

# Alternatives 4 Animal Health



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Heartworm



## The Natural Heartworm Prevention Program

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## Who's the Enemy Here?

Let's begin with a short review of the life cycle of the heartworm, *Dirofilaria immitis*. This parasite is carried in larval form by the mosquito, who ingests it while feeding on the blood of a dog who has adult heartworms in his heart. These adult worms give rise to tiny larvae called microfilaria, that circulate in the blood vessels. As an interesting aside, the microfilaria are sequestered away, probably in the spleen or lung vessels most of the day, but come into the peripheral circulation (capillaries near the skin surface) during the morning and evening. These times of day are just when the mosquitoes feed! Quite remarkable the way these parasites have adapted to play off the schedules of their carriers, don't you think? So, the mosquito bites the dog, sucks in a few "hitchhikers" in the form of microfilaria, and goes off to bite the next dog. In this way, the larvae are released in the next dog's blood, and, if all systems are go, these larvae slowly develop into adult worms. The microfilaria must go through several molts, and finally migrate to the heart where they finish development into adulthood. This cycle from bite to adult worm in the heart takes roughly six months to complete. Full grown adult worms may be six inches in length! Lodging in the heart vessels, they can eventually block enough blood flow by their sheer numbers that the heart can fail in its pumping action and result in the dog showing symptoms of heart disease. Usually this is heard as a chronic cough. Another common symptom is exercise intolerance, or loss of stamina. A simple blood test reveals the presence of adult worms by the tracks the females leave in the blood, called antigens.

Once a dog is diagnosed "heartworm positive," it means there are at least 3-5 adult worms in the heart. The test is not quantitative, so the positive result could mean 3 or 13 or 30 worms are present. Generally we can guess there is a larger worm burden if the dog has heart symptoms, like a murmur; weak pulses in the hind leg arteries; or the cough and loss of stamina are present as mentioned above. The veterinarian seeking to know the size of the worm burden may also take radiographs of the heart and lungs. There are certain fairly distinct patterns of radiographic changes that appear in the dogs that have a large number of worms present in the heart.

## Conventional Treatment

The treatment that is commonly recommended for a positive dog is a course of injections of an arsenic compound, called melarsomine. This toxic drug kills the worms, and the advice given to the owners of dogs so treated is that they must keep their dog quiet, avoiding vigorous exercise, for several weeks after the treatment. This is because the worms die off rather abruptly, and exercise may cause them to "shake loose" in large pieces and clog up the blood vessels in the lungs or elsewhere. The microfilaria may receive another course of drugs to clear them before the dog is declared heartworm free. Testing the blood is used to determine

the success of the treatment.

### **Fear Sells!**

As with much of conventional medicine, the fear of the disease drives most people to buy the heartworm preventatives sold by the veterinarian. Especially useful in instilling this fear is a picture, model or, better yet, a jar with a preserved heart cut open to reveal the presence of a multitude of long, spaghetti-like worms stuck inside! We had just such a specimen in the waiting room of my conventional practice. What a sales tool!!! Not wanting such a horrible condition to strike their pet, anyone seeing this amazing sight would quickly inquire as to the availability of preventative drugs.

My aim in this report is to replace that fear with reasoned logic, so that you can operate at a much higher level of decision making than that which accompanies the strong emotion of fear. For, as you'll see as you read along, this parasite is not the death sentence or plague it is painted to be. And, as your confidence grows in the inherent ability of your dog to resist this foreign intruder, your fear will consequently decline. You'll be able to decide a safer, non-toxic course for your dog that will extend his life, eliminate a common source of damaging chemical exposure, and let you sleep at night knowing you have acted proactively to protect your beloved Spot from harm.



### **How to Think Wolf**

So, the best framework in which to examine this parasitic disease is the natural model. What happens in the real world? You'll remember from another page in my web site that the dog is very closely related to the wolf, it's cousin and ancestor in the wild (see [The Missing Ingredient](#) for reference). So, let's look at the wolf and the coyote as examples of how canines in the wild deal with this parasite.

