

A Pet Owner's Guide to Joint Health for Dogs

COSEQUIN[®]





What is Cosequin®?

Cosequin is a patented, scientifically researched nutritional supplement dispensed by thousands of veterinarians since 1992 to help dogs maintain healthy joints. As dogs age, it is common for their joints to become less flexible which impacts their mobility and quality of life.

You may have noticed that your dog has difficulty walking up stairs or jumping on the bed. While he used to be eager to play, now he is content to rest. Even at younger ages some dogs are subject to joint health concerns which affect flexibility and mobility.

Cosequin contains TRH122** chondroitin sulfate and FCHG49** glucosamine. These ingredients have been scientifically formulated to support and maintain the health of your dog's joints. Published studies have shown that the specific combination of ingredients in Cosequin works together to maintain the structure of the cartilage in your dog's joints while inhibiting the enzymes that break down cartilage. It is very important to note that the published studies on Cosequin do not apply to other brands.

What is joint cartilage?

Cartilage is a slippery and resilient tissue produced and maintained by its own specialized cells. It cushions the surfaces where two or more bones meet to form a flexible joint. When a dog is in motion there is tremendous pressure on the joint. Cartilage, joint fluid, and underlying bone work together like a shock absorber allowing flexible joint function.

Because cartilage lacks a direct blood supply, nutrients must pass into the cartilage from surrounding tissue. These nutrients sustain cartilage cells and provide the components necessary to maintain a healthy cartilage structure.

Scientists are not sure about all the factors that cause cartilage breakdown; however, they have discovered enzymes that play a role in the process. With age, injury, or over-activity, the process of breakdown can exceed the process of replacement leading to problems in the joints. These problems result in less flexibility. That's when it's time for Cosequin which maintains the cartilage structure and inhibits the enzymes that break down cartilage.

*Cosequin contains FCHG49® Glucosamine and TRH122® Sodium Chondroitin Sulfate, Nutramax Laboratories® proprietary veterinary researched specifications.

How does Cosequin® work?

The ingredients in Cosequin work together to help support and protect the cartilage. Glucosamine hydrochloride acts as a building block of cartilage by supplying a key nutrient that keeps cartilage cells healthy and functioning properly. Chondroitin sulfate blocks the enzymes that break down cartilage.

When is the use of Cosequin recommended?

Early action is always the best advice. Different breeds of dogs age at different rates. With regular check-ups your veterinarian can talk with you about your dog's aging process. Your veterinarian may discuss weight control, selective use of medications, exercise and the administration of Cosequin.

It is important to have your dog examined by your veterinarian if you notice the dog having difficulties climbing stairs, jumping into the car, going for walks or even getting up. Your veterinarian can advise you if Cosequin can help. Your veterinarian may also suggest using Cosequin as a protective measure. This can be important for maintaining an active life for many dogs, especially large breeds and working dogs of all sizes. Cosequin may also be used to help support cartilage following joint surgery.

How much Cosequin should I give my dog?

Every dog's needs may differ. Dogs will respond at different rates of time. While the initial administration period is four to six weeks, some dogs may respond in a shorter period. When your dog achieves a good response, you can begin to decrease the number of Cosequin capsules/tablets/soft chews you give to your dog each day. Watch your dog's movement and attitude to see that he is feeling comfortable as you decrease the administration. If you see that your dog is not as comfortable, increase the number of capsules/tablets/soft chews to the previous level, observe your dog for a few weeks, then try lowering again.

Cosequin is very economical because many dogs can be maintained on a lower number of capsules/tablets/soft chews long-term.



How long does Cosequin® take to work?

Since Cosequin is a supplement and provides nutrients to maintain your dog's joint health, it works more gradually than drugs. Improvement on Cosequin can range from gradual to dramatic. Following the administration schedule on the label for your dog's weight, we recommend an initial administration period of four to six weeks. Some dogs may show a response in a shorter period of time.

