

Answering Pet Parents' Biggest Questions on Creating Happy, Healthy Pets

A Special Q&A by Dr. Karen Shaw Becker

Dr. Karen Becker:

Hello, bark & whiskers family. I'm so excited to be joining you today for this Q&A session. Occasionally, we do these Q&As from our awesome community, and I love doing them because it gives me a chance to specifically answer your questions, which is wonderful. I also love how many people participated for submitting questions. We had questions on Instagram, Twitter, Facebook [and] from all of our platforms. And so, I am so thankful for each and every one of you [for] taking the time to submit your ideas, thoughts [and] questions. And if you have participated in our Q&As previously, you know a little bit about the background. Sometimes we do fire speed round Q&As, and I like those where I give myself only 30 seconds to answer questions. So, I can literally cover about 300 questions in an hour because I can speak quickly and we just boom, boom, boom, boom.

That's exciting, but it doesn't necessarily give us a really deep dive about some of the topics that you're interested in. Likewise, honestly, some of you submitted questions like, how do you cure cancer? And I could do a six- or eight-hour webinar and still not cover the depth and breadth of answering those really deep questions. So, for today's bark & whiskers Q&A, I'm going to do a hybrid. I'm going to just start at the top, with the very first question submitted, and go right down the line because we only have an hour. Any more than that, it can be overwhelming and it can be almost information overload. Any less than that, people are like, "oh," so I'm going to try. And we have four pages of questions. I'm going to go through as many as I can in the hour that we have together, always knowing that we will do this again, of course, in the near future.

So, if we don't get to all of the questions, don't panic. We do this regularly because it's important for myself as well as the entire bark & whiskers team to be able to specifically give you information you're looking for. I will tell you, if you are not a subscriber of my daily free newsletter, please remember that honestly most of these questions, if not all of them, I have answered not only in one article, but a multitude of different articles over the last almost 15 years. So those articles that are there as a resource for you are uploaded to the bark & whiskers website, and they're always accessible for you, and they usually have quite a bit of information as well as applicable links that would be beneficial. So, if today I didn't answer your question specifically, please remember that we have this incredible bank of information available to you free of charge on the bark & whiskers website.

So, the other thing I have to say is, because it's illegal for me to specifically give your animal medical advice, I'm going to speak generally about these topics. It is important that for any veterinarian to give you specific medical advice, they need to have examined your animal first. So you're going to hear me talk about hypothetical situations, or if this was my dog, I would do this, or here are some things you can think about, but the best protocols and, most importantly, an appropriate diagnosis for your animal's medical situation needs to be given by a veterinarian that you have a client-patient relationship with who has physically examined your dog or cat, and that is the person that you need to be able to take the best medical advice from. If you live in an

area where you don't have access to a proactive, integrative or wellness veterinarian, and you're especially excited about today's Q&A because you don't have a perspective from outside of the box, nontoxic, do no harm first approach, don't panic about that.

There are several really great international, I'm going to call them platforms or associations, that I belong to, that many integrated proactive wellness veterinarians belong to. So, if you are looking to get specific medical advice, like you need doses, you need an entire protocol, you need a dynamically changing protocol for your animal's intense medical issues, please visit www.civtedu.org. That stands for the College of Integrative Veterinary Therapies. They are an online educational association that I myself and many integrative veterinarians belong to. I am not able in my state to give telemedicine consultations, but many veterinarians around the world can. And so, if you're looking to partner with a proactive veterinarian, but you don't have one on your pet's medical team, you can do a telehealth consult with many amazing integrative veterinarians who practice medicine just like I do, and they're available specifically for a one-on-one consultation about your animal's specific medical needs.

So, if you're desperate to get an opinion or, let's say, a nutritional consult specifically directed for your pet's issues, please consider doing a telehealth medicine with a proactive wellness professional. All right, first question. Don't mind me. Midlife, needing my readers. First question comes from Anthony M. Anthony says, "Hello. I am currently training as a canine handler with a Belgian Malinois." Great breed, highly driven breed, very smart breed, as Anthony you're finding out. "I have been researching the best ways to keep him healthy all around, like heart health, stomach [and] joints, and I see that feeding raw food is the best way. What product should I feed him when it comes to raw? And is there a specific site I should buy from or should I buy the meat myself and grind it up at home?" Anthony, this is a really good question. And what I will say to you is that – when I say it doesn't matter, there are amazing, great quality, commercially available raw food diets that you can purchase, and there are excellent homemade recipes that you can follow and make the meals at home.

I do both for my animals and part of the reason I have to do both is I love making homemade food because you have control over the ingredients. So, I'm able to choose Homer's meat and veggies. I can physically see the fruits and vegetables that I'm chopping up. So, I love that because I have full control of the raw ingredients. However, I'm busy and so sometimes when I open the freezer, it's like "I'm going to run out of food tomorrow and I don't have time to make more." Then I do buy commercially available raw foods. In either situation, there are some foundational things that's really important. First and foremost, [with] raw or fresh food diets, the reason veterinarians oftentimes are not supportive of fresh foods is because the vast majority of people that do homemade diets are guessing at a recipe. And I will also agree with my colleagues that it's really important that you don't guess at a recipe.

So, if you want to do homemade food, you need to follow a nutritionally complete recipe to make sure that you're meeting your dog's minimum nutrient requirements. And as long as you're doing that, then you're fine. What I don't want you to do is to do some meat, bone and organ, throw in a multivitamin and think that you're good because you won't be good. And most importantly, you want to make sure that because you have a working dog and because you want his brain and body to work, that you're covering all of your bases. Second thing I'll mention to you is there is no one perfect recipe or perfect company making a perfect diet for your dog

because research is very clear that the benefits of fresh feeding and with any diet is in the rotation, is in the diversity in the types of foods that you're giving, the types of meats.

So, for Homer, I rotate through beef, chicken, turkey, quail, pork, venison, rabbit [and] bison. I just keep rotating through all of these different proteins, as well as every possible vegetable you can imagine. I [went] to my farmers market and two weeks ago they had okra, green beans, summer squash and papaya that were on sale. That's what I bought and ground up and used for the base of his nutritionally complete meals. When I buy commercially available fresh foods, I always rotate brands. But here's the second big caveat or warning that most veterinarian will say: Just as in the ultraprocessed pet food world, there are good, better, best, and then average, really bad, and terrible quality ultraprocessed foods, [the] same is true with any category of food, including raw, dehydrated, gently cooked and freeze-dried. So, because raw food diets are one of the fastest growing segments of the pet food industry, there are many companies that are just doing it poorly.