First, do we ever read in the newspapers or see on television the banner headline, "Wolves in Southern states endangered by dreadful heartworm epidemic!"? The subheading might say, "Heartworm preventative bait being dropped from airplanes to save endangered packs." No, of course not. It has never happened this way, nor will it in the future. Why? It is solely because the wolves and coyotes have immune systems that are functioning as intended, "seeing" this parasite for what it is: foreign. The job of the immune system is to react to foreigners, be they bacteria, viruses, parasites, or cancer cells (see [Immunity](#) for more on this). "React" means to send in special blood cells, like natural killer cells or eosinophils; to make antibodies and create inflammation; and in various ways, to attack those foreigners and eliminate them from the body. That's what the immune system was designed to do, and, if we don't

interfere with it, that is what it does with great efficiency.

Is there evidence that the wild canids are really not dying of heartworm? Yes, in fact. Several years ago, preparing for a seminar on natural health care, I searched the literature for evidence of heartworm deaths in wolves and coyotes. Some very interesting data emerged <sup>1</sup>. In this study, coyotes were autopsied after being trapped. Only 7% had evidence of heartworm present in the heart. And *none* of those who had the heartworm died of this parasite. The worms were incidental findings, i.e. not causing disease. And that's how it works in the real world. It would only be the very weakest members of a pack, those suffering from malnutrition or disease or weak genetic constitutions, who would succumb to parasites and die from them.

### **What's wrong with this picture?**

Why then do we see dogs dying of heartworm disease? It's a fact, they do die of this parasite. (Remember, genetically speaking, they are nearly identical to the wolf). The reason can only be that dogs, living in man's environment, have had their immune systems impaired so that they do not "notice" the foreigners called heartworms well enough to eliminate them. Are their immune systems impaired permanently and irreparably? Certainly not. Over and over in my practice, I see dogs who resist this parasite without the use

of any prophylactic medication. Do they live indoors solely, never contacting a mosquito? No, they spend time outdoors regularly, they just have normally functioning immune systems. Approximately 90% of my canine patients do not use drugs to prevent heartworm -- they follow the principals outlined in this report. My "poster child" for natural heartworm prevention is Katy, a teenage black lab who lives in Austin, where heartworms are endemic. Her owners, Jim and Becky, bring her in yearly for a heartworm blood test. It's negative, year after year. Why? Because Jim and Becky follow the program of natural prevention and Katy's immune system works.

### **Dog, wolf? What's the difference?**

So, how wolves and dogs differ in their lives tells the story of how we should prevent heartworm naturally. There is every reason to expect a dog, the genetic cohort of the wolf, to resist this parasite if we simply stop interfering with the inborn, innate immune system present in our "domesticated wolves." I see this difference between wolf and dog in five main areas:

- Nutrition
- Vaccination
- Toxin exposure
- Disease outcomes
- Lifestyle

Attending to these five areas will allow your dog's immune system to be every bit as efficient as the wolf's or coyote's, and resist parasites just as effectively. Let's look at each in turn, and understand how we can bring our dogs back to their normal state of alert immune surveillance and freedom from parasites, without the use of drugs.

- **Nutrition**

It doesn't take much to see there is a great difference between what wolves eat and what people feed dogs. Please review what Dick and Jane learned from visiting me with Spot in [SeeSpotGlow.com](http://SeeSpotGlow.com). The here revealed toxic aspect of commercial dog food is clearly lacking in the wolves' mainstay: prey. And, in [The Missing Ingredient](#), I describe what's present in prey that's been cooked out of commercial dog food. Do these things make a difference to the dog's immune system, and its ability to fight and resist foreigners, like heartworm? It must, as we see our dogs succumbing to death from parasitism. It can be only a weakened state of health that allows such an aberration to take place. And nutrition is clearly a cornerstone of health. So, to correct a misdirected course in nutrition, we have to feed our dogs more like wolves. The choices are described in many books, some of which are in my [Recommended Resources](#), and also in [The B+ Feeding Plan for Dogs](#). When you've fed a dog this way for some weeks, and you see his coat get shinier, his eyes clear up, and his energy for play increase, can there be any doubt that his immune system is also improving? Not in my mind.

