

# ARTHRITIS & CHRONIC PAIN IN CATS



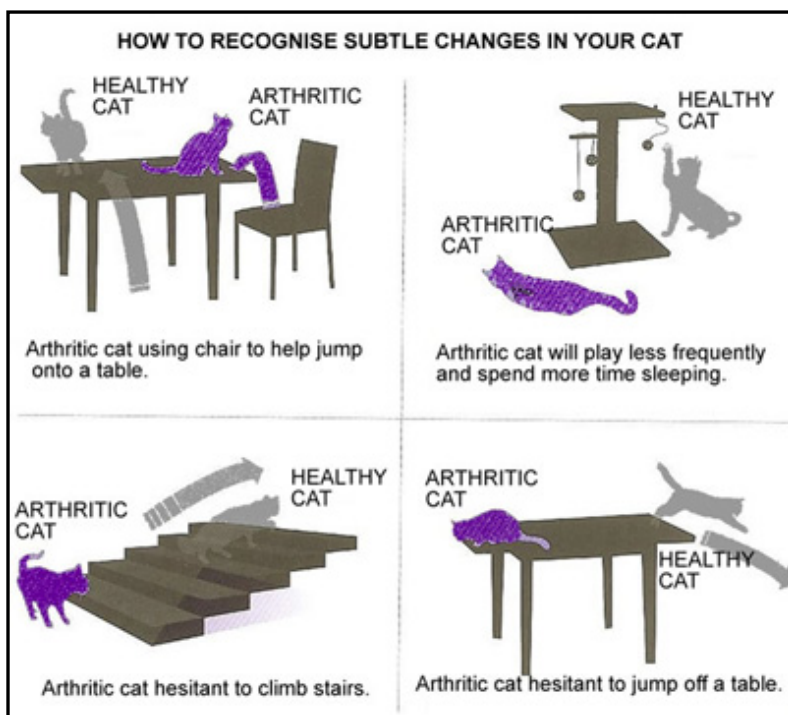
There are an estimated 80 million cats in the US. Almost half suffer from chronic and debilitating pain associated with the above conditions. **Only a small percentage of these 40 million affected cats have been properly diagnosed and are under a vet's care.** The barrier to delivering needed professional care: the inherent difficulty in diagnosing chronic pain in a species that has successfully evolved because of its ability to mask such pain as a form of protection against predators.

*Sadly, most cats with arthritis are under-medicated for pain.* Most people attribute signs of pain to aging or are completely unaware their pet is less active and playful because something hurts. If we could teach just one thing that would vastly improve the lives of our patients, it would be how to identify pain.

90% of cats over age 12 have arthritis visible on x-rays.

Arthritis in cats usually begins at around age 9. In its earliest stage, there are no symptoms, but as the disease slowly progresses and joint damage worsens, cats begin to "slow down." Most cat owners don't pick up on subtle pain signals. This is where we can help.

Cat behavior here at the veterinary clinic is not like it is at home. Unlike a dog, we can't trot a cat up and down the hall on a leash to watch it move. We can't see hesitation when the cat jumps up or down, or slowness on the stairs. The best person to pick up on these things is you!



A new website, [www.painfreecat.org](http://www.painfreecat.org), has a tool that allows pet owners to diagnose pain in their feline companions. It is called the Feline Musculoskeletal Pain Index, FMPI. Developed by NC State University's College of Veterinary Medicine, the FMPI is the only clinically validated instrument for diagnosing and monitoring feline chronic pain arising from degenerative joint disorders.

The FMPI tool scores the degree to which a cat is suffering pain associated with a chronic musculoskeletal disorder. Basically, the tool is a

questionnaire. It walks you through a set of questions about your cat's mobility, agility, and disposition that are associated with chronic pain. Each answer is scored. The sum of the scored observations measures the degree to which the cat suffers from pain associated with long-term, degenerative osteoarthritis (OA) or related neuromuscular and orthopedic conditions.

### **Pain doesn't look like you think it does**

- Meowing or crying are the least common signs of pain in pets.
- The most common signs of pain are sleeping more and interacting less.
- Cats most frequently have arthritis in the lower back and the elbows. Less jumping up, jumping down or going up or down stairs may be noticed. Lack of grooming may mean back pain is making it hurt to twist or bend.

### **Symptoms of pain (at any age):**

- Slowness, stiffness, difficulty rising or jumping up
  - Did your cat used to race up or down the stairs but now she goes slowly?
  - Did he stop climbing up to a favorite high perch or counter?
- Sleeping more, less responsive to activities going on (it's not just "old age!")
- Playing less often or for shorter amounts of time
- Unkempt fur from not being able to twist and bend to groom
- Missing the litter box due to difficulty squatting or getting in or out
- Decreased appetite or weight loss
- Eating slowly or showing a new preference for canned food may indicate oral pain

### **Arthritis Treatment Options**

There are lots of treatments for arthritis. In fact, figuring out what your cat needs can be confusing and overwhelming. The following is a list of some of these products, with some explanation on how they work. Most of the treatments listed below are compatible with each other, so you can try any or all of them if you like. The goal with arthritis treatment and prevention is to keep the patient comfortable and active as long as we can. These new medications can help a great many dogs and cats stay happier longer.

