

JOINT SUPPORT

Supports

Joint Health and Mobility*

DOSAGE

Liquid Phyto Caps: 2 capsules, 2-3 times daily

DURATION OF USE

3 months

BEST TAKEN

After meals, with water



Supplement Facts

Serving Size 2 Capsules
Servings Per Container 30

Calories per serving - 20

TOTAL EXTRACTS: 532 mg

Turmeric root (*Curcuma longa*) ▲
standardized to 19.8 mg Curcumins 80 mg

Proprietary Synergistic Blend: 532 mg

Devil's Claw root + (*Harpagophytum procumbens*), Green Tea ▲
(*Camellia sinensis*), MSM (Methylsulfonyl methane), Boswellia resin
+ (*Boswellia serrata*), Brown Seaweeds + (*Padina pavonica*), Camu
Camu berry freeze dried + (*Myrciaria dubia*), Chaga Mushroom +
(*Inonotus obliquus*), Hawthorn berry ▲ (*Crataegus* spp.), Ginger root,
Supercritical CO₂ Extract + (*Zingiber officinale*), Hops flower,
Supercritical CO₂ Extract + (*Humulus lupulus*), Rosemary herb,
Supercritical CO₂ Extract + (*Rosmarinus officinalis*)

Total Dry Herb Equivalency: 5,040 mg

Other ingredients: Soy lecithin, vegetable glycerin, vegetable cellulose (capsule).

▲ = Certified Organic Ingredient + = Ecologically Harvested

Manufactured by Gaia Herbs in our Oregon Tilth
Certified Organic Processing Facilities

DESCRIPTION OF FORMULA

Joint Support maintains optimal levels of the protective synovial fluid between the joints and maintains the health of cartilage. Joint Health also enhances immune system function and helps to support the normal functioning of cytokines and prostaglandins. These compounds are essential for maintaining normal function in nearly all parts of the body, including the joints and the musculoskeletal system.*

The body normally and naturally responds to stress by activating what is known as the inflammatory cascade. Nuclear factor-kB (NF-kB) has generated considerable attention as a promoter of the inflammatory cascade and COX 2 enzyme activity, which causes inflammation in the joints. NF-kB is a family of factors in the body that regulate immune and inflammatory responses. Inhibition of this family reduces production of the pro-inflammatory prostaglandins. However, the NF-kB system is essential to immune function so it is important to target only its cascade manifestations.*

Joint Health supports the appropriate expression of COX 2 enzyme activity by neutralizing free radicals that stimulate NF-kB to initiate the inflammatory response. Other agents have selectively inhibited COX 2 enzyme activity throughout the body, which may cause health challenges like compromised heart function, while Joint Health works to modulate COX 2 activity without compromising heart function.*

Joint Health promotes healthy communication between the immune system and strained cells, nourishing the body's natural shielding response to environmental stressors and protecting joint tissue against challenge from the body's own physiologic responses. These responses include the body's natural inflammation response and excess fluid in the joints.*

Brown Algal Seaweeds contain substances that stimulate the synthesis of glycosaminoglycans such as hyaluronic acid and chondroitin, recognized for their unique ability to encourage healthy joint tissue. Brown Algal Seaweeds also offer an active, highly absorbable form of calcium that protects joints from the damaging effects of bone resorption, associated with loss of calcium, collagen and other bone matrix components.*

Devil's Claw is a plant from southern Africa valued for its benefit in maintaining healthy joints. This herb contains iridoid glycoside constituents that maintain normal fluid levels in the interstitial spaces of tissues that encase the joints, encouraging overall joint health. Further, the compounds in Devil's Claw function to promote muscle tissue health.*

Turmeric root is a potent modulator of healthy prostaglandin and thromboxane formation. It maintains and supports healthy joints and contains compounds that provide antioxidant protection against the damaging effects of toxins and other environmental stressors. Together with ginger and rosemary, this herb works to suppress the NF-kB family of factors that can initiate the body's natural inflammatory cascade.*

Boswellia is an Ayurvedic herb that supports a healthy inflammation response and encourages optimal joint function.*

Camu Camu offers a potent vitamin C complex that contains bioflavonoids, anthocyanins and other important co-factors to support healthy immune function and neutralize free radicals associated with inflammatory response and joint health.*

Green tea promotes healthy communication between the immune system and strained cells, supporting the body's natural shielding response to environmental stressors such as free radicals. It has an inflammatory-cascade normalizing action that promotes the healthy metabolism and activity of

arachidonic acid, prostaglandins, leukotrienes and platelets. When joint tissue is stressed, these compounds, if not maintained at healthy levels, can contribute to the body's natural inflammatory cascade.*

Hawthorn Berry maintains and supports healthy joints and contains compounds that provide antioxidant protection against the damaging effects of environmental toxins and other stressors. Hawthorne berries promote healthy fluid levels in the body, reducing excessive levels in the joints that can compromise function.*

