

## Evidence-Based Supplements & Prescription Foods to Help Prevent & Treat Osteoarthritis (OA) In Pets



### Highlights

- Use early in course of disease or as a preventative in athletes & high risk dogs.
- Carefully check products: If they are NOT FDA regulated there is no proof of effectiveness
- Can delay or reduce use of non steroidal anti-inflammatories (NSAIDS) like Rimadyl ®.
- Ideal combination, quality and quantity of ingredients as well as dose are all things to consider.
- Great info at [consumerlab.com](http://consumerlab.com) (a human website that has some pet products rated)

**Reason for using and/or desired effects:** Pain relief for mild osteoarthritis (OA) to inhibit joint inflammation, provide cartilage support, and prevent degradation of cartilage

**Active Ingredients:** Glucosamine HCL, Na Chondroitin sulfate (low molecular weight (LMW), Avocado Soybean, Perna Green Lip Mussel (GLM), Unsaponifiables (ASU), MSM, are the most commonly used and have studies supporting their use. Interestingly according to an April 2009 study elk antler velvet has a moderate level of comfort to be effective too.

**Dose:** depends upon product but generally 900 mg of Glucosamine HCl, 350 mg Chondroitin Sulfate and 90 mg ASU for a 60 lb dog or 2000mg of Glucosamine and 1200 mg Perna daily. May take 6 to 8 weeks to see any effect and may be reduced after desired effect is seen. **Chondroitin sulfate dose & effectiveness may vary according to purity and molecular size according to [consumerLab.com](http://consumerLab.com)**

**Background:** Joint supplements are commonly available for pets online, at pet stores and pet supermarkets in food and treats. Considerable confusion exists as far as effectiveness & appropriate form/dose as they are not FDA regulated drugs. For example, almost all pet treats contain only minute amounts of active ingredients. **Repeatedly products have failed testing for not enough chondroitin sulfate to be effective (the most expensive ingredient)**

**Side effects:** No long term or short term side effects have been found.

**For maximum effect:** Start early in course of disease or as prevention in high risk dogs.

## 10 Important Things You Need to Know

- 1) They should be used EARLY before damage has occurred (after any joint surgery, any diagnosed arthritis condition, and in high risk dogs e.g. obesity, athletes and breeds at risk for hip dysplasia and other developmental orthopedic diseases.

- 2) These are very safe products are recommended by most board certified veterinary orthopedic surgeons and can be used with any other medications.
- 3) Glucosamine is generally thought to be a “building block” for joint cartilage and Chondroitin Sulfate an anti-inflammatory. Avocado Soybean Unsaponifiables (ASU) a fat extract found in only one manufacturer’s product (Nutramax) is reportedly doubly synergistic and reduces inflammation.
- 4) By the *Dietary Supplement Health & Effectiveness Act* (DSHEA) labeling they have to be safe but not necessarily effective or even pure (until recent 2008 ruling).
- 5) By law glucosamine cannot be added to pet food to a level that would be therapeutic. However, it is allowable for food to contain Glucosamine (at sub therapeutic levels, additional supplements would have to be added for this to be effective. (Perna GLM products have bypassed this restriction by being natural products)
- 6) To date only one study has been done using live pets (not yet published or peer reviewed) all studies have been done with cartilage cells) to prove that these supplements affect lameness scores. Laboratory tests do show (using Nutramax patented products) that they reduce inflammation and slow progression of joint progression of joint cartilage degeneration.
- 7) Quality control was a significant issue in a study done in 2001 (84% of products did not contain what they said they did) Even with purity standards, quality control will continue to be an issue with few standards and very little effort to police the multitude of products (both veterinary & human products are unregulated by FDA).
- 8) Appropriate doses of BOTH Glucosamine & Chondroitin Sulfate (LMW) are very important to achieve success in pets according to several studies.
- 9) Used alone at appropriate doses or in conjunction with high levels of EPA (one of the fish oils) at 20mg/lb, the combination of Glucosamine, CS, and ASU can be as effective as non-steroidal inflammatory drug (like Rimadyl<sup>®</sup> or Metacam<sup>®</sup>) if used early in the course of disease.
- 10) All studies done in pets for glucosamine/Chondroitin Sulfate have been done with the patented ingredients that are found in only in one manufacturer’s products (Nutramax)

**Our recommendations:** DASUquin<sup>®</sup> or Glyco-Flex<sup>®</sup> or Royal Canin Joint Mobility<sup>®</sup> (regular or large breed) for dogs or Royal Canin Mobility JS for Cats<sup>®</sup>

Note: we also advocate 20mg of EPA (the anti-inflammatory ingredient in fish oil) for dogs with active arthritis (to help treat or possible prevent) The Royal Canin foods mentioned here contain this amount already. See <http://westtownevet.com/pet-health-library/nutrition-introduction/prebiotics-probiotics/> for the latest updates in this rapidly changing area! Don’t forget the important factors of ideal weight and good supportive exercise program!

ConsumerLab.com Product Review of Joint Health Supplements Accessed Jan 10, 2012

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