given, it only blocks one Arachidonic Acid (AA) pathway, for example VIOXX and Celebrex block only COX-2 which causes an overflow of AA into the other pathway, the LOX-1. That is why COX-2 inhibiting drugs are known to have side effects such as increased incidence of asthma.

Inflammatone Competitive Advantages

- Synergistic Formula
- Inhibits Inflammatory Processes in Multiple Metabolic Pathways
- Good Safety Record and Extensive Research on all Ingredients

Designs for Health chose not to include the following ingredients for these reasons:

- Hops was shown to cause urticaria and other allergic effects
- Oleanolic acid was shown to increase insulin production similar to glucose
- Cayenne pepper was shown to cause GI irritation and leaky gut

9. Some of the Inflammatone ingredients were shown to block Phospholipase A2 (turmeric, ginger) or TNF-alpha (Quercitin) which is similar to what corticosteroids do, but without their side effects.

Additional benefits: rutin reduces glycation, Serrazymes™ improve the efficacy of antibiotic treatment and relieve sinus congestion via mucolytic effects. Look for an extensive description of the many benefits of resveratrol such as that on collagen, cardiovascular disease and others in our new upgraded Grape Seed Supreme flyer. Inflammatone works both on an empty stomach and with food but it has slightly different effects:

a. On an empty stomach, the proteolytic enzymes are absorbed partially in the circulation and clear out immune complexes that accumulate in joints, airways, intestinal tract, and any tissue that had already started the inflammatory process. Once absorbed in the blood stream, these proteolytic enzymes have a fibrinolytic effect, thus reducing blood clot formation.
b. When taken with food, the proteolytic enzymes will aid in protein digestion which is very likely to reduce certain protein's allergenic potential. This will prevent an inflammatory response that might result from undigested peptides like gluten, casein, egg, soy, etc. This will also tend to reduce the total body inflammatory load.

The array of proteolytic enzymes contained in Inflammatone were specifically chosen to have good activity over a very wide range of pH, characteristic of the stomach and intestinal environment.

Research shows that inflammation is associated with many serious disorders. By controlling the inflammatory processes in multiple metabolic pathways, Inflammatone can be helpful for most, if not all of your patients, especially for post-operative healing[9] *(see our Pre and Post Surgery Protocols in the Designs for Health Online Library at* ***www.designsforhealth.com****).*

References

1. FitzGerald GA, Patrono C. The coxibs, selective inhibitors of cyclooxygenase-2. N Engl J Med. 2001 Aug 9;345(6):433-42
2. De Caterina R, Zampolli A. From asthma to atherosclerosis--5-lipoxygenase, leukotrienes, and inflammation. N Engl J Med. 2004 Jan 1;350(1):4-7
3. Ammon HP, Safayhi H . Mechanism of antiinflammatory actions of curcumine and boswellic acids. J Ethnopharmacol. 1993 Mar; 38(2-3): 113-9.
4. Kiuchi F, Iwakami S . Inhibition of prostaglandin and leukotriene biosynthesis by gingerols and diarylheptanoids. Chem Pharm Bull (Tokyo). 1992 Feb; 40(2): 387-91.
5. Guardia T, Rotelli AE . Anti-inflammatory properties of plant flavonoids. Effects of rutin, quercetin and hesperidin on adjuvant arthritis in rat. Farmaco. 2001 Sep;56(9):683-7.
6. Manna SK, Mukhopadhyay A. Resveratrol suppresses TNF-induced activation of nuclear transcription factors NF-kappa B, activator protein-1, and apoptosis: potential role of reactive oxygen intermediates and lipid peroxidation. 1: J Immunol. 2000 Jun 15; 164(12): 6509-19.
7. Lo AH, Liang YC . Carnosol, an antioxidant in rosemary, suppresses inducible nitric oxide synthase through down-regulating nuclear factor-kappaB in mouse macrophages. Carcinogenesis. 2002 Jun;23(6):983-91.
8. Surh YJ. Anti-tumor promoting potential of selected spice ingredients with antioxidative and anti-inflammatory activities: a short review. Food Chem Toxicol 2002 Aug;40(8):1091-7
9. Satoskar RR, Shah SJ . Evaluation of anti-inflammatory property of curcumin (diferuloyl methane) in patients with postoperative inflammation. Int J Clin Pharmacol Ther Toxicol. 1986 Dec; 24(12): 651-4

See additional research references, including many full abstracts, posted on our website at www.designsforhealth.com.
References also available upon request. Please send an email requesting Inflammatone studies to info@designsforhealth.com.