- **Vaccinations**

When we vaccinate, what system are we targeting? Why, the immune system, none other. How does the immune system normally get provoked into responding to some foreigner, be it viral, bacterial, parasitic, or cancerous? In a word, gradually. And in four words, *in an orderly way*. Let's look at the example of canine distemper exposure as an example. Typically, aerosol exposure from droplets of virally contaminated secretion is the initial route of exposure to the dog who's healthy from the dog who has distemper. A very elaborate response to this foreign virus begins in the mucus membranes of the nose, where local antibody is produced to try to capture and contain the virus. The alert goes out from this area to the rest of the body's multifaceted immune system, in case more is needed to stop the intruder. Should the local response fail, the virus may get a level deeper, getting trapped by the tonsils and lymph nodes in the throat. Here, more identification information is gained, more response by the immune system made, and another "wall" is erected to try to stop the invader. If this defense is breached, the virus makes it down the trachea to the bronchi. All along the bronchial tree are lymph nodes that do further processing of the virus, identifying it as foreign and worthy of attack. Chemicals are released including chemotactic factors, interleukins, and complement that call in reinforcements like natural killer cells that try to kill the virus. Should even this barrier fail, the blood is the avenue reached, by which the virus gains access to the rest of the body. Now it's systemic, running loose in the whole of the body, and unless the immune system can really turn up the attack, the dog succumbs to distemper and may die.

When we vaccinate an animal, say for distemper, we completely bypass this orderly, gradual exposure and deliver the virus, via syringe, right into the blood (though given subcutaneously, the capillaries beneath the skin quickly pick it up and it becomes systemic). And, even worse, we don't deliver just one type of virus, we often deliver a combination of them, 5-8 in most cases. What must this do to the immune system? I can only surmise that it sends it into panic! The most intimate level, the blood, has been reached without warning, without time to prepare, and now the intruder is everywhere. Do we see evidence that this vaccination procedure affects health negatively? Without a doubt, as noted in [Vaccinations: Safety](#). And how many vaccines do you suppose the wolf receives in the course of its life? You guessed it, unless he lives in a zoo, none. And our domesticated wolf-dogs? Commonly, they receive seven or more annually throughout their lives. How can we bring our dogs closer to the health of the wolf? We can stop vaccinating them annually, a practice that shows [no efficacy](#) and clearly results in chronic disease. Remember, it's the immune system we depend upon to keep the heartworm at bay. We want it to be in optimal balance and health to do its job properly. Vaccines interfere with that. We can stop.



- **Toxic Exposure**

The myriad of unnatural chemicals that we and our animals are exposed to is growing yearly. Some of these are topical chemicals, designed to kill unwanted pests like fleas. Ever read the labels on the latest in flea treatments, the little tubes we are told to squeeze onto the shoulders of our dogs? In tiny fine print, we are warned not to eat, drink, or smoke while using these products, and to avoid exposure to *our* skin. If exposed, we are warned to wash thoroughly with soap and water. Yet, we are expected to believe these same chemicals are harmless to our dogs. What's the logic in this? If it's dangerous to us, it's also dangerous to the dogs we would put this on to kill fleas.

*Q: What's do you call a chemical that kills fleas?*

*A: A pesticide.*

Are pesticides poisons? Of course, they poison the flea, that's how they rid the dog of these pests.

We needn't look far to see that toxic chemicals adversely affect health, and the immune system specifically. The unfortunate people who lived over toxic waste dumps like Love Canal, found themselves with immune breakdown. Some twenty years ago, a study came out showing a several-fold increase in cancer incidence in those dogs whose owners used herbicides on their lawns.

So, in how many areas might a dog get exposed to toxins? Several that come to mind are flea control, lawn chemicals that kill weeds or insects, heartworm preventatives themselves (see the labels for warnings), household cleaners, cigarette smoke, etc. Can we do something about these exposures? Without a doubt.

