



Chapter 8 Heart Disease and Supplementation

If your dog is getting into his/her senior years or has had heartworms now or in the past, you need to read this chapter so you will know how to help prevent heart disease in your dog. If you wait too long and your dog shows signs of heart disease like lethargy, wheezing, coughing or has a hard time walking or running, it's often too late to save your beloved dog for living a longer life, but with supplements you can help extend his/her life and help them to be comfortable throughout their lasting years and possibly extend their life further. If your vet suspects heart disease, he/she will usually want x-rays, EKG or cardiac ultrasound. Many times he/she will find the heart enlarged, possibly fluid in the lungs. Your vet will also listen with a stethoscope for missed or skipped heartbeats causing a heart murmur.

Some breeds are predisposed to heart conditions, including New Foundlands, Cavalier King Charles Spaniel, Great Danes, and Dobermans. But no dog is excluded. Much depends on the breeding line, the diet, and overall care of the dog. Dogs with heart disease will be lacking sufficient nutrients. Many dogs on kibble will come down with heart disease as well. Heart murmurs are ranked on a scale from 1 to 6, where 1 is considered mild and 6 is the worst case.

These symptoms are what to look for in heart disease:

- Abdominal distention

- Exercise intolerance
- Lethargy/weakness
- Coughing/Gagging
- Breathing difficulty
- Excessive panting
- Bluish skin/gums
- Sleeping more
- Loss of appetite
- Rapid weight loss

There is a blood test for early detection in heart disease. It's called the ProBNP test. (B-type Natriuretic Peptide) This test measures the peptide hormone that the heart releases. This only shows up when the heart is under pressure or working harder than it should be. This test can prepare you for the future to help your dog's heart function better and last longer without causing more stress. You can have this done at any age but in larger breeds, I would start around 4-5 years of age and check it either yearly or every other year depending on dog, but can be done as often as necessary.

Normal numbers range: <900pmol/l.

Moderate: 900 to 1800 pmol/l - Possible disease - Consider other tests such as x-rays or ECG.

Severe: >1800 pmol/l - heart failure is high, exercise intolerance, breathing difficulty.

Probiotics and Digestive enzymes are important. The goal here is to make the immune system strong and rebuild/repair muscles, liver etc. If you have a healthy gut, you will have a healthier body. Diet plays an extremely important roll. A homemade diet (raw preferably) is your best diet. **Do not feed commercial pet foods. Homemade only but make sure you have all the correct supplements for a homemade diet.** Do not feed anything with salt in dogs with heart disease. Provide fresh filtered multi-stage chlorine and fluoride-free water at all times.

If your dog is on medications, add milk thistle to the diet to help filter the liver. You can give milk thistle for five days and then off for two days weekly. After 1-3 months stop milk thistle for at least 30 days then you can give again. This is not an herb to be given daily and permanently. Normally 30 days is the recommended time to give.

If your pet is suffering from a heart condition, you may want to try these vitamins and herbs. It has been documented that these have shown improvement in heart conditions, and even eliminating medications or stopping them altogether.

For **prevention** of heart disease, you can give these supplements (several or all):

- Ubiquinol/COQ10
- L-Arginine
- Organic Hawthorn powder (or Ajuna)
- Taurine (try to find one not sourced from China because most are and/or feed raw heart meat)
- Propionyl-L-Carnitine /L-Carnitine

- Fulvic/Humic Acid (natural minerals, amino acids and some B vitamins)
- Organic Astragalus powder
- D-Ribose
- Astaxanthin
- Magnesium Orotate or Magnesium Taurate (contains Taurine)

I myself had a dog suffering from a heart murmur and with these supplements; I was able to stop all coughing and stopped all medications. Give it a few weeks to see if coughing subsides. Another dog with more severe symptoms was treated using all of these below and the coughing was cut in half but continued medications daily as well. Without the supplements, the coughing stayed the same even on medication.