And I had the negative experience of evaluating many of the Canadian raw food, commercially available diets, and I was just appalled. I was appalled at not just the nutritional inadequacy that I found when I sent those foods in for testing, I was appalled at the companies that just plain lied about what was in their food. So one thing that is important to me is that you love and trust the company of the foods that you are buying, which means you're going to visit the company website, you're going to see who formulated the food and, most importantly, every food, whether it's dry food, canned food [or] freeze-dried, they should be able to confidently offer you a complete nutritional analysis, which means they'll show you the nutrients that are in your dog's food. And you have a right to want to know what's in your [dog's] food. You want to make sure you're meeting your pup's minimum iodine requirement, vitamin D [and] vitamin E.

You have a right to know those nutrients that are in the food that you're buying. If a pet food company or if a raw food company says, "Oh, our recipe's proprietary, we can't tell you what's in the food," or "We've never evaluated the food," or "We believe that you don't have to have a nutritional analysis of the food," that is one I have seen personally with beautiful-hearted people who haven't done the research feed poorly formulated or unformulated raw food diets. And they can end up with nutritional deficiencies. The exact same thing that happens when you guess at a recipe that you're making at home. So, I'm not trying to scare you. I'm trying to make sure you understand that veterinarians feel very strongly about homemade diets because so many people do it incorrectly, and it's not until their hair is falling out from hypothyroidism or they have vitamin E deficiency enough that their toenails are falling out and people are like, "I wonder why that is?"

And then veterinarians say, "Never feed a homemade diet." And I would argue and say feed a homemade diet. It's the best quality of food your dog or cat will ever eat. However, you've got to make sure that you're following a recipe. So, all that to say, I don't care if you buy a great quality commercially available diet that is nutritionally complete, I don't care if you make it. You'll probably end up doing what I do, which is when you have time, you'll make it. When you can find – I can find, sometimes, meats on sale that I buy all the meat and make a month or two of the food and freeze it so that I have a stash of it. But you can't totally mix things up, mix up brands, mix up proteins, but just make sure that you know in your heart that you are meeting

your dog's minimum nutrient requirements because you have a beautiful working dog that you want with you for the next decade and a half.

And the only way that's going to happen is by you intentionally creating meals and meal plans that are not just covering your pup's minimum nutrients, but you want to make sure you're giving him an abundance of vitamins, minerals, antioxidants, polyphenols [and] things that are going to keep his organ system strong. So, that's a great question and I appreciate you asking that.

Cat G says, "Is mint toxic to cats and dogs?" Cat, mint is not toxic. In fact, catnip, which my kitty loves – if your cat doesn't like catnip, try silver vine. Some kitties have the receptors, the nepetalactone receptors for catnip, but they say about 30% of cats don't have the receptors so they don't respond. It's not this euphoric, amazing, endorphin-releasing herbal reaction. So, the kitties that tend to not react to catnip usually find a little bit of added pleasure with silver vine. So, silver vine or catnip, both are not toxic. Catnip is in the mint family.

And I grow fresh mint for using in herbs, but also in my iced tea, I have fresh mint in there. My cat and dog will both nibble my mint from the garden and it's a-okay. Where you can get into hot water quickly and where much of the resource and actually a lot of the fear-based reports you'll see online come from the essential oils. I am not a fan of using essential oils with cats without veterinary supervision or in dilution from an aromatherapist and oil company that you know is cat-friendly. But herbs themselves, the only herbs you have to stay away from in the garden per se are chives, leeks [and] onions, the members of the onion family, but the other things growing in your garden – My kitty nibbles on marjoram, thyme, basil – she loves basil – mint, lemongrass [and] lemon balm. Most herbs from your garden are not just a-okay for your dog and cat, but really good. And allowing them to self-select fresh herbs is a great idea, just no onion family.

Ingrid M says, "Do you have a new book of human grade food or raw food for dogs and cats?" Well, Ingrid, thanks for asking. I just submitted the manuscript for book number two. Those of you that follow me or have been a part of bark & whiskers for a while, you probably know that myself and my co-writer, Rodney Habib, we produced a book called "The Forever Dog." It hit No.1 in the New York Times Bestseller, which we were not anticipating, but we're so fired up it did because it's the only pet health book in the world to do so. That tells you the power of dogs and how important dogs are. For people, dog health is important, and I think it's been really underestimated. The No.1 response we got from "The Forever Dog" was, "Oh my gosh, it's 400 pages and a lot of information," but also, it's really heavy on the latest longevity science of how you're going to intentionally keep your dogs living longer, but people wanted a pair down version. So, this next book is actually a cookbook and all of the recipes are nutritionally complete.

They are AAFCO (The Association of American Feed Control Officials), FEDIAF (European Pet Food Industry Federation) and NRC (National Research Council) compliant. They're for active cats, less active cats, active dogs, less active dogs and growing puppies, including two different early-growth and late-growth European standard recipes. So, that is in the works. It will be available hopefully this upcoming May through Harper & Collins. So yes, the rumors are true, and you have heard that we do have a cookbook coming. Any foods that you buy at the grocery store are human-grade. So, by default, because this is a book of hundreds of recipes, you will be

able to go to your grocery store [and] buy the ingredients, or get them from your farmers market and be able to make a wad of nutritionally complete recipes for your dog or cat at home. Thanks for asking.

Joanna M says, “Is kale good for your pet?” Joanna, kale is great, and not just kale, but all dark green leafies. As I mentioned, the only things you’re going to avoid from the garden are chives and onions, but all those dark, green, colorful leafies are really good for your dog and your cat, if he or she will eat them.

A lot of kitties are not into roughage, but it’s interesting. My best friend, who’s also a veterinarian, she adopted a kitty from a shelter who was obsessed with eating, would nose bomb dive into salads, which is not normal for a kitty who is by nature an obligate carnivore. But what’s interesting is that Dr. Rucker’s cat, when we did microbiome testing, she was totally deficient in fiber. So, it was her body telling her, Cheryl – her kitty’s obsession with wanting to eat salad – and her favorite foods were Brussels sprouts and kale, and that’s not normal for a carnivore that would want to be hunting mice, but she was obsessive about veggies because she was so fiber-deficient. So what Dr. Rucker did is she ground up a bunch of medicinal mushrooms, a bunch of dark green leafies, okra, endive, escarole, kale. She ground everything up together, put a dollop in ice cube trays, and every day she’d pop one out, thaw it, and then mix in basically a heaping teaspoon of this veggie mix with Cheryl’s meat-based nutritionally complete raw food.

