

Glucosamine Synergy®

4635 90 Capsules

NON
DAIRY

NON
SOY

BONE, JOINT,
AND MUSCLE

JOINT HEALTH

- Maintains healthy connective tissue*
- Supports the body's normal connective tissue repair process*

Warning: If pregnant or nursing, or have any health condition, consult your health care professional before using this product. Keep out of reach of children.

Supplement Facts

Serving Size: 1 Capsule

Servings per Container: 90

	Amount per Serving	%Daily Value
Manganese	1 mg	43%
Sodium	30 mg	1%
Glucosamine Sulfate	500 mg	†
Proprietary Blend	91 mg	†
Indian frankincense (<i>Boswellia serrata</i>), calcium lactate, nutritional yeast, carbamide, bovine bone, veal bone PMG™ extract, bovine liver, defatted wheat germ, bovine heart PMG™ extract, magnesium citrate, organic oat flour, inositol, organic pea vine juice powder, Spanish moss (<i>Tillandsia usneoides</i>), ascorbic acid, ribonucleic acid, organic beet (root), organic sweet potato, organic carrot, d-alpha tocopherol (vitamin E sunflower), bovine liver fat extract, bovine adrenal Cytosol™ extract, bovine kidney, bovine spleen, ovine spleen, organic reishi mushroom powder, organic shiitake mushroom powder, rice bran, sunflower lecithin powder, vitamin A palmitate, organic flaxseed oil, cyanocobalamin, and cholecalciferol.		

†Daily Value not established.

Other Ingredients: Gelatin, water, calcium stearate, manganese glycerophosphate, and dicalcium phosphate.

Contains: Wheat and shellfish (crab, shrimp).

Importance of Maintaining Joint Health

Bones and supportive connective tissue, including cartilage, are in a constant state of renewal and restoration. Poor diet, not enough exercise, and excessive stress contribute to strain on cartilage and associated tissues. Engaging in healthy lifestyle habits and adding beneficial compounds to the diet can help support joint health. Glucosamine Synergy combines glucosamine, *Boswellia serrata*, and manganese to help maintain healthy joint function.*

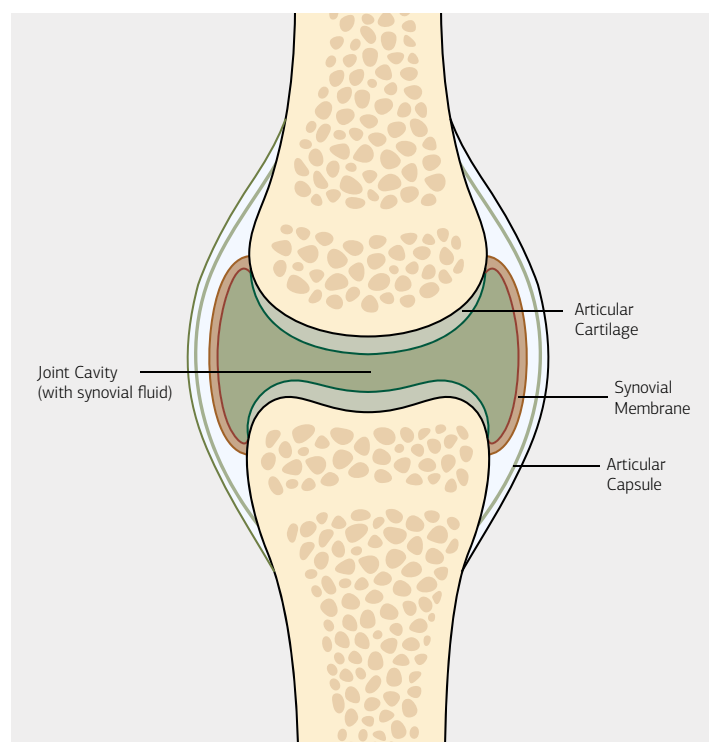


FIGURE 1: Glucosamine Synergy encourages healthy joint functioning by maintaining healthy connective tissue and supporting the body's normal connective tissue repair process*

Manganese

Manganese is an essential mineral with diverse functions in the body. It supports joints and connective tissue as a cofactor for glycosyltransferases, enzymes involved in bone formation and cartilage synthesis.¹ Glycosyltransferases produce glycosaminoglycans, which are components of proteoglycans.¹⁻³ Proteoglycans are important for bone formation and as components of the extracellular matrix of cartilage — the thick layer of strong, pliable connective tissue that covers the ends of bones to allow for efficient joint motion.

Manganese is also a critical component of the antioxidant enzyme manganese superoxide dismutase (MnSOD).¹ MnSOD helps control reactive oxygen species in cartilage chondrocytes, supporting healthy cartilage.⁴

One serving of Glucosamine Synergy is an excellent source of manganese (43% DV).

Boswellia Serrata

Boswellia serrata has been used historically for joint support in Ayurvedic medicine.⁴ Scientific evidence has verified its benefits in supporting a healthy inflammatory response in the joints.⁵ A meta-analysis of seven randomized controlled studies found that *Boswellia*, when used alone or in combination with other joint-supporting nutrients, was able to improve several measures of joint health and function.⁵ Mechanistically, extracts of *Boswellia* and boswellic acids have been found to support healthy inflammation through the modulation of the synthesis of pro-inflammatory enzymes and mediators.^{6,7} They have also been shown to significantly reduce glycosaminoglycan degradation in vivo.⁸

Glucosamine Sulfate

While manganese activates enzymes involved in the synthesis of proteoglycans, glucosamine is involved in the rate-limiting step in proteoglycan production.⁹ Pre-clinical studies have demonstrated that glucosamine can enhance the production of cartilage matrix components, as well as prevent collagen degradation in chondrocytes by inhibiting lipoxidation reactions and protein oxidation.^{10,11} While clinical studies have produced mixed results, possibly due to the use of different preparations of glucosamine, a meta-analysis of 15 randomized, double-blind, placebo-controlled human studies found that supplementation with glucosamine resulted in positive changes.¹²

One serving of Glucosamine Synergy contains 500mg of glucosamine sulfate — the supplemental form of glucosamine.

Why Suggest Glucosamine Synergy from Standard Process for Your Patients?

Glucosamine Synergy contains many of the same ingredients as Ligaplex II, with the added benefit of glucosamine and *Boswellia serrata* to help maintain healthy joint function and support connective tissue. Glucosamine and *Boswellia* may also help relieve discomfort in affected areas after strenuous exercise*

Since 1929,
Standard Process
has been changing
lives with our whole
food philosophy.

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