This is a list of supplements that will work for heart disease if your dog has already been **diagnosed**:

- Ubiquinol/COQ10 (highly recommended)
- Pycnogenol or Pine Bark Extract
- L-Arginine
- Organic Hawthorn (or Arjuna) powder
- Taurine (try to find one not sourced from China because most are and/or feed raw heart meat)
- L-Carnitine
- D-Ribose (highly recommended)
- Magnesium Orotate or Magnesium Taurate
- Vitamin C (ester C-Magnesium Ascorbate) or better yet - Camu Camu or Rosehips)
- Vitamin E (soy free)
- Fish Oil (sardine/anchovy or squid)
- Organic Turmeric
- Organic Dandelion Leaf (diuretic)
- Fulvic/Humic Acid
- Astaxanthin
- Boswellia/Frankincense

Other Herbs for the heart:

Motherwort (*Leonurus cardiaca*)

Fo-ti root (*Polygonum multiflorum*)

Kudzu (*Pueraria spp*)

Bugleweed (expectorant and diuretic) not for use in hypothyroidism.

These are best when split into at least 2 doses per day. Do not throw all of these into one meal and not expect reactions. In other words, add two supplements into wet foods daily for 7-14 days, if no reaction (diarrhea, vomiting) then add 2-3 more into diet, give for 7-14 days then add a couple more and so on. Work up to getting all of these in the diet. It's a lot I know but, do this and see what happens. If your dog isn't better within 4-6 weeks, you can choose to cut back on

them. But I would continue use as long as your dog is alive. You may cut back after 6 months to half a dose on some or even stop a few.

Ubiquinol/COQ10

Ubiquinol is better but COQ10 is acceptable as well.

Ubiquinol Dosage:

Small dogs: 50mg per day

Medium dogs: 100mg per day

Large dogs: 100mg twice per day

Giant dogs: 100 - 200mg twice per day

COQ10 Dosage:

Small dogs: 100 - 200mg daily

Medium dogs: 200 - 300mg daily

Large dogs: 300 - 400mg daily

Giant dogs: 400 - 500mg daily

Pycnogenol or Pine Bark Extract

Dosage: 1 - 2 mg per lb of body weight.

L-Arginine

Dosage:

Small dogs: 250mg

Medium dogs: 500mg

Large dogs: 750mg

Giant dogs: 1000mg

Higher amounts of L-Arginine in some rare cases can cause diarrhea. Do **not use with myocardial infarction.*

Astaxanthin

Astaxanthin is a very powerful antioxidant and it is 800 times stronger than COQ10. Astaxanthin can play a crucial role in helping your dog's heart function properly. Wild caught Salmon also contains Astaxanthin. Astaxanthin is also 65 times more powerful than vitamin C. Dogs and humans do not make Astaxanthin themselves so we must get it from other sources. When purchasing a supplement, make sure it is created from marine microalgae and not fungus. Look for oils and not powders. This may make your dogs poop a reddish orange color.

Dosage:

1- 2mg per 20 lbs or follow directions if in a pet supplement form.

I like to use human supplements a lot, as I don't trust many pet products plus they seem to be more expensive. That's my personal opinion. I am selective on what I like to purchase for my dogs. Astaxanthin is a very safe supplement to give so there is no known toxic effects.

Organic Hawthorn Berry powder

Dosage:

Small dogs: 1/4 tsp

Medium dogs: 3/4 tsp

Large dogs: 1 tsp

Giant dogs: 1 1/2 tsp

Taurine (Also good for Epilepsy. Helps heart muscle to contract.)

Taurine is best given on an empty stomach. Note that Taurine is abundant in raw meat, particularly heart, but much is lost when the meat is cooked. You may want to add some meat and canned fish with bones (low sodium sardines, jack mackerel, pink salmon-*wild caught*) to the diet if your dog suffers from heart disease. Cooking reduces Taurine, so feed raw or cook lightly. Canned fish is high in sodium, so rinse before feeding or look for low sodium fish.

Vitamin B-6 is needed for the conversion of Taurine, so adding a B-complex vitamin supplement (better than supplementing B-6 alone) is also a good idea. B vitamins work together as a team the best. Lamb and rice diets may contribute to Taurine deficiency, either due to the effect of rice or a lower availability of Taurine in lamb.

