



## Joint Care

### Supports and protects joint tissue

When used as a daily supplement, our Joint Care supplement will help support healthy joints and improve mobility.

#### Benefits include:

- Supports healthy joint function
- Made with natural glucosamine sulfate, not synthetic glucosamine hydrochloride
- Does not include synthetic MSM
- High-grade, human-quality supplement

### SUPPLEMENT OVERVIEW

Most of the reliable research on glucosamine has been conducted on **glucosamine sulfate**, and not on glucosamine hydrochloride, a synthetic form commonly used in animal products. **Glucosamine sulfate** occurs in nature, and is found in the fluid within joints (synovial fluid). In humans, there is sufficient evidence demonstrating its effectiveness in the treatment of osteoarthritis. Studies in dogs have demonstrated improvement in pain scores, significantly alleviated pain compared to placebo, and improved overall activity, as evidenced by owner questionnaires and ground force plates.<sup>1,2</sup> **Glucosamine sulfate** has also been shown to have better bioavailability in dogs.<sup>3</sup> For these reasons, JFFD Joint Care contains **glucosamine sulfate**. **Chondroitin sulfate** is also included as it provides added benefits in dogs with osteoarthritis.<sup>4</sup> Some joint supplements for dogs also contain methylsulfonylmethane (MSM), which is only available from synthetic sources and the manufacturing process sometimes leads to chemical contaminants. Until there is a natural source of MSM, we will not include it in our Joint Care.

### SUPPLEMENT INDICATIONS

Joint Care is indicated in healthy dogs as a preventative or in dogs with osteoarthritis and degenerative joint diseases as a complement to other therapies, including weight loss, physical therapy and rehab, and rest.

### RECOMMENDED USES

- Healthy dogs to maintain joint health.
- Dogs with osteoarthritis to slow its progression.
- Dogs with specific joint diseases such as hip dysplasia, patellar luxation, OCD, etc.
- As an adjunct to NSAID therapy.

### SAFETY

Glucosamine sulfate and chondroitin sulfate supplements are considered safe. There are reported safety issues with glucosamine hydrochloride and chondroitin hydrochloride with reports of dogs suffering from liver and multi-system organ failure after accidental large-dose overdoses (>25 to 200 capsules.) None have been reported from overdose of glucosamine sulfate.

### DOSING

For first 6 weeks:

- Dogs <10 lbs: 1/2 capsule daily
- Dogs 10-24 lbs: 1 capsule daily
- Dogs 25-49 lbs: 2 capsules daily
- Dogs 50-100 lbs: 3 capsules daily
- Dogs >100 lbs: 4 capsules daily

All above dosages may be halved after 6 wks.

### Supplement Facts

Serving Size 1 capsule		Servings Per Container 60
Amount Per Serving		
Vitamin C (as ascorbid acid) .....	20mg	
Magnesium (as magnesium bisglycinate chelate).....	4mg	
Glucosamine Sulfate 2KCl .....	500mg	
Chondroitin Sulfate Sodium.....	400mg	

<sup>1</sup> McCarthy G, O'Donovan J, Jones B, et al. Randomized double-blind, positive-controlled trial to assess the efficacy of glucosamine/chondroitin sulfate for the treatment of dogs with osteoarthritis. *Vet J* 174:54-61, 2007.

<sup>2</sup> Altilio M, Peal A, Alvey M, et al. Therapeutic efficacy and safety of undenatured type II collagen singly or in combination with glucosamine and chondroitin in arthritic dogs, *Tox Mech Meth* 17:189-196, 2007.

<sup>3</sup> Lara K, Maxwell, Penny Regier, and Satyanarayana Achanta (2016) Comparison of Glucosamine Absorption After Administration of Oral Liquid, Chewable, and Tablet Formulations to Dogs. *Journal of the American Animal Hospital Association*: March/April 2016, Vol. 52, No. 2, pp. 90-94. doi: <http://dx.doi.org/10.5326/JAAHA-MS-6267>

<sup>4</sup> Comblain F., Serisier S., Barthelemy N., Balligand M., Henrotin Y. Review of dietary supplements for the management of osteoarthritis in dogs in studies from 2004 to 2014. *J. vet. Pharmacol. Therap.* 39, 1-15. doi: 10.1111/jvp.12251.