- Fleas. Use [Non-Toxic Flea Control](#), as outlined in my web site, [Alt4Animals.com](#).
- Lawn chemicals: visit the local organic gardening store near you. Pick up a copy of Organic Gardener for ideas.
- Household Cleaners: look for safe products at the store, see [Recommended Resources](#) for links, avoid the commonest toxic ones like bleach, Lysol, and the germicidal soaps and cleaners. Clearly we can have naturally cleaned houses.
- Offer purified water for the pets in the house, the same as you would drink. More on this below.
- And, feed only [healthy, super premium dog food](#) with natural preservatives, or a raw diet.

- **Disease Outcomes**

This is an area where wolf and domesticated canine have quite a big difference. Let's start with the wolf (or coyote, fox, dingo, etc.). The type of disease they get is *acute*, meaning it has a fixed course, begins rather abruptly and finishes in a relatively short time. Take parvovirus diarrhea for example. If a pack of wild canids is exposed to parvovirus, many, if not all of the members, will show symptoms of the acute disease, which would be diarrhea, perhaps bloody diarrhea, perhaps vomiting, and a fever and loss of appetite. A very small minority of animals in the pack will die from this acute disease, say 10% or less. These would be the weakest members, those who have not competed well for nourishment, who couldn't keep up with the pack, who were very old or very young, those with weak immune systems who may have been burdened with large numbers of parasites, etc. Their disease outcome would be death, which would actually strengthen the pack, by removing their less fit genes from the gene pool.

The vast majority of the pack will "fight the good fight," i.e. make a strong immune response with fever, diarrhea, high white blood cell counts, lots of antibodies and Natural Killer cells fighting the virus, and, after one or at most two weeks, they would recover from the illness. The outcome for this group, the majority of the pack, is striking. They will be forever immune to parvovirus, as their immune memories will recognize it should they ever be exposed again. Further, they are likely *strengthened generally* by this exposure and battle, as if they had flexed their "immune muscles," and bested a difficult foe. They are likely to carry this outcome over to other microbial disease exposure, and will be more fit overall because of the battle they have won.

In stark contrast is the experience of the domestic dog. We, as a society, have said, in effect, "We don't want any acute disease!" We have vaccinated it all away in the last 30-40 years. So, in its place comes *chronic* disease, the plague of today that includes the many diseases that linger, smolder, and generally make life miserable. The common ones include arthritis, allergies, ear infections, thyroid disease, diabetes, and chronic inflammation, like inflammatory bowel disease. What's the outcome for these dogs? Well, if they are owned by caring individuals, they commonly get brought to conventional veterinarians and are given drugs for their symptoms. Most with "anti-" in their name: antibiotics, antiinflammatories, antidiarrheals, etc. These do not cure the disease, they only modestly control symptoms while the disease smolders on, gradually worsening over time. So, the outcome for this treatment is one of weaker and weaker individuals, whose immunity is far from enhanced by all the drugs, and whose ability to "wage battle" is lessened.

So here, too, we have a choice. One of the reasons you are reading this ebook is that you desire to do something more for your animal than simply suppress symptoms. We can use natural methods, like classical [homeopathy](#), to actually cure the chronic diseases and thereby make our animals more fit. This takes time and takes the attention of someone trained in the method to effect, but it's achievable. And, of course, when chronic disease is truly cured, we have the optimum state of health, where the immune system and all other systems are working at full potential. Does heartworm or any parasite have a chance to set up housekeeping in such a healthy body? Absolutely not.

- **Lifestyle**

Ah, here's a fun one to wrap up the differences between wolf and dog! How do we live with these dogs who are wolves inside? What do they do that approximates what the wolf would do in its life? What *would* a wolf do in daily living?