Dosage:

Small dogs: 250mg

Medium dogs: 500mg

Large dogs: 750mg

L-Carnitine (Angina, Heart Attack, Heart Failure)

Dosage:

Small dogs: 250mg

Medium dogs: 500mg

Large dogs: 750mg

Giant dogs: 1000mg

**Higher amounts of L-Carnitine in rare cases can cause vomiting, diarrhea, loss of appetite. It is always good to have a watchful eye when giving supplements to your pets.*

D-Ribose

Dosage:

Small dogs: 500mg

Medium dogs: 1000mg

Large dogs: 1500mg

Giant dogs: 2000mg

Supplementing with D-ribose can improve heart function following damage to the heart muscle. It helps the heart muscle manage energy, offering a solution to the slow-motion cardiac energy crisis that is heart failure. D-ribose improves blood flow and the exchange of oxygen and CO₂.

**Can cause some side effects including diarrhea, stomach discomfort, nausea, and low blood sugar. Stop taking ribose at least 2 weeks before surgery.*

Magnesium Orotate/Magnesium Taurate

Dosage:

Small dogs: 10mg - 20mg

Medium dogs: 20mg - 50mg

Large dogs: 50mg - 100mg

Giant dogs: 75mg - 150mg

Or when using powder 1/8 teaspoon up to 1/2 teaspoon depending on size of dog.

Astragalus (*Astragalus membranaceus*)

Immunostimulant, antiviral, anti-inflammatory, hypothyroid (mildly depresses thyroid function), hypotensive, digestive tonic. Works on immune systems, lungs, liver, **heart**, kidneys, thyroid, and digestive tract. Astragalus is used for strengthening the body against viral infections of the respiratory and heart. Astragalus can be used for early treatment of a variety of respiratory infections, including kennel cough (*Bordetella bronchiseptica*). Astragalus helps to raise white blood cell counts and also boosts the body's immune system. Astragalus may be useful for helping the body protect itself and speed recovery from the damages of long-term steroid medications. Astragalus is also useful in early stages of kidney infection and/or renal failure. Astragalus is non-toxic in any dosages. Buy organic.

Powder

Dosage:

Small dogs: 1/4 tsp

Medium dogs: 3/4 tsp

Large dogs: 1 tsp

Giant dogs: 1 1/2 tsp

Vitamin C - (Buffered/Ester C-*Magnesium Ascorbate*) or Camu Camu or Rosehips)

Dosage:

Adjust accordingly but a good place to start or work towards.

Small dogs: 500mg - 1500mg

Medium/Large dogs: 1000mg - 3000mg

Giant dogs: 2000mg - 4000mg

Powder

Dosage:

Small dogs: 1/4 tsp

Medium dogs: 3/4 tsp

Large dogs: 1 tsp

Giant dogs: 1 1/2 tsp

Vitamin E (soy free):

Dosage (three times a week):

Small dogs: 200IU

Medium dogs: 300IU

Large dogs: 400IU

Giant dogs: 600IU

Fish Oil (Sardine/Anchovy or Squid)

Dosage:

Small dogs: 500 - 750mg

Medium dogs: 1000 - 1250mg

Large dogs: 1500 - 1750mg

Giant dogs: 2000 - 2250mg

Organic Turmeric

This herb is strong flavored and smells with a bright orange color. And it even will stain garments. May cause stomach upset for sensitive tummies. Terrific for all ailments and diseases except kidney stones. It is important to note that turmeric is a binding agent and a good remedy for diarrhea as well. It can cause constipation as well as dehydration so be sure your dog drinks plenty of water when using it. Turmeric works for most all illness including, joints, heart, cancer etc. It's a great additive for most any ailment and for preventing future illness.

Dosage:

Small dogs: 250mg

Medium dogs: 350mg

Large dogs: 500mg

Giant dogs: 750mg

This can be adjusted up or down.

Powder

Dosage:

Small dogs: 1/4 tsp

Medium dogs: 3/4 tsp

Large dogs: 1 tsp

Giant dogs: 1 1/2 tsp

You can purchase capsules and slide into foods if possible or buy smaller (size 0) empty capsules and fill them yourself. Standard capsules are size 00. They go as small as size 4. You can buy them on Amazon, eBay etc.