And within about three months, Cheryl’s obsessive desire to want to eat salad diminished because we were finally meeting her fiber requirement. So that speaks of two things. Well, this speaks of three things. Number one, there’s this thing called zoopharmacognosy, which means animals have a desire to self-medicate. And there are some other questions that I’m going to get to about self-medication. If you have a dog or cat that’s obsessing about wanting to eat something, honor that. So, for instance, if your dog wants to go after mushrooms in the backyard, that’s scary because a lot of outdoor mushrooms are poisonous. Now, here’s the rule of thumb with mushrooms. Any mushrooms you buy from the store for yourself, from the grocery store or from a farmers market, any human edible mushroom that’s safe and healthy for humans is safe and healthy for dogs and cats. Any outdoor mushroom that’s potentially toxic for humans will also kill your dog and cats. So, I just have a “No foraged mushrooms outside” rule.

I’m not a mycologist, so I’m not good at identifying, “Oh, this is an edible mushroom or this one’s poisonous.” So, I just don’t let my animals or myself eat any mushrooms from the wild. If you’re really good at identifying mushrooms, bravo, that’s great. But it is important that you’re not allowing your dog to self-select mushrooms because they can select mushrooms that could kill them. That being said, medicinal, culinary, healthy mushrooms are one of the healthiest things you can offer your animals. So what Dr. Rucker found is that mushrooms, with all of this great prebiotic fiber, also had beta-glucans. All of these beautiful medicinal components, along with the high-fiber veggies that she was giving to Cheryl, that allowed Cheryl’s fiber requirement to finally be met. We have underestimated both dogs’ and cats’ fiber requirement, and I think that that can be reflected in how much grass they want to eat [and] how much dirt they want to eat. Animals, dogs and cats can be really obsessive about wanting to eat certain things, including fibrous things because they’re lacking fiber in their diet.

And by giving them more fiber through fresh fruits and veggies, we're helping to meet that fiber requirement in a whole food healthy way. So yes, I love feeding kale. The one caveat to kale would be, Joanna, [is] that if you have a dog that has a genetic predisposition to creating oxalate stones, so some breeds, Shih Tzus come to mind, there can be a genetic predisposition to making bladder and kidney stones that are calcium oxalate foundation, that are rooted in a naturally occurring accumulation of calcium oxalate crystals in their kidneys and bladder. If you have a dog that has this genetic predisposition, you would want to steam high-oxalate veggies. And kale is a vegetable that does have higher than average veggie oxalate content, so steaming your kale is a way to dramatically reduce the oxalate content. But all that to say, when you're in the kitchen and when you're chopping up fresh fruits and veggies, especially those beautiful dark green leafies, you chopping them up and sharing them with your dogs or cats [is] a-okay.

And it's interesting, like spinach, also a high-oxalate [veggie], if you've got oxalate issues, you can just steam. You can do leftover steamed veggies for animals that have oxalate issues. But I do think that it's wonderful you're thinking about giving kale to your animals because it means that you have recognized that your dogs and cats need some fresh foods on a daily basis, not just for their microbiome health, but for all those polyphenols and antioxidants and all the beneficial bioactives that are found in fresh unadulterated living fruits and veggies. Really good that you recognize that. So yes, go ahead and feed some kale.

Christine says, "What should I feed my cat with kidney disease?" This is a big old question, Christine. In fact, this is one of these questions that, honestly, I could do a four- to six-hour webinar on. Let me just say this, there are four stages of kidney disease. The IRIS, the International Renal Interest Society, uses the same human kidney disease category markers as we do for pets.

So, stage 1 is the most mild and stage 4 is pulmonic kidney failure. And we are able to assess what stage of kidney disease your animal is in by urine and blood work. And so, hopefully your animal has been assessed, if you have an animal with kidney disease. I don't know if they're in stage 1 kidney disease, stage 2, stage 3, stage 4. I will say that the general consensus among veterinarians is that we don't tend to restrict protein until between stages 3 and 4. Integrative proactive wellness vets like myself really don't believe in restricting protein until stage 3. Some conventional veterinarians will automatically – the second that they see the SDMA (symmetric dimethylarginine) elevated or they see a lot of protein being passed in there, they'll automatically put kitties on a low-protein diet. But here's the kicker: We know that kitties are obligate carnivores. They need a lot of fresh, whole unadulterated, beautiful, good-quality protein to nourish their bodies, including supportive kidney structures. So, it's not that protein's bad or evil, it's that the quality of protein is really important.

And here's the dirty dark secret of the ultraprocessed pet food industry: The vast majority of pet foods, "cat food" that you buy at big-box stores, Walmart, Target, Petco [or] PetSmart, those foods are not made with human-grade ingredients. They're made with feed-grade or rendered or foods that failed human inspection, so they go into feed, including pet food. So, if you're feeding cat food, the quality of protein in that food is probably not amazing. So, the first thing I would tell you to do is either switch to a human-grade pet food, which means it's a whole lot more money because it's not this feed-grade, not approved rendered protein. It's great-quality human grade protein, which is a lot more expensive. Moisture content matters, which means kitties need

a high-moisture diet. So, getting your kitty off of dry food and onto, at a minimum, canned food, but even better, fresh or gently cooked human-grade food would be ideal. I have a video on Facebook, a video on bark & whiskers on how to do that.

Your cat is probably finicky like all cats are, and the kitties are very addicted to their food. So, you don't just cold turkey and say, "Here's your brand-new food" because your kitty will probably [go on a] hunger strike and not eat it. What you do do is slowly trick them into eating healthier quality food and different types of food. And so, my recommendations are moisture-dense, human-grade, meat-based food, and then when your veterinarian says that your cat is between stage 3 and 4, you would go from a high-protein diet to a moderate protein diet. And then in pulmonic stage 4, we go from a moderate protein diet to actually potentially a lower protein diet. But we don't restrict protein until kidney damage is done because research has shown that cats actually can die of hypoproteinemia. They die of the consequences of being denied protein months to years before they actually die of kidney failure and we learned that the hard way.

So most of us are not fans of protein restriction until the end stages of kidney disease, but you could absolutely do amazing things to help support the kidneys, nourish the kidneys — a lot of moisture, great quality protein. There are amino acid supplements you could put your kitty on, and some renal supportive nutraceuticals, homeopathics, western herbs, eastern herbs [and] ayurvedic herbs that are really good to help your kitty's remaining kidney function to be strong. So, look into some supportive nutraceuticals as well. All right, Jay Ann says, "What vaccines are mandatory?" This is a good question, Jay Ann. In the U.S., the only vaccine that's mandatory, required by law status, is [the] rabies vaccine. Now, I see a lot of times online, Jay Ann – some people say, "Parvo and distemper vaccines are required by my veterinarian." So remember that your veterinarian's requirements to be a client may be that they require annual or every three-year parvo distemper boosters, but that isn't a state law, nor is it a county law or a village law. The only village, municipality, state, federal law is rabies.