YOUR DOG'S JOINTS

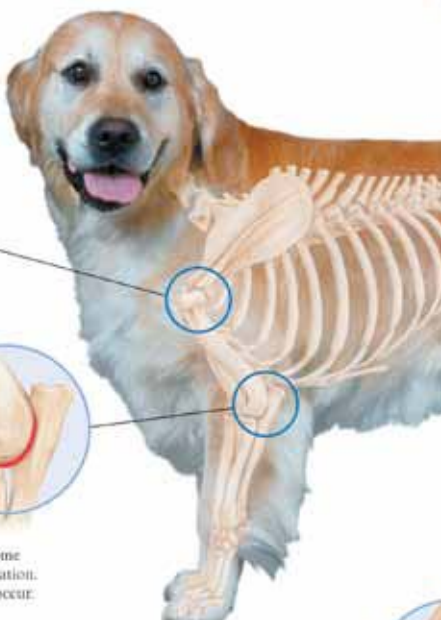
Joint problems are common in pets. Although these problems are usually not life-threatening, malfunctioning joints can greatly decrease your pet's quality of life.

The **SHOULDER** is a ball and socket joint. This is a common site for "wear and tear" problems.



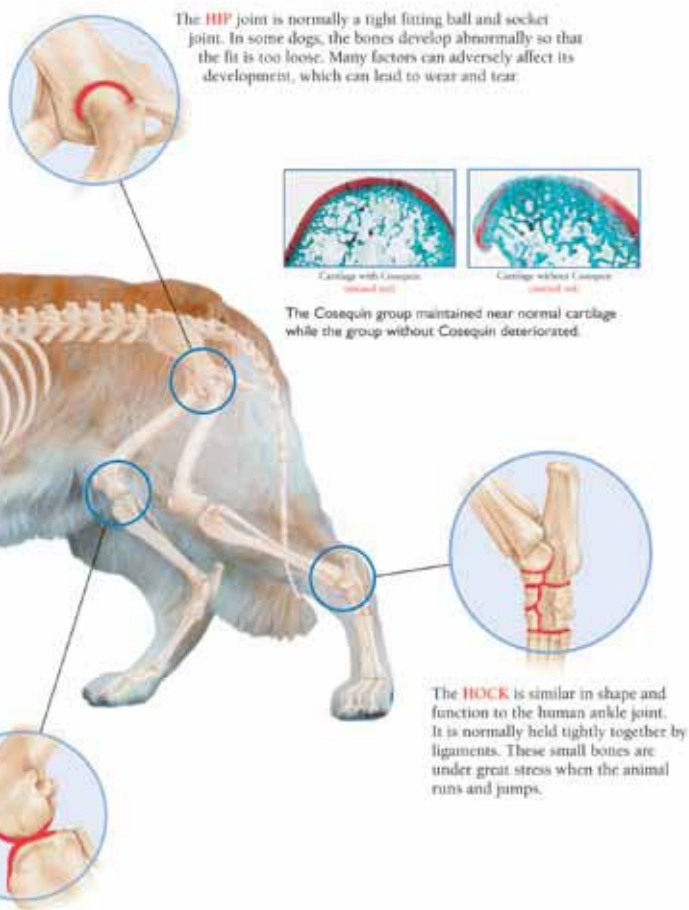
In the **ELBOW** joint, 3 bones come together on a tight "hinge" formation. Malformation of this joint may occur.

The **STIFLE** joint is similar in shape and function to the human knee. Because the bones are not shaped to fit very closely together, this joint depends a great deal on ligaments to hold the bones in place. It is a commonly injured joint.



Are there any side effects?

Cosequin® offers unparalleled safety. A safety study in dogs demonstrated no adverse effects of Cosequin administration on blood work parameters, including complete blood count, biochemical, and clotting values. Some dogs may experience a mild gastrointestinal upset such as that which occurs when switching foods. If this is the case, you can try offering Cosequin with a meal.





Is Cosequin[®] superior to other joint health supplements?

Yes. On the label, different brands may appear to be the same, but unlike drugs, the ingredients in supplements are not equivalent. Cosequin, with its exclusive combination of TRH122[®] glucosamine and FCHG49[®] chondroitin sulfate, is the only glucosamine/chondroitin sulfate supplement that has been shown safe, effective, and bioavailable in peer-reviewed, published, controlled, U.S. veterinary studies.

In a published survey of over 3,000 veterinarians, over 80% of dogs administered Cosequin improved significantly in their mobility, level of comfort, and attitude. Overall, the veterinarians rated Cosequin as good to excellent.