1) **Glucosamine:** brands include Arthroflex, Cosequin, Dasuquin, Glycoflex and many others.

These nutritional supplements are recommended for any dog or cat that is a senior, already has arthritis or has had a joint injury or joint surgery. These products supply glycosaminoglycans such as glucosamine and chondroitin. Glycosaminoglycans, or GAGs, decrease inflammation in the joints (and elsewhere). They are also what the body uses to make joint fluid, so giving extra helps keep the joints better

Pets started on arthritis supplements early (even before symptoms develop) will have less degenerative change in their joints as they age

lubricated. They have been proven to slow the progression of arthritis. Pets started on these products early (even before symptoms develop) will have slower deterioration in their joints as they age. Many pets with arthritis will have less pain and stiffness when taking these supplements but **the primary goal of glucosamine is to prevent or slow joint deterioration, not to treat it once it is there.**

Some brands of glucosamine also contain other nutritional ingredients that help the joints, such as MSM, Vitamin C (which improves absorption of glucosamine from the intestinal tract) and creatine. The more severe the symptoms of arthritis the more likely we are to add these additional ingredients. It usually takes two to four weeks to see improvement when beginning treatment if signs of pain are already present.

GAGs come in capsules, chewable tablets, liquids and granules to sprinkle on the food. Most dogs like the taste. Cats can be fussy but we have several products for cats as well and we can give you samples to try before you invest in an entire bag or bottle. The cost varies from about \$25 to \$100 depending on the product and the size. Most will last one to three months, depending on the size of your pet.

Some pet foods contain glucosamine, though most over-the-counter foods don't contain nearly enough to have any beneficial or therapeutic effect. You are best off using a prescription joint diet with extra glucosamine and/or fish oil. Prescription diets have been tested for efficacy and are much better regulated.

These diets are perfect for pets who are at risk for arthritis but do not yet have symptoms, or as an adjunct to other pain and anti-inflammatory medications. Providing fatty acids in the food is usually less expensive than giving supplements. **We highly recommend these foods for any pet having arthritis or at risk for arthritis to develop.**

Many of our clients are using their own glucosamine medications for their dogs. Be aware that in the sulfate form, or without added elements such as Vitamin C, dogs don't absorb glucosamine from the intestinal tract efficiently. A good quality glucosamine product for pets will say glucosamine HCl, not glucosamine sulfate, on the label. A dog may absorb eighty percent of a GAG product made for pets, but only forty percent of a human glucosamine sulfate product. This means you would need to give twice as much of a human product to see the same effect.

In addition to not always being the correct type of glucosamine, 38 of 40 human glucosamine products tested by consumerlabs.com did not actually contain the ingredients listed in the amounts stated on the label. Since there is no FDA oversight of nutraceutical products like these, some brands contain little or no active ingredients, despite label claims. For this reason, **we recommend getting your pet's supplement from us, not from a health food store or pharmacy.** Unless you are using a prescription joint diet you will need a supplement **in addition** to what is in your pet's regular food.

Cosequin and Dasuquin, our most-recommended products, are both made by a company called NutraMax. NutraMax is the only company that has done any significant testing of its glucosamine products for both safety and efficacy, so we like them. Cosequin is the original product and Dasuquin came out a few years later. Cosequin has glucosamine, chondroitin and Vitamin C.

Dasuquin contains glucosamine, chondroitin, ASU and MSM. MSM, short for methylsulfonylmethane, is a source of organic sulfur, a compound used by cartilage, so it helps to keep cartilage healthier. Avocado/Soybean unsaponifiables (ASU) are extracts from avocado or soybeans. ASU augments both glucosamine and chondroitin – in other words if you add ASU to a glucosamine supplement it works better than if there is no ASU present.

**Dasuquin Advanced** is our most powerful glucosamine supplement. It's like a souped up Dasuquin, containing 5 additional nutritional support ingredients not found in regular Dasuquin. These extra ingredients help to reduce pain and damage inside the joint. Our goal in using it is to get your pet enough extra relief from pain that we can delay starting prescription medication or be able to reduce the dosage of the prescription medication. Since these added ingredients are nutritional supplements they don't have the side effects that drugs do. Dasuquin Advanced has the same ingredients as Dasuquin, plus the following:

Green tea extract provides a compound called epigallocatechin gallate (EGCG). This compound inhibits the production of three different inflammatory chemicals. It works even better when combined with ASU.

