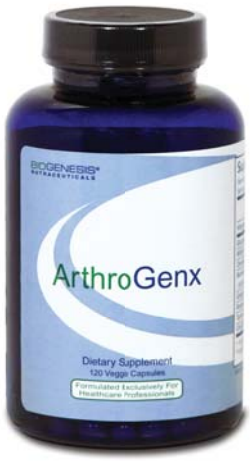

BIOGENESIS® NUTRACEUTICALS, INC

ArthroGenx

Serving Size 4 capsules
Servings Per Container 30

	Amount Per Serving
Niacin (niacinamide)	600 mg
Glucosamine sulfate (2KCl)	1500 mg
MSM (methyl sulfonyl methane)	500 mg
Chondroitin sulfate	250 mg
Boswellia gum extract (*Boswellia serrata*)(70% boswellic acids)	100 mg
Ginger root extract (*Zingiber officinale*)(5% gingerols)	50 mg
Rosemary leaf extract (*Rosmarinus officinalis*)(6% rosmarinic acid)	50 mg
Turmeric rhizome extract (*Curcuma longa*)(95% curcumin)	50 mg
Cetyl myristoleate	30 mg

OTHER INGREDIENTS: Cellulose, mct, silica. Contains crustacean shellfish (from crab and shrimp).

SUGGESTED USE: As a dietary supplement, take 2 capsules two times per day or as directed by your healthcare professional.

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ARTHROGENX

SYNERGISTIC BLEND SUPPORTING MUSCULOSKELETAL HEALTH

- **Nutritionally promotes joint health and function**
- **Nutritive support for joint regeneration**
- **Supports healthy range of motion**
- **Helps reduce symptoms of pain and stiffness**
- **Promotes relief from overworked joints**

GLUCOSAMINE SULFATE is one of several naturally occurring amino sugars that are necessary for the rebuilding and healthy maintenance of connective tissue, including tendons, ligaments, cartilage, and bone matrix. Increased age is associated with glycation of cartilage that reduces the production of proteoglycans involved as joint lubricants. Glucosamine is an essential component of proteoglycans and may be nutritionally required to re-establish proteoglycan levels. A meta-analysis of fifteen double-blind, placebo-controlled clinical trials revealed that glucosamine sulfate was superior to placebo in all fifteen studies. Patients receiving glucosamine sulfate have a gradual and progressive reduction in joint pain and tenderness, as well as improved range of motion and walking speed. Glucosamine sulfate is stabilized with either sodium chloride or potassium chloride. Our glucosamine product is stabilized with potassium chloride to avoid an additional source of sodium for patients.

CHONDROITIN SULFATE is a glycosaminoglycan that is a major component of cartilage; it is rich in sulfur and related to glucosamine. It helps hold water and nutrients in joint tissue and enhances the circulation of nutrient molecules in cartilage. A meta-analysis performed on seven randomized double-blind clinical trials using chondroitin sulfate showed it to be significantly superior to placebo with respect to the Lequesne index and other pain scores.

MSM (METHYL SULFONYL METHANE) is a source of organic sulfur found naturally in the human body. MSM is a stable metabolite of DMSO and is 34% elemental sulfur. It supports many functions, including maintenance of connective tissue health. Replacement and repair of collagen basement membrane, procollagen, and collagen are dependent on an adequate dietary supply of sulfur. MSM has been found to lessen destructive changes in joints.

TEL: 425.487.0788 / 866.272.0500 FAX: 425.485.3518 www.bio-genesis.com

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CETYL MYRISTOLEATE is a naturally occurring ester of a myristoleic acid that is commercially obtained from palmitic acid. An investigation on mice regarding joint pain and inflammation led to the discovery of cetyl myristoleate as an effective anti-inflammatory agent. In a study of rats injected with a joint inflammatory producing material, the cetyl myristoleate group was healthy and had virtually no signs of joint inflammation. The control group was unhealthy and had severe swelling. Cetyl myristoleate is thought to have several mechanisms of action: (1) serves as a lubricant for the joints; (2) functions as an immune system modulator; and (3) mediates the inflammatory process.

NIACINAMIDE has been used for joint pain and stiffness relief for the past fifty years. Recent evidence shows that niacinamide is effective in suppressing the inflammatory cascade and in modifying gene expression that affects joint tissue integrity. It does this partly by inhibiting PARS, a repair enzyme activated by DNA strand breaks caused by reactive oxygen species. PARS activation leads to an energy-depleting cycle that depletes the cell of NAD and ATP, causing dysfunction. In a double-blind, placebo-controlled study, patients with joint pain using niacinamide had global joint discomfort improved by 29%. Pain was worsened by 10% in placebo subjects. In addition, joint mobility of niacinamide subjects increased by 4.5 degrees more than controls.

BOSWELLIA SERRATA GUM EXTRACT contains boswellic acids that have been used for centuries by Ayurvedic medicine for joint pain and other inflammatory conditions. Boswellic acids modulate the 5-lipoxygenase pathways to leukotriene synthesis thereby promoting pain reduction.

GINGER *(Zingiber officinale)* is known to be a potent inhibitor of inflammatory prostaglandins and thromboxanes. In one study, patients experiencing joint discomfort reported significant pain relief following the consumption of ginger.

TURMERIC *(Curcuma longa)* contains curcumin, one of the active ingredients in turmeric. It inhibits free radical damage and may reduce inflammation. Curcumin has been shown to significantly reduce paw inflammation in rats.

ROSEMARY *(Rosmarinus officinalis)* has a number of active components that inhibit lipid peroxidation and superoxide generation. Rosmarinic acid has a suppressive effect on inflammation by inhibiting the complement pathway.