**Turmeric should not be given to dogs prone to kidney stones. Turmeric isn't supposed to be given with blood thinners. Turmeric should not be combined with drugs that reduce stomach acid (Pepsid, Zantac etc), as the body will actually increase its production of stomach acid, and thus, lead to nausea, stomach pain, bloating, and esophagus damage.*

Organic Dandelion Leaf Powder (Taraxacum officinale)

(Diuretic):

Dandelion has been used for digestive and liver (root); Pancreatitis, edema (leaf), Anemia, Kidney/Bladder. The leaf and root are good for many conditions involving edema (water retention) and the flowers are high in antioxidants. You can use root and leaf together and most of all for liver, kidney, and heart disease in dogs.

Dandelion should not be used in cases of bile duct obstruction or acute gallbladder inflammation. The high mineral content may affect the absorption of a certain class of antibiotics (quinolones). Dandelion leaf is particularly useful in animals that have a chronic problem with indigestion. If your dog has frequent gas and/or passes food that does not appear digested, apply a few drops of dandelion tincture on his/her tongue.

Dandelion Leaf is popular and is a safe but powerful diuretic and liver stimulant. Dandelion works with congestive heart failure, pulmonary edema, arthritis, gallbladder disease, and kidney stones. Drugs such as Lasix are often used to drain off excess fluid from the body and help the elimination of waste. Pharmaceutical diuretics are fast acting and very effective, but while they do a good job at reducing fluid buildup, they tend not to discriminate between what the body needs to keep and what it needs to lose. The body often loses too much potassium, a crucial heart and brain chemical, through urination. In this case, potassium must be supplemented throughout the therapy. Dandelion leaf on the other hand, contains its own rich source of potassium that the body can absorb.

While dandelion leaves are used as a diuretic, the root holds its own usefulness as a safe liver tonic. The liver is the primary filtering organ and responsible for removing toxins from the blood for elimination in the kidneys. And while dandelion leaf tea or tincture may do much toward relieving the symptoms through a nutritive/diuretic action, the root will work closer to the underlying causes.

Dandelion does not further irritate an already inflamed condition. Dandelion root was shown to be effective in treating inflammatory diseases of the liver and the gall bladder including gallstones.

Dandelion helps reduce fluid in the lungs and around heart. It's a natural diuretic and helps to restore potassium levels lost while taking medications.

Dosage:

Capsules-up to 250mg a day

Powder

Dosage:

Small dogs: 1/4 tsp

Medium dogs: 3/4 tsp

Large dogs: 1 tsp

Giant dogs: 1 1/2 tsp

Note on the differences between the root and leaf

Dandelion Root is used mostly for liver, gallbladder, and better digestion. Aids in destroying cancer cells. A research study done in Ireland showed that dandelion root was especially effective against certain strains of bacteria that are responsible for staph infections and food-borne illnesses. High in vitamin K.

NOTE: *May* affect the absorption of a class of antibiotics (quinolones).

Fulvic/Humic Acid

Many pet parents wonder if their pets will be getting “too many minerals” if they are giving other products that also contain minerals such as a Calcium supplement. The answer is no because Fulvic is extracted from plant material – not rocks or clay. It is impossible for plant-derived minerals to build up in the tissues. Depending on the severity of health issues, you can give higher amounts. Fulvic/Humic Acid detoxifies the body of heavy metals, toxins, and pollutants, increases oxygen absorption in blood, enhances healing, repair, and rejuvenation of the cells - energizes cells, repairs and detoxifies the thyroid.

Approximate Dosing:

Small dogs: 1 teaspoon

Medium dogs: 2 teaspoons

Large dogs: 1 TBSP

Collagen:

Collagen makes up 30% of the entire body in dogs. Collagen works on nails, coat, joints, and digestive tract to name a few. Most collagen supplements contain amino acids, what most bodies are lacking, especially in older pets. Collagen comes in many types including Type I, II, III and so on. Type II is specific for joints and I and III are specific to skin, hair, nails. Overall Collagen promotes healthy systems in all areas. The amino acid Glycine targets cancer cells as well as the digestive system. Some types of collagen comes from fish. I tend to steer away from fish due to any chances of mercury contamination. Collagen peptide is another term for hydrolyzed collagen. If purchasing human products, start with a low dose and work up in dosing over a few weeks time. Normally human dosing is based off of a 150-160 lb human. Adjust accordingly. Not all Collagens are created equal. Collagen is a tasteless and odorless powder, so it is easy to use and mix into wet foods. At this time, I found the brand Forest Leaf to be superior in its ingredients and contains 18 amino acids including Glycine. There are 9 essential amino acids: histidine, isoleucine, leucine, lysine, methionine, phenylalanine, threonine, tryptophan, and valine. And 20 amino acids in total. This particular brand contains 8 of those 9 essential amino acids. Tryptophan is not in it. I found this common in many of them. Amino acids play a key role in our health as well as our pets. The body cannot make amino acids so they must come from the diet. Buckwheat is a plant-based food that contains all nine essential amino acids. Protein sources are meat, poultry, eggs, dairy and seafood contain all 9 essential amino acids as well.

