

## Vitamin C and Pets

### *Separating Fact from Fiction*

There are ways to provide all the health benefits of Vitamin C in a safe and effective manner:

1) Feed the best diet you can. Raw diets and high-quality natural foods are the best way to ensure your pet is getting all the nutrition he or she needs to stay healthy.

2) Use digestive enzymes to help your pet absorb all the nutrients from his food. Not only are these safe to use long-term but they actually help correct many gastrointestinal problems.

3) Supplement with healthy green foods. Barley grass contains large amounts of vitamins C, A, B1, B2, B6, E, biotin, folic acid, choline, pantothenic acid, iron, chlorophyll, potassium, calcium, magnesium, manganese, zinc, proteins, and enzymes. Studies have shown that spirulina inhibits cancer colony formation and enhances brain activity. It also increases circulation to the eyes, aiding in vision problems such as cataracts and retinal degeneration. Alfalfa is one of the best herbal therapies for arthritis and it, too, possesses cancer prevention properties by inactivating chemicals that cause cancer.

4) If you are using vitamin C to help arthritis, consider a joint complex containing glucosamine, chondroitin, and MSM. These provide pain relief, anti-inflammatory properties, and help build healthy new cartilage. They are safe to feed daily and long-term.

**Vitamin C prevents cancer, strengthens the immune system, and provides numerous health benefits.**

**Fact:** The antioxidant properties of vitamin C make it effective in preventing infections and may also provide some protection against certain cancerous tumor growth. There is also evidence that vitamin C may reduce the risk of cataracts and macular degeneration by fighting free radicals that damage the lens of the eye. Vitamin C also fights the symptoms of arthritis by aiding in the synthesis of the connective tissue collagen, which is an integral part of cartilage.

**Daily Vitamin C supplementation is necessary to provide my dog or cat all these health benefits.**

**Fiction:** It is true that humans and some animals (for example guinea pigs and monkeys) require Vitamin C. People lack the enzyme that is required to manufacture this vitamin independent of what we get in food and supplements. Dogs and cats, however, possess this enzyme and can synthesize vitamin C on their own. Vitamin C deficiency in humans can result in bleeding gums and painful joints, and can reduce the body's ability to heal wounds. These same symptoms occur in monkeys and guinea pigs if they do not receive vitamin C, *but do not occur in dogs and cats.*

Because dogs and cats manufacture their own vitamin C, *there is no AAFCO recommendation for including vitamin C in canine or feline diets or supplements.* Even though dogs and cats do not require vitamin C, many high-quality natural pet foods include it as a preservative. Likewise, if you are feeding a raw diet, your pet is getting additional vitamin C in any fruits or vegetables contained in the food. Additional vitamin C supplementation over and above what your pet manufactures naturally and what may be in his food is simply more than he can possibly use.

**My vet prescribed Vitamin C, so it must be safe to give my dog or cat on a daily basis.**

**Fiction:** It is true that vets sometimes prescribe vitamin C *for specific health problems*, even though studies are lacking that show effectiveness of vitamin C for most conditions. There are some studies that show it may be effective for epilepsy, atopic dermatitis, feline leukemia virus, periodontal disease, and osteoarthritis. It is also helpful for animals being treated with steroids, aspirin, or other anti-inflammatory drugs, since they can lower the amount of vitamin C in the body. Unfortunately, there are safety issues that must be considered.

Too much vitamin C is extremely hard on the digestive system and can cause chronic diarrhea when given long-term. In fact, when vets prescribe vitamin C for a certain condition, they usually advise dosages up to what is called the "bowel tolerance" dose. In humans, high doses of vitamin C can cause copper deficiency and excessive iron absorption. It is also contraindicated in people with kidney problems, as it may cause kidney stones when given over time.

**Some forms of Vitamin C are better than others.**

**Fact:** The best form of vitamin C is that which the body manufactures itself. Next to that, natural forms of vitamin C from healthy foods such as vegetables, fruits, and green foods is best. If you are determined to give a manufactured vitamin C supplement in the form of a powder, tablet, or capsule, Ester-C is better tolerated than Ascorbic Acid. That is because Ester-C is absorbed more quickly and has less time to irritate the intestinal tract.