# Glucosamine Synergy Combines *Boswellia serrata* and Protomorphogen™ Extracts With Vitamins, Minerals and Glucosamine to Help Maintain Healthy Joint Function

The connective tissue between any two bones creates a joint. Our bones are joined together in ways that depend upon movement and load bearing requirements. For example, our knees move differently than our shoulders. In order for the parts of our musculoskeletal system to move efficiently, the muscles, tendons, ligaments, cartilage, and bone must interact effectively with their neuromuscular partners. Joints are classified according to their structure and movement. Fibrous joints are immovable, cartilaginous joints are slightly moveable, and synovial joints are freely moveable. Synovial joints endure the greatest wear and tear and, as such, are constantly in some state of renewal and restoration. In order for these types of joints to remain fully functional, they require connective tissue to help keep them stable and lubrication to maintain durability. Synovial fluid provides lubrication to our freely moving joints. A thick layer of strong, smooth, and pliable connective tissue called cartilage covers the ends of bones to provide a uniform gliding surface for efficient joint motion. Healthy cartilage maintains elasticity and does not become rigid. When unprotected joint surfaces continually grind against each other, the joints cannot move efficiently or effectively.

### How Glucosamine Synergy Keeps You Healthy

#### Supports musculoskeletal system health

Glucosamine is an amino sugar, part of a carbohydrate that is made in the body and involved in forming nails, tendons, skin, eyes, bones, ligaments, and heart valves. Glucosamine sulfate is the supplemental form of glucosamine that can help the body in the normal repair and rebuilding of cartilage. Boswellia serrata extract can help maintain healthy joint tissue by inhibiting the activity of certain enzymes and the release of compounds called leukotrienes. Calcium helps keep bone tissue strong, assists in nerve impulse transmission, and is necessary for proper muscle growth and contraction-an important consideration in joint stabilization. Nutritional yeast contributes B-complex vitamins and inositol to encourage healthy brain and nerve function. It also provides minerals that help form bone tissue and support connective tissue repair and maintenance. Carbamide promotes the healthy osmotic transfer of tissue fluids to maintain healthy fluid levels in joints. Bovine glandulars and Protomorphogen™ and Cytosol™ extracts provide unique tissue support at the cellular level to encourage healthy cell maintenance and tissue antibody interaction. Manganese is needed for bone tissue growth and reproduction and helps form cartilage and synovial fluid in joints. Magnesium also assists in the formation of bone tissue and is necessary for calcium and potassium uptake. Vitamins A and E provide strong antioxidant protection. Vitamin A assists in bone formation, while vitamin E encourages tissue repair.†



Introduced in: 2000 Content: 90 Capsules

#### **Supplement Facts:**

Serving Size: 1 capsule Servings per Container: 90

%DV

Calories Manganese Glucosamine Sulfate

1 mg 50% 500 mg

(from Crab Shells)

Boswellia serrata Extract 60 mg

Boswellia serrata Extract 60 mg (65-70% Organic Acids)

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Glucosamine Synergy® 4635



## Glucosamine Synergy®

#### What Makes Glucosamine Synergy Unique

#### **Unique Product Attributes**

#### Multiple nutrients from a variety of plant and animal sources

- Supports connective tissue and the natural healing process in joints
- Extracts from bovine and ovine tissues provide nutrients and support the corresponding tissues in humans
- Vitamins, minerals, and nutrients from plants and animal tissues work synergistically for maximum effect+

#### Contains Protomorphogen™ extracts

- · Standard Process' unique manufacturing method of deriving tissue cell determinants from animal glands and organs
- · Help provide cellular support and rehabilitation in corresponding human tissues
- · Important antigenic properties of nucleoprotein-mineral determinants, the foundation of the product+

#### **Certified Organic Farming**

A healthy ecosystem is created by using organic farming techniques, such as rotating crops, fertilizing the soil with nutrient-rich cover crops and by-products from our processing, practicing strict weed control standards, and continually monitoring the health of our plants

- · Assures the soil is laden with minerals and nutrients
- Ensures plants are nutritionally complete and free from synthetic pesticides

#### **Unique Processing**

#### Upon harvesting, nutrient-rich plants are immediately washed and promptly processed

· Preserves nutritional integrity

#### Exclusive low-temperature, high-vacuum drying technique

· Preserves the enzymatic vitality and nutritional potential of ingredients

#### Not disassociated into isolated components

• The nutrients in Glucosamine Synergy are processed to remain intact, complete nutritional compounds

#### Degreed microbiologists and chemists in our on-site laboratories constantly conduct bacterial and analytical tests on raw materials, product batches, and finished products

• Ensures consistent quality and safety

#### Vitamin and mineral analyses validate product content and specifications

Assures high-quality essential nutrients are delivered

Studies on nutrients generally use large doses and these studies, some of which are cited below, are the basis for much of the

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#### Whole Food Philosophy

Dr. Lee challenged common scientific beliefs by choosing a holistic approach of providing nutrients through whole foods. His goal was to provide nutrients as they are found in nature-in a whole food state where he believed their natural potency and efficacy would be realized. Dr. Lee believed that when nutrients remain intact and are not split from their natural associated synergists-known and unknown-bioactivity is markedly enhanced over synthetic nutrients. Following this philosophy, even a small amount of a whole food concentrate will offer enhanced nutritional support, compared to a synthetic or fractionated vitamin. Therefore, one should examine the source of nutrients rather than looking at the quantities of individual nutrients on product labels.

Proprietary Blend: Calcium lactate. nutritional yeast, carbamide, bovine bone meal, veal bone PMG™ extract, bovine liver, defatted wheat (germ), bovine heart PMG™ extract, magnesium citrate, oat flour, calcium stearate, inositol, carrot (root) powder, pea (vine) juice, tillandsia powder (Tillandsia usneoides), ribonucleic acid, beet (root) powder, bovine spleen, ovine spleen, bovine adrenal Cytosol<sup>T</sup> extract, bovine kidney, mushroom powder, bovine liver fat extract, flaxseed oil extract, mixed tocopherols (soy), para-aminobenzoate, ascorbic acid, rice (bran), soybean lecithin, vitamin A palmitate, cellulose, cyanocobalamin, and cholecalciferol.

Other Ingredients: Gelatin, manganese glycerophosphate, water, colors, and calcium

Suggested Use: One capsule three times per day, or as directed.

Sold to health care professionals.

 $McCarty\,M.F, et\,al.\,\,2000.\,\,Sulfated\,gly cosamin ogly cans\, and\,glucosamine\,may\, synergize\, in\, promoting\, synovial\, hyaluronic\, acid\, synthesis.\,\, \textit{Medical}$ Hypotheses 54(5): 798-802.

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