Cosequin is manufactured in the United States by Nutramax Laboratories, Inc. following manufacturing standards adopted by the pharmaceutical industry. Each batch of Cosequin is subjected to stringent quality control measures and meets label claim. However, a number of reports including a study published in the *Journal of the American Nutraceutical Association* showed that up to approximately 80% of glucosamine/chondroitin sulfate brands did not meet their own label claim.

I give my dog a food that contains glucosamine and chondroitin sulfate. Do I still need Cosequin?

Yes. None of the foods contain the researched combination of high quality ingredients in Cosequin. The amount of glucosamine and chondroitin sulfate in dog food is often minimal. Even if these diets contained high quality glucosamine and chondroitin sulfate, a large-breed dog would need to consume more than the daily requirement of food to obtain the amounts of glucosamine and chondroitin sulfate found in Cosequin DS. In addition, both glucosamine and chondroitin sulfate may degrade when subjected to the heat or extreme pressure in the manufacturing process of commercial dog food.

Can I give a supplement labeled for human use to my dog?

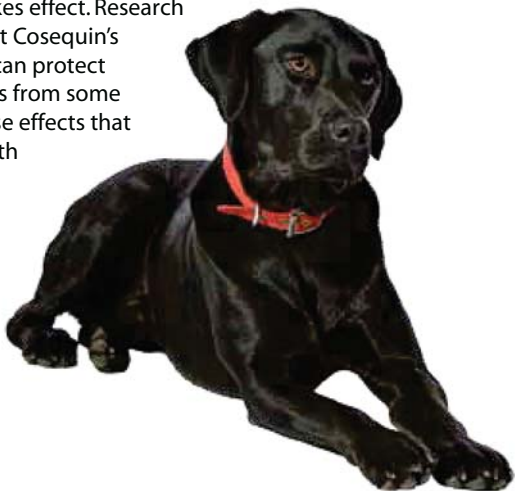
Many human glucosamine/chondroitin sulfate supplements use substandard ingredients, and, as noted earlier, studies have shown that many do not even meet their own label claim for the ingredients listed on the bottle. With Cosequin®, each capsule, tasty chewable tablet, or convenient soft chew contains exactly what is stated on the label. These trademarked ingredients have been shown to be safe and effective in pets.

Should I exercise my dog while he is on Cosequin?

Exercise is important for optimal joint function as well as weight control for the overall health of your pet. Joint movement is needed to circulate fluid around the cartilage as well as to bring nutrients and to remove waste products. It has been shown that when joints are immobilized, cartilage structures break down at a rapid rate. Consult with your veterinarian, but in most cases, moderate exercise is recommended. Walking on sand or another soft surface or even swimming will help circulate needed nutrients and reduce excessive stress to the cartilage. It is important not to push your pet but to exercise at a comfortable pace.

Why is my dog on a pain medication and Cosequin?

Dogs that are just beginning to show issues with joint comfort often described as “slowing down” or “getting old” usually respond to Cosequin without any need for other products. In some cases, your veterinarian may recommend pain medication. In many cases, your veterinarian may reduce or discontinue the pain medication over time as Cosequin takes effect. Research indicates that Cosequin’s ingredients can protect cartilage cells from some of the adverse effects that can occur with some pain medications.



Ask your veterinarian whether your pet may benefit from another quality veterinary product, including liver health, digestive health, omega-3 fatty acid, and other wellness products from Nutramax Laboratories, Inc.

Visit our website: **www.Nutramaxlabs.com** for more information and special offers.

TIPS FROM THE FDA FOR CONSUMERS ABOUT NUTRITIONAL SUPPLEMENTS

Contact the manufacturer for more information about the specific product that you are purchasing.

If you cannot tell whether the product you are purchasing meets the same standards as those used in the research studies you read about, check with the manufacturer or distributor.

**For more information, visit the FDA web site:
<http://www.cfsan.fda.gov/~dms/ds-savvy.html>**

Cosequin® is Available in:



Tasty Double Strength Chewable Tablets.



Unflavored Capsules in Regular Strength.



Tasty Double Strength Chewable Tablets with MSM.



Easy to eat Soft Chews are also available in convenient, resealable bags.



Tasty natural chicken and tuna flavored capsules for cats.

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NEADS

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▼ Source: Survey conducted in November 2009 of small animal veterinarians who recommended oral joint health supplements.