

# Help Prevent the Most Common Feline Heart Condition

Cats develop heart disease, just like dogs and humans, but it often goes undetected until the condition is already severe. Diagnosing it can be tricky and there is no cure for the most common heart condition seen in kitties. Help prevent it with this winning combo of the right food and supplements.

**Analysis by Dr. Karen Shaw Becker**

## STORY AT-A-GLANCE

- Like humans and dogs, cats develop heart disease, most often a condition called hypertrophic cardiomyopathy (HCM), in which the walls and ventricles of the heart thicken, and the heart muscle enlarges
- Symptoms of HCM are variable depending on the severity of the disease; cats with heart murmurs, arrhythmias, or gallops should be evaluated for the condition
- Diagnosing feline heart conditions can be problematic; however, screening ultrasounds can help diagnose the vast majority of significant disease and a proBNP blood test is also recommended
- A natural treatment approach for feline HCM includes a combination of high doses of ubiquinol and omega-3 fatty acids, certain amino acids, heart glandulars and herbs
- Steps you can take to help prevent heart disease in your cat include feeding a nutritionally optimal, species-specific diet and supplementing with CoQ10 in the form of ubiquinol

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Cats develop heart disease just like dogs and people, and in fact, estimates are that about 15% of the general population of domestic cats are affected.<sup>1</sup>

However, unlike the majority of dogs with heart problems, cats rarely develop degenerative valvular disease. The heart condition most commonly seen in felines rarely occurs in dogs. It's called hypertrophic cardiomyopathy (HCM), and it accounts for 80% of feline heart problems.<sup>2</sup>

Ragdolls and Maine Coons are genetically predisposed to HCM, and there's a genetic test available for these two breeds. The problem is also seen in the Persian, other oriental breeds, and American shorthairs, but it can occur in any cat. Kitties usually develop the condition when they reach middle age, but it can occur at any age.

Two other types of cardiomyopathy — restrictive cardiomyopathy and dilated cardiomyopathy (which occurs more frequently in the Abyssinian, Burmese and Siamese than other breeds) — are much less common in felines. However, dilated cardiomyopathy (DCM) was quite prevalent before a link was discovered between **taurine deficiency** and DCM around 1980. Now that taurine is routinely added to commercial cat food, the disease is seen far less in kitties.

## Feline Hypertrophic Cardiomyopathy

Hypertrophic means thickened — the walls and ventricles of the heart become too thick, or hypertrophied, which causes growth of the heart muscle. Unlike other muscles of the body, bigger isn't better in the case of the heart muscle. The severity of the condition depends on how thick the muscle wall ultimately gets. Some cats develop only minor thickening, while others develop a much more significant problem.

As HCM progresses, the structure of the heart actually changes, and heart function is affected. Thickened muscle walls become less flexible, and the left ventricle can no longer relax or stretch efficiently to fill with blood.

These changes can create a heart murmur because the heart valves don't grow as the heart muscle enlarges, and they become insufficient. This can also cause a buildup of blood in the left atrium of the heart, which forces fluid back into the lungs and into the chest cavity, which ultimately causes congestive heart failure.

In some unlucky patients, the thickening of the heart causes an arrhythmia that can bring on sudden death. And some cats develop feline aortic thromboembolism (FATE), also called saddle thrombus, which is a blood clot that forms in the aorta and blocks the flow of blood, usually to the back legs. FATE causes sudden paralysis, a tremendous amount of pain for the cat, and even death.

### Signs to Watch For

Symptoms of feline HCM vary and depend to some extent on the severity of the disease. Cats with mild disease don't always have symptoms. But a kitty with significant disease will usually show noticeable signs of a problem.

The challenge for pet parents is that cats are masters at disguising illness, so until the condition is severe, even a very sick cat may have no symptoms, or very mild symptoms that are non-specific and don't seem to suggest heart disease, such as a tendency to hide more, eat less, or be generally lethargic.

In cats with obvious symptoms, there can be respiratory distress caused by congestive heart failure, or leg paralysis due to a blood clot as noted above.

Cats with congestive heart failure tend to breathe through an open mouth, and they sometimes pant. You should watch for breathing difficulties during exertion. Some kitties with HCM and congestive heart failure have a hard time walking any distance without stopping to rest.

### Diagnosing Heart Disease in Cats Can Be Problematic

A heart murmur isn't an accurate indicator of the presence of feline heart disease, because sometimes kitties with heart disease have a murmur and sometimes, they don't. In addition, cats can have a heart murmur but no heart disease.

When presented with a cat with suspected heart problems, many veterinarians refer the owner to a veterinary cardiologist, who uses ultrasound imaging to view the heart and diagnose disease. Sometimes kitties require light sedation to undergo an echocardiogram, and cardiac evaluations can run several hundred dollars.

