



PRODUCT DATA SHEET

JOINT RELIEF 2.0

Clinically Advanced Support for Joint and Connective Tissue Health[†]



Size: 180 Capsules | Serving Size: 6 Capsules | Servings Per Container: 30

Joint Relief 2.0 is a comprehensive formula designed to promote and maintain healthy joints and connective tissue. **Joint Relief 2.0** delivers a full spectrum of ingredients in efficacious forms and doses of glucosamine sulfate, chondroitin sulfate, methylsulfonylmethane (MSM), hydrolyzed collagen, hyaluronic acid, cissus quadrangularis along with other supportive ingredients to optimize joint health.[†]

Glucosamine and chondroitin are natural and vital molecules found in all human tissues including our joints. Glucosamine and chondroitin are essentially the “brick and mortar” of our joints and connective tissues. These molecules are required by our joints to help them maintain elasticity, resiliency, flexibility and for maintenance and repair from exercise, daily activities and aging. **Joint Relief 2.0** provides the clinically established forms (sulfate) and efficacious doses of glucosamine sulfate (1,500 mg), chondroitin sulfate (1,200 mg) and MSM (600 mg) per serving. Glucosamine is considered as the first line of defense for joint tissue support.[†]

Methylsulfonylmethane (MSM) is a molecule rich in organic sulfur and found naturally in the human body. MSM provides an enhanced spectrum of nutrition to fortify healthy cartilage matrix composition, connective tissue strength and joint comfort. MSM also provides additional antioxidant benefits.[†]

Hyaluronic Acid is a glycosaminoglycan and is found in virtually all tissues of the body and has a high daily turnover. Hyaluronic Acid supports cartilage, synovial fluid and skin. Hyaluronic Acid is unique in that it can absorb up to 3,000 times its weight in water functioning as an important hydrating molecule for tissues. Hyaluronic Acid increases the viscosity of joint tissue providing beneficial lubrication and shock absorption. Hyaluronic Acid is also a major component of the skin and plays an important role in skin lubrication.[†]

Collagen is the principal form of structural protein in the human body and makes up connective tissues and moveable joints. Collagen is essentially the “glue” that holds our tissues together. As we age, collagen synthesis and structural integrity declines. **Joint Relief 2.0** contains highly soluble and bioavailable hydrolyzed collagen that stimulates tissue collagen synthesis and supports healthy joints promoting joint motility and flexibility.[†]

Joint Relief 2.0 also delivers a full spectrum of ingredients including turmeric, cissus quadrangularis, boswellia serrata and ginger to reduce inflammation and joint tissue oxidative stress along with ginger, white willow bark, vitamin D, manganese and boron to optimize healthy cartilage function along with joint and connective tissue health.[†]

KEY FEATURES

- **Comprehensive Formula with Glucosamine Sulfate, Chondroitin Sulfate, Hydrolyzed Collagen, MSM and Hyaluronic Acid**
- **Provides Anti-Inflammatory Ingredients including Ginger, Boswellia Serrata, Turmeric and Cissus Quadrangularis**
- **Clinically Established Forms and Efficacious Doses**
- **Contains 200% Daily Value of Vitamin D**

KEY MESSAGES

- *Glucosamine sulfate is considered the first line of joint support and the first line of defense for joint tissue pain.[†]*
- *Provides the research supported potency and forms of glucosamine sulfate at 1,500 mg and chondroitin sulfate at 1,200 mg per serving.*
- *Glucosamine is required by our joints to help them maintain elasticity, resiliency and flexibility and for maintenance and repair.*
- *Glucosamine has been shown to modulate chondrocyte (primary cells found in cartilage) proliferation, cartilage matrix production, and cartilage gene expression.[†]*
- *Chondroitin sulfate promotes the synthesis of structural molecules called glycosaminoglycans functioning as an important structural component of our joints and contributes to strength, flexibility and shock absorption.[†]*
- *Provides hydrolyzed collagen which supports healthy joints and promotes joint motility and flexibility.[†]*
- *Methylsulfonylmethane (MSM) is a molecule rich in natural organic sulfur delivering nourishment to fortify healthy cartilage matrix composition, connective tissue strength and joint comfort.[†]*

(cont'd on p.2)



YOUR ASSURANCE OF QUALITY[®]

[†] These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

Size: 180 Capsules | Serving Size: 6 Capsules | Servings Per Container: 30

Supplement Facts		
Serving Size: 6 Capules Servings Per Container: 30		
	Amount Per Serving	%DV*
Vitamin D3 (Cholecalciferol)	800 IU	200%
Manganese (Citrate)	2 mg	100%
Boron (Citrate)	2 mg	**
Glucosamine Sulfate (Shellfish)	1500 mg	**
Chondroitin Sulfate (Bovine)	1200 mg	**
Methylsulfonylmethane (MSM)	600 mg	**
White Willow Bark Extract (15% Salicin)	100 mg	**
Ginger Root Extract 4:1	100 mg	**
Boswellia Serrata Gum Extract (65% Boswellic Acid)	100 mg	**
Turmeric Root Extract 4:1	100 mg	**
Cissus Quadrangularis Extract 20:1	100 mg	**
Hydrolyzed Collagen (Bovine)	100 mg	**
Hyaluronic Acid	4 mg	**

*Percent Daily Values are based on a 2,000 calorie diet.
**Daily Value not established.

Directions: 6 capsules daily, in divided doses, with meals.