There's a one-year rabies and a three-year rabies, and they're the same product. They just are licensed for different timeframes. So, I would always instruct my clients to please choose the three-year rabies because you get a three-year tag and a three-year certificate. And over a lifetime, that's substantially fewer unnecessary vaccines than giving a rabies vaccine every year. So, the only one in the U.S. required by law is rabies. If your veterinarian has a mandatory hospital requirement of having parvo and distemper, that could be worthy of a conversation that you could have that could go something like this, "Hey, Dr. Johnson, I know that parvo and distemper is not required by law. I know it's required for Johnson Animal Hospital for me to be a client here. I also know that parvo and distemper don't wear off just like my vaccines that I was given when I was a kid. I don't go in and get boosters every year."

"I've read and I've learned that those vaccines oftentimes last a lifetime and how I would know if my dog or cat needed additional vaccines versus unnecessarily vaccinating is a blood test called a serum antibody titer. And I'm interested in doing that because I'd like to be respectful of your 'veterinary hospital requirements,' but I don't really want to over vaccinate my dog unnecessarily. Are you cool with doing a rabies-" Or you can also do rabies titers, but [that's a] different topic. "Are you cool with doing a parvo and distemper titer, so I can find out and make sure that my animal is protected against disease without giving them more vaccines?" And hopefully your

veterinarian is progressive enough, understanding enough and/or graduated in the last 20 years so that they are a younger category of veterinarian that are significantly more open-minded to recognizing – We want to make sure and it's responsible to be a good steward of our animals to make sure that they're protected against disease. We all want that.

None of us want side effects from unnecessary vaccines. So, suggesting or recommending or asking your vet to please do a vaccine titer is a really nice compromise, and most veterinarians are happy to do that. Both of our national labs, both Antech and IDEXX – and your veterinarian uses one or both of those labs – both of those labs offer vaccine titers as well as their significantly reduced cost titers going through the University of Wisconsin Madison Vet School. They have a titer lab and for \$55 they will do parvo and distemper titer. So, all good options for you and a nice way to have a conversation with your veterinarian about not overvaccinating. Oh, this kind of plays into this question, Vicky G says, "My puppy had two parvo distemper shots at 6 and 10 weeks of age." So those "puppy shots." "She's now 8 months. Do I need to do it again?" So, hopefully you have read my free article after article after article on parvo distemper titers. If not, what you'll read in those articles is that we recommend that you give two puppy shots, which you've done.

Two weeks after the last puppy shot, ideally, would be a vaccine titer. You would run this simple easy blood test, because if your puppy is protected two weeks after their last puppy shot, they are protected for life. And so that would be good to know. The conversation you can have with your veterinarian would be exactly the scenario I just played for you, "Hey, my dog is 8 months old. I wish I would've titered two weeks after the last puppy shot and I didn't, but I'd like to titer now." I would never recommend that you automatically go in and say, I'm just here for those annual booster shots, because the truth is we probably know that most animals don't need them, and how you can prove that your animal is protected against disease is by doing this vaccine antibody titer test, and that's what I recommend you do now. OK, Sarah B says, "Diatomaceous earth orally for parasites and other benefits, pros or cons?" Thanks, Sarah, for asking this question.

So diatomaceous earth, if you are not familiar with this, this is ground up, microscopic sea organisms that actually feel like – It's a white powder, it feels like chalk when you touch it. These ground up crusty shell, ocean organisms create microtrauma to soft-bodied insects and parasites. So, if they contact fleas or ticks or worms, they create abrasions in the exoskeleton of the parasite and then the bug or worm just dries up and dies. So, it is very effective. I have a pigeon right now with a broken wing. He's got lice. I'm using diatomaceous earth on the outside of his body to treat his lice and it's working beautifully. I much prefer diatomaceous earth for external use, Sarah, rather than internal use. Externally, [for] fleas and ticks, really amazing. [For] lice as well, [it] does a great job for external parasites. You have to avoid the [animal's] head.

If diatomaceous earth makes contact with the eyes, it can cause profound vision issues, lifelong and even permanent damage to the eyes. And it's certainly because it's a fine particulate powder, it should not be inhaled. So, you want to make sure that you are not breathing it in yourself, but that you're also dusting it for your dogs or cats, you're dusting it from their neck down, that you are not putting it on their head or face at all. You want to make sure that there's no inhalation of fumes. My issue with serving it orally is that early on in my career, let's say, 1999, I knew about diatomaceous earth and I had heard that it was a natural dewormer. What I found is that a

hundred percent of the time, it reduced worm burden, but it didn't get rid of the parasitic issue. And in fact, tapeworms are the biggest issue. Tapeworms burrow their little heads. If you could see their microscopic teeth, they grab onto the lining of your dog or cat's small intestine.

And the diatomaceous earth can kill the proglottids, the section behind it, but it doesn't ever kill the head that's buried deep within the lining of the soft tissues of the small intestine. So, what I found was that I was unnecessarily excited about potentially curing my patients of worms that I never actually cured any of them. But what I did do, and what diatomaceous earth does orally, is create GI (gastrointestinal) inflammation. It's an abrasive. It literally is like eating microscopic sandpaper. So, I love it externally because our animals and us, we have a thick skin. Our squamous cells, the outside of our skin, are resilient and can handle this abrasive powder. The lining of our dogs' and cats' GI tract is like the lining of our mouth. It's sensitive and that abrasive fine powder acts like gritty sandpaper and can cause massive inflammation. So, I'm not a fan of feeding it orally.

And my history has been that I initially, for three or four years early on, assumed it would take care of raw worm, tapeworm [and] coccidia. It didn't do anything. It knocked the worm burden down, but all of my patients ended up – when I rechecked [their] fecal four to six months after using diatomaceous earth, they still had all the parasites I was treating them for. So, I no longer use diatomaceous earth orally, but I love it topically. That was a long-winded answer, sorry about that. OK, Dan said, "You spoke on trachea issues with small dogs. Which of the products in your current catalog would be best for those recommendations?" So tracheal collapse is a common issue with small dogs, and I recommend chondroprotective agents, Dan, for that. So in between the cartilaginous rings of your dog's trachea is flexible cartilage and the ligament can cause, oftentimes, some secondary weakness in their throat. And so, using counter protective agents like MSM (methylsulfonylmethane), glucosamine [or] Perna mussel.