Fortunately, in recent years ultrasound machines have gotten smaller and less expensive, making them more accessible to general practice veterinarians. In 2016, veterinary researchers from Cummings School of Veterinary Medicine conducted a study to teach primary care veterinarians to use ultrasound to screen for heart disease in cats. The results, published in the *Journal of Veterinary Internal Medicine*,<sup>3</sup> were encouraging.

The Cummings team nicknamed their study the “cat cardiology roadshow,” because they traveled around New England teaching veterinarians how to use an ultrasound machine and what to look for. They dubbed the screening ultrasound the “two-minute echo” because it takes just a couple of minutes and is also gentle on the cat.

After the training, veterinarians were able to identify the vast majority of asymptomatic kitties with significant heart disease. But unfortunately, the two-minute echo procedure isn't as successful in helping to identify cats with mild heart disease. However, the veterinarians who were trained in the procedure told the researchers they planned to continue to screen cats for heart disease using the two-minute echo procedure.

Heart murmurs, arrhythmias, or gallops detected in routine physical exams of healthy cats certainly warrant further investigation. If your veterinarian doesn't have access to ultrasound as a diagnostic tool, I strongly encourage you to ask him or her to run a proBNP blood test on your kitty. This test can give you peace of mind that your cat has no early signs of heart disease, or it can alert you to a problem so that you can take steps to proactively manage her heart health.

## **Treatment Options**

There is no cure for HCM, and changes that occur to the heart muscle are permanent. However, if the heart problem developed as a result of another underlying issue, treatment of the primary disease can result in partial or complete resolution of the HCM.

Conventional treatment involves the use of diuretics and ACE inhibitors to treat congestive heart failure. Drugs that claim to reduce the likelihood of blood clots are sometimes used with HCM patients at risk for thromboembolism. These drugs must be closely monitored to prevent hemorrhage, and they provide no guarantees, which is why I prefer to use the natural supplement nattokinase to reduce the risk of blood clots.

No medications have proved consistently effective in improving the heart function in HCM patients. And sadly, often cats with HCM are not treated until congestive heart failure has developed.

I've successfully treated many patients with this heart condition using a combination of high doses of ubiquinol and omega-3 fatty acids, as well as certain amino acids, including taurine, L-arginine, and acetyl L-carnitine. I also use heart glandulars and herbs, including hawthorn.

Because amino acid deficiency (a dietary shortage of meat-based protein) can fuel HCM, I strongly recommend that all my cat patients consume a human-grade, meat-based diet, and eliminate all fillers such as grains and unnecessary carbohydrates that kitties don't need in the first place.

I also think we've underestimated the role of vitamin D in companion animal medicine, and its role in heart disease, as well. Identifying and treating vitamin D deficiency is an important step in reducing diet-related cardiovascular stress.

# Helping Your Cat Avoid Heart Disease

Keep your feline family member lean and fit by feeding a nutritionally balanced, species-specific diet that meets her nutritional requirements for unadulterated animal protein (amino acids).

Calculate how much filler (aka carbs, which cats don't require) is in your cat food. Feed foods with less than 20%, so that the remaining calories come from lean proteins supplying abundant nutrients for heart health.

I believe the unnecessary carbohydrates found in most processed cat foods offset the amount of animal-derived protein cats need, making carbs (and nutrient deficiencies) a significant nutritional contributing factor to feline heart disease.

Also, the high temperatures the food is processed at inactivate the delicate fatty acids, so even though the label says it contains the correct amount of essential fatty acids to maintain good cardiovascular health, they've been inactivated through the manufacturing process. Add in responsibly sourced krill oil at the time of feeding.

The amount of taurine, carnitine and CoQ10 found naturally in unprocessed meat is critically important to your kitty's heart health. These vital nutrients are not found in adequate quantities in most ultra-processed foods and processing further diminishes their bioavailability. This is another reason I recommend minimally processed, starch-free foods (no grains or potatoes) for cats.

If you feed dry or canned food, I recommend supplementing your pet's diet with coenzyme Q10 (in the form of **ubiquinol**) and taurine, at a minimum, as well as additional marine sources of omega-3 fatty acids (krill oil), especially if you have a cat that may be predisposed to cardiovascular disease.

## Sources and References

<sup>1</sup> [dvm360, September 4, 2018](#)

<sup>2</sup> [The News-Gazette, December 20, 2018](#)

<sup>3</sup> [The use of focused cardiac ultrasound to screen for occult heart disease in asymptomatic cats. J Vet Intern Med. 2019;33:1892–1901](#)

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