



— Your Trusted Source —

# Joint Optimizer

Introduced 2008



## What Is It?

Joint Optimizer is designed to support a healthy balance of immune mediator activity, to promote healthy joint function and comfort.\*



Joint Optimizer was formulated with Dr. Sam Yanuck, D.C., P.A. Dr. Yanuck is a graduate of Cornell University and Palmer Chiropractic University. He completed postdoctoral training in functional neurology and has an extensive background in nutritional biochemistry. Dr. Yanuck has authored articles on functional illness and treatment in the International Journal of Neuroscience, is a periodic guest lecturer at local universities and hospitals and has lectured in the U.S. and abroad. He has been in practice for 16 years and is located in Chapel Hill, North Carolina.

## Uses For Joint Optimizer

**Joint Health:** Joint Optimizer is uniquely formulated to maintain the body's natural mechanisms for upregulation and downregulation of immune mediators. Cytokines and prostaglandins are chemical messengers that influence cellular activities in a variety of tissues. Maintaining healthy cytokine and prostaglandin function helps to lessen occasional pain and to sustain healthy joint mobility and comfort. In a 4-week trial organized by Dr. Yanuck, three fourths of volunteers that were supplemented with Joint Optimizer experienced positive support, including the ability to resume physical activity. Dr. Yanuck credits this with the potential of the formula to help lessen the activity of immune mediators without suppressing them completely, which would create an undesirable reaction by the immune system on musculoskeletal tissues.\*

*The body's natural immune response is influenced by many factors, only some of which may be affected by the ingredients in this formula.\**

## What Is The Source?

Vitamin D<sub>3</sub> is derived from lanolin. Glucosamine sulfate is derived from crab and shrimp. Boswellia serrata extract is derived from the gum resin and standardized to contain 70% boswellic acids. Turmeric is derived from *Curcuma longa* root and standardized to contain 95% curcuminoids. L-glutamine (free-form) is derived from vegetable fermentation. Bromelain (2,400 gdu/gram) is derived from pineapple stem. Cetyl myristoleate complex is derived from beef tallow and standardized to contain 20% cetyl myristoleate (vegetable sources of CMO contain myristic acid, not cetyl myristoleate). Ascorbyl palmitate is derived from corn dextrose fermentation and palm oil.

## Recommendations

Pure Encapsulations recommends 3 capsules in the morning and 3 capsules in the evening, with meals, with 8–10 ounces water.

## Are There Any Potential Side Effects Or Precautions?

Boswellia, bromelain and glucosamine have been associated with G.I. upset, heartburn, nausea or diarrhea. CMO can cause mild burping. Other rare side effects of glucosamine include drowsiness, skin reactions, or headache. Curcumin (turmeric) is not recommended for individuals with bile duct obstruction. If pregnant or lactating, consult your physician before taking this product.

## Are There Any Potential Drug Interactions?

Glucosamine and bromelain may be contra-indicated with blood thinning medications. Bromelain may be contra-indicated with certain antibiotics. Glutamine may be contra-indicated with anticonvulsant medications. Consult your physician for more information.

## Joint Optimizer

<b>three vegetarian capsules contain</b>	 <b>0</b>
vitamin D (as cholecalciferol) (D <sub>3</sub> )	600 iu
glucosamine sulfate (from crab, shrimp)	750 mg
proprietary blend	910 mg
Indian frankincense (boswellia serrata) extract (gum resin) (standardized to contain 70% boswellic acids), turmeric (curcuma longa) extract (root) (standardized to contain 95% curcuminoids), L-glutamine (free-form), bromelain (2,400 gdu/gram), cetyl myristoleate complex (bovine)	
ascorbyl palmitate (fat-soluble vitamin C)	40 mg
other ingredients: vegetarian capsule (cellulose, water)	
<b>3 capsules in the morning and 3 capsules in the evening, with meals, with 8–10 ounces water.</b>	

\*These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.