

- Promotes optimal joint health
- Supplies important enzymes for cartilage composition
- Contains a dosage 33 per cent higher than the industry standard



ITEM# 131

Every day your joints endure an enormous amount of stress from physical activity, including walking, lifting, and typing. Despite this heavy and constant use, we take our joints for granted and expect them to function trouble-free for several decades. However, millions of people in the United States and Canada suffer from some form of joint problem. The situation is worse for athletes and those who have high amounts of physical stress at work and at home. To help support healthy joints, USANA created **PROCOSA® II**, a product with a blend of glucosamine, manganese, vitamin C, and silicon—the building blocks for healthy cartilage.

CARTILAGE

Cartilage is the protective layer that cushions and lubricates the joints. Over the years, the cartilage in our joints is gradually worn down due to normal physical activity. The body rebuilds the cartilage as it is worn and replaces shock-absorbing synovial fluid, so the joints are always protected. For various reasons, however, the production of new cartilage and synovial fluid can fall behind demand. Because of poor blood supply, lesions to articular cartilage do not heal at the same rate as other tissue in the body; cartilage is rebuilt slowly. And if components of the substances used for cartilage repair are in short supply, the recovery from damage can be slowed even more.

GLUCOSAMINE

Glucosamine, an amino sugar, is an important precursor in the biosynthesis of cartilage. Specifically, it is a building block of proteoglycans—protein molecules with a high content of bound carbohydrate. Proteoglycans and collagen compose the majority of the cartilage matrix. Proteoglycans are essential for healthy cartilage

because they bind the water that lubricates and cushions the joint. When the articular cartilage degenerates, joint pain and osteoarthritis may result.

In addition to its role as a biochemical precursor, glucosamine is believed to play a role in regulating cartilage formation and normalizing cartilage metabolism by encouraging higher production of collagen and proteoglycans.² Glucosamine also stimulates synovial production of hyaluronic acid, which is responsible for the lubricating and shock-absorbing properties of synovial fluid.³

Numerous double-blind clinical studies have shown the efficacy of glucosamine supplements in maintaining healthy cartilage, healthy joints, and full range of motion in the short-term.⁴⁻¹⁰ More recently, a three-year

study was published showing that joint space increased in the glucosamine-treated group, while it continued to decrease in the placebo group, indicating that the protective cartilage was better maintained in those who used glucosamine.¹¹ Additional studies have demonstrated that glucosamine, taken orally, is well-absorbed and diffuses into tissues, including the articular cartilage.¹²⁻¹⁴

A POWERFUL BLEND

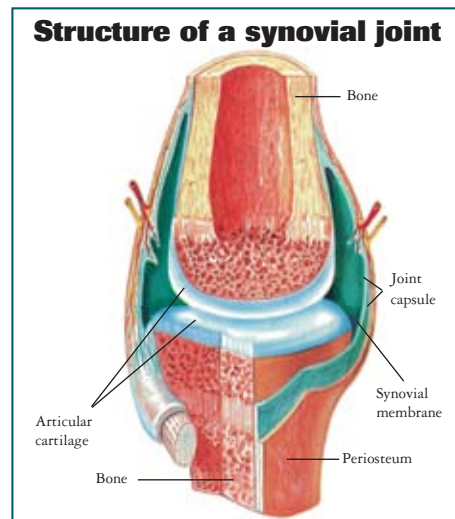
The combination of glucosamine sulfate with turmeric extract, manganese, vitamin C, and silicon represents a more comprehensive approach to joint health. Over the long term, these ingredients help retain healthy cartilage. Glucosamine sulfate promotes the incorporation of sulfur, a component of protein, into the cartilage matrix. Turmeric contains curcumin and related compounds known as curcuminoids, which have good antioxidant properties.^{15,16} Manganese is required for enzymes involved in the biosynthesis of proteoglycans.^{17,18} Vitamin C is essential for the reactions necessary to collagen formation. And, silicon is required for proper collagen formation and ultimately cartilage composition.¹⁹

WHY PROCOSA® II?

PROCOSA II is USANA's formula for joint health. We incorporate a full 2000 mg per day of high-quality glucosamine sulfate, a dosage 33 per cent higher than the industry standard. Then we combine this with turmeric extract, vitamin C, manganese, and silicon for comprehensive joint health.

References

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RECOMMENDED ADULT DOSE: TAKE TWO (2) TABLETS TWICE DAILY, PREFERABLY WITH MEALS. /		
DOSE RECOMMANDÉE POUR ADULTES: PRENDRE À DEUX (2) COMPRIMÉS DEUX FOIS PAR JOUR		
LABORATORY TESTED, QUALITY GUARANTEED, MEETS USP SPECIFICATIONS FOR POTENCY, UNIFORMITY AND DISINTEGRATION WHERE APPLICABLE. / TESTÉ EN LABORATOIRE, QUALITÉ GARANTIE, CONFORME AUX NORMES USP EN MATIÈRE DE PUISSANCE, D'HOMOGENÉITÉ ET DE DESINTEGRATION, LE CAS ÉCHÉANT.		
EACH TABLET CONTAINS:		CHAQUE COMPRIMÉ CONTIENT:
VITAMIN C (CALCIUM ASCORBATE)	75 mg	VITAMINE C (ASCORBATE DE CALCIUM)
MANGANESE (GLUCONATE)	1.25 mg	MANGANESE (GLUCONATE)
SILICON (HVP) CHELATE	0.75 mg	SILICON (CHÉLATE DE PHV)
NON-MEDICINAL INGREDIENTS:		INGRÉDIENTS NON MÉDICINAUX:
GLUCOSAMINE SULFATE	500 mg	SULFATE DE GLUCOSAMINE
MICROCRYSTALLINE CELLULOSE	273 mg	CELLULOSE MICROCRISTALLINE
TURMERIC EXTRACT	125 mg	EXTRAIT DE CURCUMA
ASCORBYL PALMITATE	10 mg	PALMITATE D'ASCORBYLE
DEXTRIN	7.3 mg	DEXTRINE
COLLOIDAL SILICON DIOXIDE	5 mg	DIOXYDE DE SILICIUM COLLOÏDAL
DEXTROSE	1 mg	DEXTROSE
(*HYDROLYZED VEGETABLE PROTEIN / *PROTÉINES VÉGÉTALES HYDROLYSÉES)		