So, believe it or not, the joint support product that we have for pets is a perfect thing, and people say, "Well, the trachea is not a joint." It isn't, but it's the raw materials for cartilage repair, maintenance and support, and what your dog needs is tracheal support. The cartilaginous supportive structures within the trachea are weak, so offering cartilage support is a really good idea. Dr. Mercola on the human side has a product called MSM, and for dog and cat lovers that are listening who may have a seafood sensitive patient that can't take Perna mussel – Perna mussel is also called green-lipped mussel. Green-lipped mussel is awesome because it's a food source of glycosaminoglycans, which means it's a whole food source of the raw materials for cartilage repair and maintenance. If, unfortunately, your animal has a seafood allergy, they may be sensitive to Perna mussel, in which case you can use the human MSM, which is a hypoallergenic cartilage support.

In bad scenarios, I use those products together. I use our joint support with MSM, and it does a good job of supporting tracheal collapse and weak cartilaginous rings. It also supports joints, of course, at the same time, so you kind of get dual benefits. OK, Melissa C says, "Best supplements for chronic pancreatitis? Dog fed, commercial raw. I'm located in Canada." So, Melissa, if you don't know about my Canadian raw food project, please check it out. It's appalling, Canada's like the Wild West when it comes to formulation. They don't have an AAFCO, an American Association of Animal Feed Control Officials, that kind of helps set minimum nutrient requirements, and they also don't have an FDA (Food and Drug

Administration) that kind of insists on companies being compliant when it comes to saying what's really on the bag and any type of transparency when it comes to raw materials and/or formulation. So Canadian pet food companies can say things like, "This food is nutritionally complete and balanced," but it isn't.

And so, my biggest concern is that many/most of the raw foods that I evaluated from Canada, literally one of them had 89% fat content. So that means not enough protein for any dog or cat and this incredible burden of fat. Now, fat is a good energy source and fat gets vilified a lot, and I love feeding fresh, clean, healthy fats to dogs and cats. It's a beautiful source of energy, but dogs and cats in the wild get about 50% of their calories from protein and about 50% from fat. That's not volume, that's on a caloric basis. So, my biggest concern about you feeding a Canadian raw food diet would be I want to make sure that you call the company, ask for a complete nutritional analysis and that you want to make sure that the fat content is not astronomically high. You also want to make sure that the company's giving you a complete nutritional analysis as compared to minimum nutrient requirements.

When I asked the top 13 most commonly fed raw foods produced in Canada for a nutritional analysis, most of the companies would not provide it to me, and that scared the bejeebies out of me for feeding raw foods from Canada. There are a handful of really good Canadian companies that are like, "Here's my nutritional analysis. Here's it compared to AAFCO or minimum nutrient requirements." They're happy to say that the food has 18% fat and they can show you third-party testing, that they've tested it. Those are awesome companies, and that's what I would want you to feed. When it comes to supporting chronic pancreatitis patients, a couple different things I want you to remember. Usually, it's the cooked fat patients that cause pancreatitis. It's the advanced lipoxidation end products or ALEs, which are these high heat byproducts that create massive pancreatitis and pancreas inflammation, systemic inflammation in the body.

So, you getting your animals off of ultraprocessed food and onto low fat or lower fat fresh food diets is exactly what you should be doing. Yay, good job for that. I do just want to make sure that you're partnered with one of the few really good raw food manufacturers in Canada and that you are supplying adequate roughage. Roughage meaning low-glycemic, high-fiber veggies that are helping to not only bind up excess dietary fat, but also create a healthy microbiome and reduce metabolic and gastrointestinal stress. So, if your fresh food diet doesn't contain veggies, I do want to make sure that you're giving at least 10% low-glycemic, high-fiber roughage included in the food. You can add that in separate[ly], but you do want to make sure that you're giving adequate freshly ground veggies for microbiome wellbeing. In terms of supplements, the most important thing you can do is lipase or a digestive enzyme containing adequate amounts of lipase.

Lipase is the enzyme secreted from the pancreas that's necessary to process fat. Because your babe does have chronic pancreatitis, I would feed a lower fat diet right now just to reduce the variables of having the pancreas have to work even harder than it already is. Chronic pancreatitis means chronic inflammation of the pancreas, so we want to decrease all of the burden on the pancreas right now, and we do that by supplying the raw materials for digestive support — amylase, lipase and protease. You can also throw some pancreatin in there that's desiccated, typically pig or cow pancreas. Pancreatin is extracts from pig pancreas that supply this amazing ability to help process protein and fat in other mammalian bodies. So, bark & whiskers has a

really nice raw food digestive enzyme and kibble digestive enzyme. Both of those products contain lipase, but digestive enzymes are really important. If you can get a hold of freeze-dried or desiccated pancreas, that's also a really nice added benefit.

That's called glandular therapy. Supplying the raw materials of a gland that is weak in your animal's body, feeding them that gland. So, if you have an animal with a heart issue, feed heart. It's actually one of the richest sources of taurine. If you have an animal with a pancreas issue, feeding freeze-dried or fresh pancreas, if you can get ahold of it, is a really nice way to help support that organ, but [a] low-fat, nutritionally complete diet and lipase, along with some pancreatin, that's a really nice protocol for helping your babe get over chronic pancreatitis.

All right, Linda W says, "Should I be adding salt to my dog's homemade diet?" Oh, such a good question. Linda, that depends on the recipe that you're making. So for instance, I made a recipe for a client last week and the base of it was seafood. This particular dog that I was formulating for had an allergy to beef and chicken, so I made her a salmon diet and I also had some kelp in there and some dulse and some sea vegetables.

Seafoods are naturally high in iodine and salt, and so I didn't have to add any salt. When I put all of that recipe into my animal diet formulator, I didn't need to add salt because all of the foods in her nutritionally complete homemade meal had a lot of salt. However, when I do make homemade recipes for pet parents, let's say, a chicken-based recipe or a beef-based recipe, I do have to add salt most of the time, unless I'm using a supplement that contains adequate sodium, sodium chloride. It is important that you are following a recipe. And so, if you're guessing at a homemade diet, I would tell you – you can guess. If you're feeding your dog 14 meals a week, if you want to guess at two of those meals and just throw together whatever leftovers, totally cool. But what I don't want you to do is to guess the majority of the time, because what that means is you're probably deficient on not just sodium chloride, salt, but [also] iodine, vitamin E, zinc, magnesium [and] manganese, some of these really important nutrients that your animals need and they're really hard to come by.

The richest source of zinc that you could find in the wild are testicles and teeth. Gross. No one's going to feed those, right? But then my question to people who say, "Oh, I just guess at my recipe." I'm like, "Well, how are you supplying zinc?" And people say, "I don't know. How am I supplying zinc?" And what I say is, "You're probably not." The downside about multivitamins for dogs and cats is that none of them, and I mean none, none of them, none of them meet minimum nutrient requirements for vitamins and minerals. So, you won't be able to give a multivitamin and feel covered. So just make sure you're following a recipe. If your recipe calls for salt, I want you to use it, Linda. I do get that question a lot. In fact, my client last week said to me, "Oh my gosh, why isn't there salt in this diet? All the other recipes you've made for me had salt."