Alpha-Lipoic acid (ALA) is an antioxidant. One of the chemicals that Green tea extract affects is prostaglandin E2. Prostaglandins are a major category of chemical messengers involved in pain and inflammation. Adding ALA to ASU inhibits prostaglandin E2 20% better than ASU alone. (Are you confused yet? Sorry about all the acronyms but even we have trouble saying unsoponafiable!)

Curcumin extract is a natural anti-inflammatory and antioxidant. Dasuquin Advanced contains a refined form of curcumin that is seven times more effective than standard curcumin extract.

Boswellia extract comes from the Boswellia plant. It has anti-inflammatory effects by itself but, like ALA, when it is used along with glucosamine, chondroitin and avocado extract it improves the effect and is 30% more effective at reducing prostaglandin E2.

Manganese is an essential mineral that improves absorption of glucosamine.

In summary, the ingredients in Dasuquin Advanced work together to: inhibit multiple inflammatory chemicals in the body; to support cartilage production; and to protect against cartilage breakdown.

2) **Fatty acid supplements:** these are also a nutritional supplement. Fatty acids are present in most pet foods at low levels. Premium diets contain more fatty acids than grocery store brands. Extra amounts, above and beyond what is available in most pet foods, have anti-inflammatory effects, so they help relieve joint inflammation. They are also helpful for other chronic inflammatory diseases, including allergic skin disease and chronic kidney failure. As with the GAGs, about two thirds of dogs seem to be helped by these. They take longer to show an effect, usually 2-8 weeks. Fatty acid supplements usually cost \$15 to \$25 per month. You might be able to use human products but this depends on the size of your pet and whether the mg strength of the fatty acids in those products works out right. Please see dosage chart in our separate Supplements handout.

3) **Adequan injections:** Adequan is a glycosaminoglycan, similar to what is in supplements. It is an injectable instead of oral medication. For some dogs, the injections work much better than the oral granules. It starts to take affect much sooner than oral glucosamine so it's a better choice if your dog just blew out his ACL ligament and you need something on board quickly. It also works well for cats, many of whom won't eat oral glucosamine supplements. An injection is given twice weekly for four weeks. If it helps, we continue injections every 1-2 months to maintain the effect. Pet owners can often learn to give these injections themselves at home.

4) **MSM:** this is another anti-inflammatory substance that is inexpensive and can be used in addition to other arthritis drugs. We usually add MSM when Rimadyl and glucosamine are no longer sufficient to keep a pet comfortable. It can be given by itself in a capsule or with glucosamine in a dual product. It has very few side effects.

5) **Cholodin:** this nutraceutical improves neuromuscular function. It can help with hind leg weakness as well as with cognitive and neurological problems.

6) **NSAIDs** (Non-Steroidal Anti-Inflammatory Drugs): These are the mainstay of arthritis treatment of both people and pets. Included in this category are aspirin, Tylenol/acetaminophen, ibuprofen, Celebrex, and many others. Brands for pets include Rimadyl, Etogesic, Deramaxx, Zubrin, and others. Some pets tolerate one better than another, or have fewer symptoms on a particular drug. We may try a few to see which works best. Be careful not to substitute human products without our OK. Pets have very different tolerances than humans, and drug dosages also may be very different between species. See our Long Term Use of NSAID Drugs handout or watch our YouTube video on the same topic, at [www.YouTube/BFVCTV](http://www.YouTube/BFVCTV) for more information.

7) **Acupuncture:** acupuncture really helps some dogs a lot. Treatment begins with a 45-60 min acupuncture evaluation after which, she can estimate how many treatments are needed and how often. At first, treatments will be more frequent and will become less frequent as the desired effect is seen. Follow-up acupuncture treatments require 30-40 min. appointments. We do not have an acupuncturist on staff so we would refer you to another hospital for that.

8) **Therapy laser treatments:** The therapy laser uses light to decrease inflammation, pain and swelling, without the side effects of drugs. We use it often for arthritis treatment. If this is an option for your dog or cat we will give you a handout specifically on its use.

9) **Massage:** Many arthritic patients end up with sore or spasming muscles because they are no longer walking or holding themselves normally. Massage and warmth, such as from heating pads, can be helpful. There is also a technique called dry needling that is similar to acupuncture but targets the actual area of muscle spasm rather than the meridian lines used with standard acupuncture.

10) **Other medications and treatments:** With advanced arthritis, we may need several drugs to manage the pain. Gabapentin, hydromorphone, codeine and tramadol are some of the drugs we might try if needed. See our Pain Management 101 handout for more information on these.

For more information on all of these topics, visit our website library at [www.bestfriendsvet.com](http://www.bestfriendsvet.com) and our YouTube channel, BFVCTV!

Only 43% of pet owners polled believed their pet's quality of life could be improved. Yet most arthritic pets are under-medicated for pain and millions go without dental care and regular veterinary check-ups. Ask us how we can help your pet live a longer, healthier life!