

Glucosamine / Chondroitin Sulfate

BRAND NAMES: COSEQUIN, DASUQUIN, GLYCOFLEX, FLEXADIN, CANIFLEX, SYNOVI, AND NUMEROUS (NEARLY UNCOUNTABLE) OTHERS

AVAILABLE IN
TABLETS, CAPSULES,
POWDERS, and EVEN
ORAL LIQUIDS
Glucosamine is
frequently included in
joint support diets

HISTORY AND BACKGROUND

Degenerative arthritis is a painful condition frequently treated with pain-relievers, anti-inflammatory medications, supplements, physical therapy and even weight loss. It has long been accepted that treatment best involves a combination of complementary therapies from the above list. Glucosamine and chondroitin sulfate are not only cartilage building blocks but they can have anti-inflammatory properties of their own, making them excellent additions to any joint support protocol.

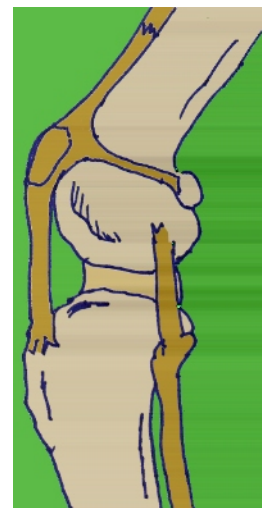
In a normal joint, cartilage breakdown is balanced by cartilage production. In the diseased joint, there is more breakdown than production. Glucosamine & chondroitin sulfates are components of cartilage and the theory is that by taking these precursors orally, one's body can use them to repair and rebuild cartilage where it is damaged. This has actually borne out and studies show that cartilage "building blocks" taken orally are indeed utilized in cartilage repair. The cartilage cells of the joint are able to manufacture their own glucosamine but this ability appears to decrease with disease and with age and may not be able to keep up with the need for glucosamine when there is an increased demand. It has further been suggested that these substances may have anti-inflammatory properties of their own and/or may act by stimulating the synthesis of joint lubricants and collagen within the damaged joint, thus contributing further therapeutic benefit.

Glucosamines and chondroitin sulfates are extracted from sea molluscs (such as *Perna canaliculus* also known as the New Zealand green-lipped mussel), from shark skeleton, as well as from cattle and chicken bones. Different supplement brands use different sources and it is controversial whether the origin is important therapeutically or not. Glucosamine and chondroitin sulfate are considered nutritional supplements. Manganese is a co-factor in joint fluid synthesis and is often included in glucosamine/chondroitin sulfate supplements as are numerous other supplements such as omega-3 fatty acids, creatine, and more.

USES OF THIS MEDICATION

Glucosamine and chondroitin sulfates might be used in any joint condition involving the classical joint structure (2 bones with cartilage covered ends articulating, a fibrous capsule with ligaments connecting the bones, and lubricating fluid assisting the smooth motion of the joint). Glucosamine and chondroitin sulfates are not likely to be helpful with disease involving other types of joints (i.e. the vertebrae and intervertebral discs).

Usually an initial higher dose is given for the first month or so and then a lower maintenance dose is given long term thereafter. The general belief is that 2-6 weeks of glucosamine/chondroitin sulfate administration is necessary before a response can be seen.



SIDE EFFECTS

In humans, glucosamine supplements can adversely impact asthma symptoms. This appears to be a human situation but it may be prudent to avoid it in patients with airway constriction.

Upset stomach has been reported in small animals as a rare side effect.

INTERACTIONS WITH OTHER DRUGS

None have ever been reported.

SPECIAL CAUTIONS

Nutriceuticals are not regulated by the FDA as they are not considered "drugs." This means that they can be sold without scientific proof of efficacy and without mandatory testing to determine the optimal dosage. It is also not required that the manufacturer demonstrate that the pills actually contain the amount of active ingredient that the label claims they do. There are numerous anecdotal reports of these medications helping numerous individuals but one should keep in mind that scientific investigation is continuing. At present, there have been numerous studies in a wide variety of scientific quality. Some experts feel there is inadequate hard evidence while others feel there is more than enough evidence to justify their use particularly given that they have very little potential for adverse effects. To make the best choice in a joint supplement product, it is best to go by your veterinarian's recommendation. For best bioavailability, use a product labeled for the species in which you plan to use it.

Be sure to store the product away from moisture and away from light.

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Mar Vista Animal Medical Center

3850 Grand View Blvd., Los Angeles, CA 90066 • (310) 391-6741 • Fax: (310) 391-6744
Additional drug and general pet care information can be found on our world wide web site:
<http://www.marvistavet.com>