And I was so proud of my client. I said, "That's so cool that you recognize that. This diet is seafood-based and it naturally has more sodium, so we didn't have to add it." But I thought it was cool that she knew enough that she should ask that question. So, you should be adding salt, Linda. If the recipe calls for salt, you need to be adding it. And if you don't add it in, interestingly, your animals can become sodium-deficient. Dogs' and cats' evolutionary diets contain a lot of blood, and blood has a lot of salt. So, there are people who say, "I think it's weird

that there's salt in your diets." Sodium and chloride are necessary minerals so if your recipe calls for it, add it in. Crystal E says, "Can cats eat bone broth?" Yes, Crystal, and it'd be awesome if you would make your kitty bone broth. You could also buy bone broth. If you buy bone broth, make sure you flip over and read the ingredients. No onions.

But kitties do really well with bone broth, and I have found, especially [in] older kitties, it's soul food for them. It's also a great way – if you have a dry food-addicted cat, adding bone broth, especially warm bone broth, into dry food is a great way to add additional moisture to help decrease kidney stress over time.

All right, Sarah F says, "Is there an alternative to omega-3s that are not fish-based?" Okay, well, this kind of ties into seafood. Some animals have mammal allergies, some animals have bird allergies, some animals have seafood allergies. If your animal has a seafood allergy, that makes it – I'm so proud of you, Sarah, for recognizing that animals need omega-3s. bark & whiskers family, when you hear that term "omega-3," I want you to be thinking DHA (docosahexaenoic acid) and EPA (eicosapentaenoic acid). Omega-3 fatty acids for dogs and cats, really, in your brain need to be only thinking DHA and EPA.

The vegetable sources of omega-3s that humans sometimes claim, like flaxseed and chia seed, dogs and cats can benefit from the vegetable sources of omega-3s, those short-chain veggie omega-3s because they supply ALA, alpha-linolenic acid. But what they don't supply is any DHA and EPA, because dogs and cats lack the enzyme that convert the vegetable sources of omega-3s to DHA and EPA. They can't do it. So, what I don't want you all to think is that by supplying hemp seed, chia seed, any of those veggie oils, camelina oil – what are some other popular ones? I think hemp and chia are the – or flaxseed. People are like, "Oh, I give my animals flaxseed for omega-3s." It doesn't do anything for DHA or EPA, so just recognize that. I can tell, Sarah, that you know that, and I love that you asked that question. Thank goodness there is actually a vegan non-ocean source of omega-3s. It's called algal oil, and it comes from algae.

Now, it doesn't usually supply a lot of EPA. Most algae-derived omega-3s are high in DHA, but not a whole lot of EPA, but those are coming. In fact, I am working with a Canadian company right now that is developing a high EPA and DHA strain of algae. So right now, the best you can do is you have to go to a human health food store. I don't know of any animal algal products on the market yet, but if you yourself or any of your animals are seafood-sensitive, or you yourself are vegan/vegetarian and you don't consume anything from the ocean, I think it's really important that you are supplying yourselves and your dogs and cats algal oil because it's the best we can do. And animals have such a high requirement for DHA and EPA that it's really great that you recognize you should be supplying it. You always supply DHA and EPA, or those omega-3 oils, at the time of feeding. Omega-3 oils are very sensitive to heat, light and storage, so they need to be added right before your animal eats them.

If you want to put them in a homemade diet and then freeze it, there is some loss during freezing, but it's minimal for the first three weeks. That's why I say if you're going to feed frozen foods, you want to use up the foods that've been in your freezer in about a month, because after a month, the DHA and EPA can begin to drop. So, I do like really supplying it at the time of feeding. If you feed any commercially available foods, there's definitely not enough EPA and DHA in the food. You'll also, if you followed me for a while, know that I'm a big fan of feeding

sardines, and sardines supply – They are small fish, they tend to not bioaccumulate marine-based toxins, dogs and cats usually love them. Little, easy, simple – put them on a lick mat, put them on your food topper, but that's a food-based source of supplying DHA and EPA that is delicious and wonderful, and that's what I do for both Cali and Homer.

If you don't have a source of sardines or your animals hate fish or you don't want to feed that fish protein, you just want to give the DHA and EPA. You want to give the oil but not the protein, then you could use a third-party tested krill oil, squid oil or, if you have a seafood allergy, algal oil. But good for you for recognizing that you want to add in DHA and EPA.

May A says, "Is it okay to give my kitty some kombucha mixed in with their food?" Yes, it is, May. So kombucha is a fermented carbonated beverage. You want to make sure that you're choosing plain kombucha, May. There's a lot of commercial kombuchas. Now, maybe you're making it yourself, which is good. [But] you want to make sure if you are buying kombucha that you flip it over and that it doesn't contain added sugars or it's not a weird flavor. There are some bizarre flavors out now. There's like cola kombucha and weird stuff. If you want to share kombucha, you can just do plain kombucha, and maybe you're even brewing it yourself.

I would love it if you would let me know if your kitties will drink it. Kombucha's a little twangy. It's fermented. It's a great source of gut-building prebiotics, that's why it's kind of joined the human craze for gut health. [It] has the exact same gut-building benefits for dogs and cats. Dogs typically love it, cats not so much. But, May, if your kitties drink it, let me know because that's awesome and it's totally safe. You just want to pick it plain and [in] small amounts, like a teaspoon on their food a day. All right, we have a couple of questions coming in from Instagram.

Okay, napoleon.bonabutte, "What tips do you have for sausage dog owners, especially keeping a healthy back as they're so long?" Okay, Napoleon, I'm going to assume that you're talking about Doxies, Corgis [and] Bassets – dogs that have long bodies, that have legs here and here, and probably ergonomically would benefit from legs here, but they don't.

Hopefully, you're not talking about sausage in terms of body weight, because one of the best ways that you can support dogs that have a very long torso – they oftentimes have back issues. And many proactive wellness veterinarians, including myself, when we see young dogs that have this structural anomaly where they're long and they need to work on their core strength, we will automatically begin a core-building, muscle enhancement program because the stronger your dog's core is, the more resilient their back is going to be. So, core strengthening exercises are really important. Swimming is one of the very best things you could ever do for a sausage dog, as you say. But making sure that they are sausage in maybe ergonomic length but not sausage in terms of body weight is really important. So, maintaining optimal or ideal body weight is extra important for dogs that have long bodies. Very important.