Chaga mushroom supports healthy immune function in a similar fashion to other popular health supporting mushrooms such as shiitake and Maitake. What sets this particular mushroom apart is its affinity for birch trees in northern Scandinavia, Russia and Canada. It derives its nutrients directly from living birch trees, rather than from the ground, and consequently is particularly high in betulinic acid (also referred to as betulin). This phytochemical, isolated from birch trees, demonstrates significant immune-supporting actions and has an affinity for tissues that have a low pH. Typically, unhealthy joint tissue will maintain a lower pH, attracting this potent phytochemical to that area; supporting healthy immune function where it is needed most.*

Hops remove water from the body, by effectively increasing urinary outflow and maintaining healthy fluid levels in the joints. Hops, also inhibits COX 2 activity associated with joint health.*

Rosemary leaf is a natural antioxidant that helps reduce free-radical damage that compromises the health of joints. Together with ginger and turmeric, this herb works to address the NF-kB family of factors that can initiate the body's natural inflammatory cascade.*

Ginger rhizome is a powerful botanical promoter of healthy prostaglandin and thromboxane activity; compounds associated with inflammation and immune function. Further, this highly valued herb promotes healthy circulation, vital joints, and a proper response to environmental stress. Together with turmeric and rosemary, this herb works to suppress the NF-kB family of factors that can initiate the body's natural inflammatory cascade.*

MSM is a naturally occurring sulfur compound found within cartilaginous tissues, offering the body an efficient means of maintaining and rebuilding the joint matrix structure.*

SAFETY EVALUATION/CONTRAINDICATIONS

Before using this product, talk with your healthcare professional if you suffer from a medical condition. Please visit www.gaiaherbs.com to obtain information regarding potential contraindications and/or side effects that may be associated with herbs found in this formula.*

KNOWN DRUG INTERACTIONS

Before using this product, talk with your healthcare professional if you take any medications. Please visit www.gaiaherbs.com to

obtain information regarding any possible drug interactions that may be associated with herbs found in this formula.*

REFERENCES

- Adcocks C, Collin P, Buttle DJ. Catechins from green tea (*Camellia sinensis*) inhibit bovine and human cartilage proteoglycan and type II collagen degradation in vitro. *J Nutr.* 2002 Mar;132(3):341-6.
- Aggarwal BB, Shishodia S. Suppression of the Nuclear Factor- κ B Activation Pathway by Spice-Derived Phytochemicals: Reasoning for Seasoning. *Ann N Y Acad Sci.* 2004 Dec;1030:434-41.
- Bone ME, Wilkinson DJ, Young JR, et al. Ginger root—a new antiemetic: The effect of ginger root on postoperative nausea and vomiting after major gynaecological surgery. *Anaesthesia* 1990;45:669-71.
- Chantre P, Cappelaere A, Leblan D, et al. Efficacy and tolerance of *Harpagophytum procumbens* versus diacerhein in the treatment of osteoarthritis. *Phytomedicine* 2000;7:177-83.
- Chopra A, Lavin P, Patwardhan B, Chitre D. Randomized double blind trial of an Ayurvedic plant derived formulation for treatment of rheumatoid arthritis. *J Rheumatol* 2000;27:1365-72.
- Chrubasik S, Junck H, Breitschwerdt H, et al. Effectiveness of *Harpagophytum* extract WS 1531 in the treatment of exacerbation of low back pain: A randomized placebo-controlled double-blind study. *Eur J Anaesthesiol* 1999;16:118-29.
- Fujita T. [Active absorbable algal calcium (AAACa) changes calcium paradigm.] [Article in Japanese] *Clin Calcium* 2005 Jan;15(1):87-93.
- Fujita T. Active Absorbable Algal Calcium (AAA Ca): new Japanese technology for osteoporosis and calcium paradox disease. *Assoc Physicians India* 2004 Jul;52:564-7.
- Kawakishi S, Morimitsu Y, Osawa T. Chemistry of ginger components and inhibitory factors of the arachidonic acid cascade. In: Ho CT, Osawa T, Huang MT, Rosen RT (eds) *Food Phytochemicals for Cancer Prevention vol 2: Tea, Spices and Herbs.* Washington, DC: American Chemical Society, 1994:244-50.
- Kimmatkar N, et al. Efficacy and tolerability of *Boswellia serrata* extract in treatment of osteoarthritis of knee—a randomized double blind placebo controlled trial. *Phytomedicine* 2003 Jan;10(1):3-7.
- Kiuchi F, Iwakami S, Shibuya M, et al. Inhibition of prostaglandin and leukotriene biosynthesis by gingerols and diarylheptanoids. *Chem Pharm Bull* 1992;40:387-91.
- Lemay M, et al. In vitro and ex vivo cyclooxygenase inhibition by a hops extract. *Asia Pac J Clin Nutr.* 2004;13(Suppl):S110.
- Lo AH, et al. Carnosol, an antioxidant in rosemary, suppresses inducible nitric oxide synthase through down-regulating nuclear factor- κ B in mouse macrophages. *Carcinogenesis.* 2002 Jun;23(6):983-91.
- Methylsulfonylmethane(MSM). Monograph. *Altern Med Rev.* 2003 Nov;8(4):438-41.
- Tripathi YB, et al. Anti-inflammatory properties of BHUx, a polyherbal formulation to prevent atherosclerosis. *Inflammopharmacology* 2004;12(2):131-52.

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