Other Ingredients: Magnesium Stearate, Rice Powder, Gelatin (capsule).

CONTAINS: Shellfish

Manufactured in a cGMP facility that processes milk, egg, fish, Crustacean shellfish, tree nuts, wheat and soybeans.

KEEP OUT OF REACH OF CHILDREN.

STORE IN A COOL, DRY PLACE AWAY FROM MOISTURE, SUNLIGHT AND EXCESS HEAT. ALWAYS KEEP TIGHTLY SEALED.

WARNING STATEMENT: Do not use this product if you are allergic to shellfish. Consult your health care practitioner before using this product if you are pregnant, nursing, trying to conceive, under the age of 18, have a medical condition or taking medications.

KEY MESSAGES (cont'd from p.1)

- Hyaluronic Acid (HA) is a glycosaminoglycan and is unique in that it can absorb up to 3,000 times its weight in water. Hyaluronic Acid increases the viscosity of joint tissue providing beneficial lubrication and shock absorption.†
- Delivers powerful and effective anti-inflammatory support ingredients including ginger, boswellia serrata, turmeric and cissus quadrangularis.†
- Provides 200% Daily Value of vitamin D, 100% Daily Value of manganese and 2 mg boron for comprehensive joint support.†

TARGET MARKET

Primary: Athletes looking for a comprehensive joint and connective tissue supplement with safe and efficacious levels and forms of ingredients.

Secondary: Individuals suffering from joint pain looking to support and maintain healthy joint and connective tissue structure.

RECOMMENDED STACK

- **Vit-Acell**
- **Max Multi Women's**
- **Max Multi Men's**

KEY REFERENCES

1. Murray RK, Keeley FW. The Extracellular Matrix. 27th ed. In: Murray RK, Granner DK, Rodwell VW eds. Harper's Illustrated Biochemistry. New York, NY: Lange Medical Books/McGraw-Hill 2006:545-64.
2. Black C, Clar C, Henderson R, et al. The clinical effectiveness of glucosamine and chondroitin supplements in slowing or arresting progression of osteoarthritis of the knee: a systematic review and economic evaluation. Health Technol Assess. 2009;13:1-148.
3. McAlindon TE, LaValley MP, Gulin JP, Felson DT. Glucosamine and chondroitin for treatment of osteoarthritis: a systematic quality assessment and meta-analysis. JAMA. 2000;283:1469-75.
4. Usha PR, Naidu MU. Randomised, Double-Blind, Parallel, Placebo-Controlled Study of Oral Glucosamine, Methylsulfonylmethane and Their Combination in Osteoarthritis. Clin Drug Investig. 2004;24:353-63.
5. Varghese S, Theprungsirikul P, Sahani S, et al. Glucosamine modulates chondrocyte proliferation, matrix synthesis, and gene expression. Osteoarthritis Cartilage. 2007;15:59-68.
6. Calamia V, Mateos J, Fernandez-Puente P, et al. A pharmacoproteomic study confirms the synergistic effect of chondroitin sulfate and glucosamine. Sci Rep. 2014 Jun 10;4:5069.
7. Pinsornsak P, Niemoopong S. The efficacy of Curcuma Longa L. extract as an adjuvant therapy in primary knee osteoarthritis: a randomized control trial. J Med Assoc Thai. 2012 Jan;95 Suppl 1:S51-8.
8. Gupta SC, Patchva S, Aggarwal BB. Therapeutic roles of curcumin: lessons learned from clinical trials. AAPS J. 2013 Jan;15(1):195-218.
9. Shen CL, Hong KJ, Kim SW. Effects of ginger (Zingiber officinale Rosc.) on decreasing the production of inflammatory mediators in sow osteoarthritic cartilage explants. J Med Food. 2003 Winter;6(4):323-8.
10. Abdel-Tawab M, Werz O, Schubert-Zsilavecz M. Boswellia serrata: an overall assessment of in vitro, preclinical, pharmacokinetic and clinical data. Clin Pharmacol Ther. 2011 Jun;90(6):349-69.
11. Umar S, Umar K, Sarwar AH, et al. Boswellia serrata extract attenuates inflammatory mediators and oxidative stress in collagen induced arthritis. Phytomedicine. 2014 May 15;21(6):847-56.
12. Bloomer RJ, Farnley TM, McCarthy CG, Lee SR. Cissus quadrangularis reduces joint pain in exercise-trained men: a pilot study. Phys Sportsmed. 2013 Sep;41(3):29-35.
13. Kim, LS, Axelrod LJ, Howard P, et al. Efficacy of methylsulfonylmethane (MSM) in osteoarthritis pain of the knee: a pilot clinical trial. Osteoarthritis Cartilage. 2006;14:286-94.
14. De Almeida Jackix E, Cuneo F, Amaya-Farfan J, et al. A food supplement of hydrolyzed collagen improves compositional and biodynamic characteristics of vertebrae in ovariectomized rats. J Med Food. 2010 Dec;13(6):1385-90.
15. Moskowitz RW. Role of collagen hydrolysate in bone and joint disease. Semin Arthritis Rheum. 2000 Oct;30(2):87-99.
16. Bello AE, Oesser S. Collagen hydrolysate for the treatment of osteoarthritis and other joint disorders: a review of the literature. Curr Med Res Opin. 2006 Nov;22(11):2221-32.

† These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

YOUR ASSURANCE OF QUALITY®

