

Glycosaminoglycan (GAG) Supplements (Glucosamine, Chondroitin)

Drs. Foster & Smith Educational Staff

Generic Name

Glycosaminoglycan supplements

Brand Names

Glucosamine: Drs. Foster and Smith Gluco-C, Acetylator, Cartiflex, Glyco-Flex, SynoviCre

[Glucosamine and Chondroitin](#): Drs. Foster and Smith Joint Care, Cosequin, Vetri-Disc

Type of Drug

Chondroprotective nutraceutical to aid in the management of arthritis.

See also [Polysulfated Glycosaminoglycan](#) for information on other chondroprotective agents.

Form and Storage

Capsules and powder

Store at room temperature.

Indications for Use

Aid in the management of non-infectious degenerative arthritic conditions and injuries involving cartilage damage.

General Information

Not FDA approved as these products are nutraceuticals, a dietary supplement with medicinal properties, and do not need to be approved before use. Available by prescription and over the counter. Caring for pets with osteoarthritis (arthritis, hip dysplasia) requires several areas of treatment including weight control, exercise, physical therapy, supplements for cartilage health, and if needed, medications for control of pain and inflammation. Glycosaminoglycans (GAGs) are the building blocks of cartilage and joint fluid. It is thought that glucosamine also stimulates the secretion of glycosaminoglycans in the cartilage and chondroitin also inhibits the enzymes that destroy cartilage. GAGs are obtained from shark or beef cartilage or chitin from crustacean shells. Glycosaminoglycans help relieve symptoms of arthritis in a high percentage of patients. Hopefully, with the use of the GAGs, pain medications can be minimized.

Usual Dose and Administration

Dogs and Cats: Typical doses start at approximately 500 mg glucosamine and 400 mg chondroitin per 25 pounds divided every 12 hours. Results should be seen within 4-6 weeks at which point cutting back by 1 capsule every 4-6 weeks could be tried to find the least amount necessary to reduce symptoms. Arthritic conditions would usually need to be treated for life.

Side Effects

Rare. May see diarrhea with overdosage.

Contraindications/Warnings

Use only if a diagnosis indicating possible benefits from glycosaminoglycans has been made.

Do not use in place of other treatments if an infection is present or surgery is needed.

No well-controlled studies for use in pregnancy or lactation.

Drug or Food Interactions

None known.

Overdose/Toxicity

Unlikely. May see diarrhea.

Summary

Glycosaminoglycan supplements containing glucosamine and chondroitin are used in the management of degenerative arthritis. Use only if a diagnosis indicating possible benefits from glycosaminoglycans has been made. May take a month or more to see beneficial results. They will NOT prevent degenerative arthritis. Side effects are rare.