Well, one obvious thing a wolf would do regularly is exercise! There's no one bringing him a bowl of food daily, that's for certain. So, daily hunting, covering probably many miles would be the norm. And some of that is high speed chasing. We can make a good addition to any dog's life by remembering regular walks, with intermittent chances to really run full out. Jogging with your dog would be great for both human and canine, but even walking on good long walks should be accessible to most everyone. If your dog is poor mannered on the leash, tugging you and generally making your walks a trial, be sure to invest in a simple head leash that quickly puts an end to that, gently and surely. These sell under various names, but two I know of are the Gentle Leader and the Halti. Try DogWise.com in my [Recommended Resources](#) for purchasing. And what if you don't run? It doesn't mean your dog can't. Visit dog parks where dogs can be off leash and play chase with one another. Toss a frisbee or ball regularly. Find a neighbor to share dog walking with and spell each other. Just find a way to make exercise a regular part of your dog's life. It will be worth it for not only his health but your own.

What else would be a regular part of a wolf's lifestyle? Drinking pure, fresh water (though this may be less common as man

encroaches on his environment). Did you know that the simple addition of fluoride to our tap water put the thyroid gland at risk? It's true. As greater numbers of people are becoming hypothyroid, so, too, are the canines in our lives. Part of this may also be due to [vaccinations](#), but we can certainly easily eliminate fluoridated water in our pets' drinking water, and take out a much longer list of unhealthy impurities that could have ill effects on health with a simple water purifier. My favorite is the reverse osmosis unit that sits quietly under a sink, has a shiny, nice looking tap all it's own that comes up next to the conventional tap, and delivers good tasting pure water for pennies a day. Anyone who's reasonably handy can install one themselves, but even barring this, there are counter top models that take no installation whatsoever. I used one like this for years. Check with your local hardware or home supply stores, and don't delay nourishing your cells and your dog's with pure water.

Another pastime the average wolf would have is chewing on bones. The prey may be a caribou or elk, so the pack consumes first the organs and meat and digestive contents, but the bones last a while. This valuable addition keeps the teeth gleaming white and gives a relaxing activity for the dog to occupy himself with between meals and exercise times. For more on this, refer to [Dental Prevention](#) in my web site.

### **All Together Now**

OK, so each of these areas, optimal nutrition, curtailing unnecessary vaccination, toxin avoidance, curative disease treatment, and healthy lifestyle will, together, be the best heartworm preventative program imaginable, called "Raising a Healthy Dog (whose immune system works!)." This is exactly what 90% of my clients do for heartworm prevention. Remember, it's the health of the dog that makes a healthy immune system, and it's the healthy immune system that keeps all foreigners, heartworm included, in check. The beauty of this approach is that it not only prevents heartworm, it prevents disease in general, even if it's some "new" infectious disease that we haven't heard of yet.



I recommend testing your success yearly with a simple blood test. Your veterinarian needs to be involved here, and don't be afraid to mention just how you got this negative test to turn out that way. The more people who learn of the efficacy of this approach, the greater the number of dogs who will be able to avoid toxins, and the better this is for all of us. After all, those toxins often wind up in our own bodies and those of our children.

### **But, but. . .**

What concerns some people when I present this to them in our first appointment is that their dog is, at present, not so healthy. That's why they have called on me in the first place! The dog I'm asked to work on may have horrible skin allergies, chronic ear infections, arthritis, diabetes, etc., etc. Shouldn't we get him healthy first, and then stop the heartworm preventatives in favor of this deeper-acting natural program?

Without exception, I still recommend this program for one main reason: time is on your side. Remember the life cycle of the heartworm we discussed in the opening section? Parasites in general are slow moving. No one ever dies suddenly with parasitic disease -- parasites are, by nature, chronic, slow invaders, not acute ones like some viral invaders can be. So, with six months of time from the introduction of larvae in a mosquito bite to adult heartworm in the heart, that's six months of time you are working on this dog's health, improving as you go. And from an adult heartworm in the heart to death of heartworm disease, meaning the heart is clogged with worms and failing as a pump, we are talking about several years, *if the immune system is completely ignoring the invader*. Which it is unlikely to be able to do, as you wake it up gently by improving nutrition, stop confusing it with annual vaccinations, stop the toxic exposures that weaken it, and work on any health issues with your homeopathic vet.