Now, just because you might be maintaining your Doxie's body weight doesn't mean that they have good muscle tone. So being lean is important, but being lean and well-muscled is even more important. And I wish that I could tell you there's a pill for – just take a pill and you get muscle tone. We'd all be doing it, but you can't. That means you have to work. So daily aerobic exercise, walking uphill [and] downhill. Swimming is the very best thing that you could do, but daily aerobic exercise is really important. Maintaining muscle mass is really important, and then

using those counter protective agents. Using the raw materials for cartilage repair and maintenance is what's going to nourish those disc spaces. So, things like MSM and Perna mussel, glucosamine, chondroitin [and] hyaluronic acid. Those are the raw materials that help keep discs resilient and strong, and that's very important too. I do start counter protective agents right away, like at 3 months of age. When I get little Corgis in, we start them on what we call back support right away, and that's a very good idea.

All right. Oh my gosh, it's been 45 minutes. I'm going to hurry. Lucy says, "Why do dogs eat dirt?" Lucy, I have lots of articles on this, and so if you don't subscribe to my free daily newsletter, please do. Most of the time, dogs will eat soil because they're craving minerals or they're craving something for their microbiome. Same with grass. Some dogs just plain like the taste, no doubt, but most dogs are specific about the type of grass that they're eating and the type of dirt that they want. I have seen many dogs search, search, search, and then they'll dig. They'll dig down to get a certain patch of clay or minerals or a limestone because they're craving certain minerals. So, I would first ask the question as a veterinarian, what's the quality of your dog food and how often are you rotating dog food? This is where rotating brands and flavors is really important.

If you're feeding a homemade diet, you make sure, sure, sure that you're meeting not just the bare-bones minimum mineral requirements, but that those mineral ranges are optimal in your complete and balanced recipe. You'll know that because the first page of the recipe will say X cups of meat, X cups of veggies, the recipe will be there. But then page two and three of your recipe will say amino acid levels and list them all. Fatty acid levels and list them all. Vitamin levels and list them all. Mineral levels and list them all. You'll be able to look at the mineral levels in your homemade food or in your dog food and compare them to the minimum amount needed to stay alive. And you want the numbers to be more mid-range of what you're feeding than low. So, I would first be suspicious of the food not providing all the minerals that your dog may need in adequate amounts.

The second thing, if you will say, "No, that's not it. This is a fabulous recipe. All of the minerals are mid-range. I rotate recipes every third or fourth batch that I make. They're getting a variety of different whole food sources of minerals." So, minerals are found in organ meats, nuts, seeds [and] cruciferous vegetables. Seafood and shellfish are really rich in minerals. Eggs are rich in terms of amino acids. You can give mineral-rich, real foods that will help with any type of deficiency, but you want to make sure that your core base daily sustenance is also mineral adequate. If it is and you know it is, then I would say, "I wonder if your dog's dealing with a microbiome issue?" Which means you could be putting beautiful food in, but if your dog is not digesting or absorbing the food because of the microbiome imbalance, then you may have a secondary issue. Thank goodness now we have easy, simple, quick checks.

You can do it at home. Take a swab of poo, you can submit it to an animal biome lab. Animal microbiome testing is becoming more affordable, but also much more common. It's such an easy, simple way to identify, "Yes, my dog's gut is great," or "Oh my gosh, I've got some imbalances or dysbiosis or leaky gut occurring." So, if it's not diet, I would be thinking about your dog craving minerals because they're not digesting or absorbing food.

All right, sqbrat3 says, "I have a 7-year-old Pembroke Welsh Corgi that has high liver enzymes. They're 300." So, I'm going to assume that when you say high liver enzymes, you mean ALT, alanine transaminase. And your question is, "How high is too high? She appears to be super healthy otherwise." So, you have to remember that there are internal and external sources of what could cause your dog's liver enzymes to become high.

ALT is a liver damage enzyme. So, it doesn't really tell us the function of the health of the liver. It tells us that you've got active damage going on, but it doesn't tell us why. So, this is where my brain goes: ALT of 300 anytime, you do blood work. And good for you for doing blood work. If you guys do blood work, I would say to do blood work every year on your annual mammal's exam. You can get a mini panel for healthy animals. You just want to know in your heart that your animal is as beautiful on the inside as they are on the outside. And what you found out with your Corgi was that, "Hey, my Corgi's beautiful on the outside, but something's going on in the inside." Good for you for checking rather than having heartbreak later or thinking, "Oh my gosh, how did this happen?" Good for you for knowing that there's a problem because now you can supply a protocol and then you can recheck the ALT and find out if it's better or worse or the same.

300 is definitely high and, if anything, any abnormal blood value above normal in my opinion, address it because that's the body saying, "We have a problem." And thank goodness we're able to test and then we're able to recheck so that we know, "Yes, the liver problem has resolved," or "Oh my gosh, it's getting worse and I need to move along and do something else." So, I would recommend you to be thinking about if your dog's liver enzymes were normal last year and they're high this year, what changed? Did you recently give flea and tick medication? I've had flea and tick chemicals absolutely cause an elevation in ALT. I've had heartworm prevention cause elevation in ALT. I have had lawn chemicals, fertilizers [and] pesticides cause elevation in ALT. So, there are external sources around the house that I want you to be thinking of like, "Okay, well what could that be?" If you recently redid your house and you've got off-gassing of environmental chemicals, that's enough to cause elevation in ALT.

So, evaluate your home, water and food, believe it or not. Food, because it's not human-grade – unfortunately, pet food is wildly known to contain mycotoxins, which jack up ALT. Heavy metals, which can jack up ALT or liver enzymes. Contaminants [and] glyphosate can jack up ALT. So, you might want to consider right now doing a homemade diet. Just stop – you have the raw materials, you know exactly what's in the food. Stop all commercial diets. Give your dog a little break for two to three months. Do a homemade detox diet. You can also use milk thistle, one of my favorite herbs for helping to support liver detoxification. Also helps the liver cells regenerate themselves. For bark & whiskers, we have Kidney and Liver Support, and that is SOD (superoxide dismutase), glutathione, milk thistle [and] dandelion, all of my favorite herbs to help support liver and kidney detoxification, all in one product.

Use something like that for the next four weeks with a homemade diet. Evaluate and clean up your home living environment, and then zip back in and recheck that ALT. If that ALT is better, what you're doing is effective. Which means the liver cells have stopped, [the] damaging effects, and they have regenerated themselves and liver enzymes are normal. Yay. I would sit back in six months and just make sure that they're still normal. If they're higher, your next step is to actually do a liver function test, which is a pre- and post-bile acids, but before you spend any money on

anything, I would do a quick detox, homemade diet, kidney and liver support, and then zip back in and recheck that ALT. Any value on your animal's blood work that's out of range – not enough for you to panic, and I'm proud of you for not panicking. I can see from your note that you're okay, but you're just wondering, “Hey, how do I approach this?” Proud of you for both of those fronts. Never ignore abnormal blood work. Ever.