Approximate Dosage:

Small dogs: 1/8 scoop

Medium dogs: 1/4 scoop

Large dogs: 1/2 scoop (1 TBSP)

**Start with lower amounts and work up to the recommended dose with time as this can cause some loose stools, diarrhea, or digestive upset.*

These dosages can be adjusted according to the results you may or may not be getting. It takes a little time to begin to see results.

The brand mentioned contains 18 amino acids including Glycine (for cancer) at 2330 mg. per scoop. This product is low in sodium. Some of the other brand of collagens contain higher amounts.

Boswellia (also called Frankincense):

Boswellia has also been shown in preliminary research to be effective at reducing swelling around brain tumors. A study performed in 2004 shows that Boswellia is an herb that lives up to its reputation. Twenty-four dogs with chronic joint pain were administered a dose of Boswellia once a week for 6 weeks. After just a couple weeks, 71% of the dogs showed improvement. The research showed that improvement was gradual but Boswellia did seem to help reduce local pain and stiff gaits. Boswellia is considered an anti-inflammatory herb. Boswellia is one herb that seems to work well. Helps coughing and asthma along with inflammation.

Dosage-Powder:

Small dogs: 1/4 tsp

Medium dogs: 3/4 tsp

Large dogs: 1 tsp

Giant dogs: 1 1/2 tsp

Potassium may be needed:

Potassium needs may be increased, if you are giving digoxin or diuretics, or decreased if you are treating with ACE inhibitors such as Enalapril, or with spironolactone. Monitor blood potassium levels and make adjustments as needed. Check with your vet before adding any potassium supplements. If you feed a raw diet or are giving Dandelion Leaf, it is probably not needed.

Note that many prescription cardiac diets are high in potassium, which may be inappropriate depending on the medications being used. Some prescription diets are also low in protein, which is always inappropriate for dogs with heart disease. If you are feeding a prescription diet for heart disease, you can improve the quality of the diet by switching to high-protein animal-source foods such as meat, eggs and some dairy (raw goats milk, Kefir), but be careful not to add foods that are high in sodium. For example: Look for low sodium sardines in water. Avoid salmon, as it is high in sodium. Note that prescription diets are **not** recommended. This can be maintained by a homemade diet (raw or cooked) best. (See Chapter 3)

While this seems like a TON of supplements, **it is**. But these are all known to help the heart. It is **not** recommended to use only one or two. Pick at least 5-8 of these and use them daily for moderate - severe cases. Combinations work much better than single ingredients. You can skip a day or two weekly for the system to have a break. Usually for the first 2-4 weeks, don't skip unless an issue arises. Like I mentioned, I have used them all at one time and had really good results. Start out with a couple for about 5-7 days and in lower amounts, if no loose stools or diarrhea, vomiting or loss of appetite, work up to full dose then add two more into the daily diet. Sometimes you may not see diarrhea until the second week so be aware. If all goes well, in 5-7 days, add in two more. Work your way up to all of the ones you plan on adding. Never throw all of them in at one time on the first day with a full dose and not expect something to happen. You

may obtain cannon butt (diarrhea) if you do. Poop always plays a crucial role in knowing where your dog is at in his diet, or anything going into the body.

Vitamin C (all ascorbates) will cause diarrhea or loose stools in higher doses. Just back off of the amount you gave until no more diarrhea or give Camu Camu for all natural. Give 100% organic pumpkin to help with the symptoms of diarrhea or loose stools along with Slippery Elm. Organic diets for a diseased heart will help improve your dog's health overall as well.

*From the book: Natural Health And Nutrition For Dogs-Revised Edition 2
by Debbie Daniel.*

You may find the book available for purchase at HolisticandOrganixPetShoppe.com