Another reason that drives some to run for the standard heartworm preventative drugs and fear this natural approach is the treatment of the disease itself, should their dog get heartworm. For many years, a very toxic arsenic based treatment was given intravenously,

which killed some dogs along with the heartworms! In later years, the drug, though still arsenic based, became less toxic and is now given intramuscularly. Even with this newer version though, dogs still risk embolism from sudden die off of the poisoned worms, so they must be kept quiet for weeks without vigorous exercise. And who would want to give arsenic to their dog, after all? So, my answer to this concern is that, over the years, I have successfully treated many cases of heartworm positive dogs with only the gentle approach of homeopathy, nutrition, and the healthy raising I'm talking about in this book. Usually within six months the dogs on this regimen come out with a negative test, and they never got sick, never had to avoid exercise, and, of course, came out healthier overall in addition to losing their parasite burden. How did this treatment work? It could only have worked by awakening the dog's immune system to fuller efficiency, so that it "saw" the parasite it had been ignoring, and attacked it. So, don't let the fear of the harsh treatment drive you to the preventative drugs. If your dog comes up positive at some point on this regimen, it just means you need to check on where your program is falling short, and get working harder on Spot's health. Check with your homeopathic veterinarian for help.

### **The Best Approach got Even Better**

I have been advocating this broad-based approach for my dog patients since the early 1990's. In early 2004, I learned of another excellent tool to make this seemingly fool proof method even more certain in preventing parasites of all kinds. It is a remarkable immune enhancing set of molecules called *transfer factors*. These are very small molecular weight peptides that actually confer immune *intelligence* from donor to recipient. They are part of the "immune cocktail" called colostrum that makes the newborn able to withstand the germs common to their environments outside the womb after birth. Discovered in 1949, they have had an impressive body of research on their effects on the immune system - some 3000+ papers have been published in the medical and research journals. MD's have picked up on these products and used them preventatively as well as for treatment of difficult immune system based illnesses, including allergies, infectious disease, autoimmune disease, and cancer, among other things. The current understanding is that the immune information that these molecules transfer is balancing or modulating in its nature. So, if the immune system is not responding enough, Transfer Factor wakes it up to higher levels of alertness and response, and, conversely, if the immune system is overreactive, attacking self or reacting aggressively to allergens, TF slows it down to normal.

So, on top of the five areas discussed in this method of "Raising A Healthy Dog (whose immune system works!)", I would add a simple, yet profoundly effective immune enhancer: [Canine Complete](#) from 4Life Research. This company has purified the Transfer Factor from two sources, colostrum and egg yolk, and, by combining the two, has demonstrated a remarkable synergy that far surpasses any other immune boosting supplement measured to date. This will keep your dog's immune system poised and alert for foreigners, be they heartworm larvae, viruses, bacteria, or even cancer cells. If your dog has any trouble with refusing this powder added to his food, you can get its main ingredient in capsule form, called [Transfer Factor Plus Advanced Formula](#), and give it by pilling. See [Immunity: Protocols](#) for dosage levels.

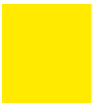
### **Much More than Heartworm Prevention**

In conclusion, this elegantly simple, all encompassing approach to heartworm prevention has been used successfully in my practice for many years, without animals succumbing to this parasite. And it works in all species, for not only heartworm prevention, but for greater health and resistance to all things foreign. I am confident that, as you apply this program in your dog's life, you will reap rich rewards in the form of glossier coat, increased vigor, less shedding and body odor, clean eyes and ears, and a longer, healthier life. The longer you are on it, the more benefits your dog will receive, and you'll look back and wonder what all the fuss about heartworm was about, anyway. Your domesticated "wolf" will have never skipped a beat on his way to a healthy old age, let alone fallen prey to parasites, a disease of the weakened.

What's right with this picture?

Everything. Enjoy.





1 [footnote reference](#)