Doesn't mean you need to panic, but it does mean you want to put together a protocol, that you hopefully will address it and fix it. But if it doesn't, then you're going to recheck and then you'll know, “Yes, it's improved,” or “No, it isn't.” But good for you for checking and now you're going to put together a protocol. Nicely done.

Oh, this next question parallels with this well, duncan.the.scottie says, "Do you have any recommendations on how long our pet should have milk thistle for a detox? Is it one week, two weeks? And how often should we repeat the process?" Well, Duncan, that depends on your pet's toxic exposure. I have some little dogs that go to work every day with their mom and dad at a nail salon, where they're exposed to all of these environmental chemicals. Their liver enzymes are always high. Those animals are on detoxes daily for their whole life or until their mom and dad doesn't take them to a nail salon every day.

Likewise, if you work at a pesticide company and your dog goes to work with you and is constantly walking on a pesticide-sprayed grass, I'd probably do daily detoxification for that dog as well because their incidence of chemical exposure is so high, and you want to be supplying ongoing and constant means of detoxification for those high-risk dogs. If you are just supplying known chemical burdens, let's say, every six weeks for a heartworm pill, which is a pesticide, but in some areas [it's] necessary, then yes, I would give a detox for a week starting the day that you give the heartworm pill. Give a detoxification protocol once a day for a week following just to help the body clear out any residue, as well as helping to detoxify and support normal hepatocellular regeneration, this process of the liver dumping the crud but also then regenerating itself from any chemical stressors. Really, the amount and the frequency of detox, Duncan, depends on your animal's exposure.

If you live in an all green organic house, you literally have no outside chemical sources or exposures whatsoever, your dogs and cats eat an entirely organic free-range, ethically sourced diet that you home-prepare, and you filter your water and the entire environment is pristine, some animals don't need any detox because their organs are being supported. The pet parents are really cognizant of environmental chemical load and are really clear to make sure that their animals don't have exposure. I've got many patients that never need detox. I have lots of patients that are on detox every day, probably for the rest of their life because their exposure is ongoing for the rest of their life. So, you just want to put together a protocol based on your animal's exposure and environment as well as potential risks. Some animals like Golden Retrievers are really high on the cancer risk, in which case I would, if I had a Golden Retriever in a known chemical environment that I couldn't remove him from, I would do detoxification much more commonly for those dogs. So, you want to match it to your animal's environment.

Okay. I just want you to know that we have a lot of questions left. We can either keep going or I'm going to choose three or four more and then we'll do this again shortly. Again, we'll do another Q&A. I love the fact that you guys submitted so many questions, but this could end up

being like a nine-hour Q&A, in which case you'll all go to sleep and tune out. So, we'll pick a few more and then we'll do it again. Okay. pipaventura – I like that – says, "What's your opinion on CBD (cannabidiol) oil every day for a 2-year-old girl?" Well, Pipa, I would say – in fact, this is not just about CBD, this is [for] any supplement, I would ask yourself, "Why am I giving CBD?" I want everyone to remember that no amount of supplements are going to undo a poor diet. You can't supplement your way out of bad food, and you can't supplement your way out of a behavior problem or an anxiety crisis. What do I mean by that? I have some clients that feed terrible quality grocery store food and spend \$300 a month in supplements, and it's like taking a really expensive multivitamin after you eat at McDonald's.

It doesn't balance out the metabolic burden of terrible food. You can't supplement your way out of it. So, I would rather have my clients buy more expensive human-grade real food diets that take the place of needing all those supplements than to spend so much money on supplements. So, my question to you and with anyone thinking about supplementation, is why do you want to give your animal supplements? Some animals need supplements. A lot of animals need supplements. All of my animals are on supplements from either genetic predispositions that they have, age, or I adopted them with physical issues and I couldn't feed them enough food to get the bioactive properties out of it. For instance, we have a question here, Scarlet says, "What about resveratrol for dogs?" Resveratrol, which is this very potent polyphenol antioxidant. In humans, we can get it from grape skins. We don't do grapes for pets, so we do Japanese knotweed.

I love resveratrol, Japanese knotweed, for dogs and cats. I love it. I use it for cancer. I use it for liver disease. I use it as an anti-aging strategy. But I don't think that every pet from birth to death needs to go on resveratrol. I'll pick and choose what patients potentially would benefit from resveratrol. The same is true with CBD. So, let's just say, Pippa, that your dog has a pain-related issue. That's a good time to consider CBD, because CBD is such a better healthy choice than using a non-steroidal anti-inflammatory drug (NSAID) that could have long-term consequences for the GI tract, kidney and liver. But if you're just waking up every day and giving CBD, I would say, no, don't do that because it's expensive, but there's also not a reason. You can read a lot about amazing supplements and you can end up literally putting four to seven powders in your dog's food to the point that they wouldn't even eat their food.

And when I ask my clients, "Can you tell me what all those things are doing?" They have no idea why they're putting four to seven powders in their pet's food. Their pets hate it, and the owners can't even explain what the benefits would be. So, I don't want you to do that. If there's a pointed medical reason, either for improved quality of life or for a health benefit that you specifically want to medicate your animal for CBD, yes, do it. If you're seeing good clinical improvement. If you do have a dog with anxiety and you found a brand of CBD that's actually helping along with behavior modification, no herbs, supplement or drug by itself is going to fix a behavior problem without you, the pet parent, intentionally working on behavior modification. Which means working with your animal's environment through training and adaptive procedures that you're putting into place to help minimize the recurrence of this happening again. You're not going to ever rely just on drugs or herbs to fix a behavior problem.

If you're using it and you're seeing improvement, yay, continue using it. But if you don't know why you're using it or you haven't seen improvement, I would tell you to think again about choosing a different protocol and then making sure that you're doing a multimodal approach that

is giving you the results that you want, so it can justify the money you're spending on the supplement. Hopefully, that makes sense. Okay, that was a lot of questions. I didn't get to all of them. Hopefully, everyone learned something. I'm excited to do this again. Next time that we have an Awareness Week, we will do it again. I appreciate each and every one of you tuning in today. I appreciate each and every one of you asking questions, and hopefully this is an inspired conversation enough that you would be able to think, "Okay, this applies to my animal's situation," and/or you have a little bit more information that you can tuck in your back pocket for when and if you need it. Thanks for joining me today, and we'll see you on bark & whiskers' site soon. Thanks, guys.