

Exploring the Parallels in Health and Nutrition Between Humans and Pets

A Special Interview With Dr. Karen Becker

By Dr. Joseph Mercola

Dr. Joseph Mercola:

All right. Welcome, everyone. Dr. Mercola helping you take control of your health. And today, we're in for a treat, especially if you have companions, pets. And we're going to be talking with Dr. Karen Becker, who's been with our site. [For] how many years now, Karen? At least a dozen, maybe more. 15?

Dr. Karen Becker:

14. 14.

Dr. Joseph Mercola:

Okay. I was close.

Dr. Karen Becker:

Close.

Dr. Joseph Mercola:

I said maybe a dozen, maybe 15, so I was in the window. I should have looked before, but [I'm] just going by memory. So, you are, in my view, probably the best holistic vet out there in the world. And I'm so glad that you're connected with us and you run our pet site.

But we haven't talked for a while. We used to share the same location in the northwest suburbs of Chicago. Or you were southwest, I was northwest. And we used to see you regularly, but we'd hardly ever seen her. Because you're in Arizona, I'm in Florida, and we'd intersect once every few years or less.

Dr. Karen Becker:

Yes. All correct.

Dr. Joseph Mercola:

It's time for an update and we're going to learn some good stuff. So, I think the first one is that, everyone, it is hard to not be overwhelmed and notice the artwork behind you. And that's not just any special artwork. Those are the cremated remains of your favorite pets. So why don't you expand on this and tell us what that's all about and what the minerals represent and if someone is interested in this, which is a pretty novel way to remember your loved ones. I love you because you have such deep philosophical views on so many things, and my view of pets is somewhat limited, but one of their best values is to teach us how to grieve.

Dr. Karen Becker:

Animals serve so many valuable purposes, Joe, but-

Dr. Joseph Mercola:

Yeah, because they're going to pass away before we are. And they're [inaudible 00:02:08] because there's the example right behind you.

Dr. Karen Becker:

Yes. Yeah. What you see behind me, all of my babies are my favorite babies. Some of them I cremated and some of them I buried. The animals that I cremated sit in urns. And when I moved from Chicago to Arizona, I moved into a tiny house. And when I moved into a tiny house, I didn't want a shelf of just urns for a bunch of reasons. And of course, they're sacred to me, I can put them on my nightstand, but I didn't know what to do. I didn't know where to put my babies because I'm in this really tiny space.

And at that moment, a company called Ever After Art contacted me and said, "We are doing a brand-new technique where you send us a tablespoon of your dog or cat's cremated remains." And they'll stain them for mineral content and then take an electron microscopy picture, and then they send you back a high-res JPEG that's basically a photo of the minerals in your animal's body. And the first one I got back was so breathtaking. Of course, I just cried because our animals are as beautiful microscopically as they are macroscopically. And so being able to see and have my babies on the wall behind me is not only very meaningful, but they're just gorgeous. It's also fascinating. You can't see, but Isabelle was a rottweiler I rescued at 7 years of age, and she was fed kibble.

Dr. Joseph Mercola:

Now, who was seven? You or her?

Dr. Karen Becker:

She was seven. And she was fed fast food her whole life. And if you could see her mineral composition, she's not as bright and vibrant. She doesn't have as much nutritional diversity stored in her bones. Her bank of minerals was not nearly as robust or diverse as, let's say, this yellow baby down here. You can't see the whole thing. This is Crosno. And Crosno was my 20-year-old kitty. He just passed away six months ago. He was raw, fresh-fed from the time that I found him at 6 weeks of age. And he's got this diverse, gorgeous profile of minerals that he banked.

So it's interesting that you can actually get a hint of an animal's health and wellness status by looking at mineral composition, even in death. So, it's Ever After Art. And they do a beautiful job of helping you see vividly upfront and every day the beautiful aspects that our animals continue to give us and the lessons that they continue to teach us.

And yes, animals are amazing at connecting us to our higher purpose, grounding us. They love us unconditionally. They role model unconditional love. The only animal, the only creature in

the whole world that will be fired up when you come back from getting the mail or if you come home six hours late from work. Your dog will still jump up on you and be totally fired up that you're home. He doesn't ask any questions. He doesn't pout that you're late. He just is genuinely, overwhelmingly happy to see you. And that is rare to get that from a best friend, a spouse, a mate, a partner, family members. Humans fail each other, and animals rarely fail us. If there's a break in the relationship, it's usually human-induced most of the time. So yes, that's the background of my babies.

Dr. Joseph Mercola:

All right. Well, thanks for that explanation. And for those who are interested, maybe you can give us some information, we can do that. And I'm assuming from the logistic perspective, it has to be bones or can you use other tissue minerals?

Dr. Karen Becker:

No, it's whatever the crematory sends back to you. You have to open the urn. That's one of the hardest parts emotionally, is opening your beloved's urn. And they send a kit and there's a little container with a scoop, and you take a tablespoon out, and that's it.

Dr. Joseph Mercola:

Perfect.

Dr. Karen Becker:

So, whatever is in your urn is what you submit.

Dr. Joseph Mercola:

So, you can do this for loved ones, too? My dad was cremated and I still have his ashes.

Dr. Karen Becker:

I don't know about humans, I just-

Dr. Joseph Mercola:

Well, it's the same thing. Right? Tissue is tissue.

Dr. Karen Becker:

Yeah, of course it is. I'm certain that you could do it. I don't think that they will market for humans, but I agree with you. It would be fascinating to see humans, in terms of minerals – Humans and animals have a lot in common, but here's a big difference, Dr. Mercola. In North America, the average human eats about 51% ultraprocessed food a day. About half of their calories are coming from ultraprocessed food.

But in the animal space, it's actually much worse. Dogs and cats eat a minimum of 85% ultraprocessed foods, from birth till death. So actually, humans, of course, are nutritionally deprived, but on top of animals having to eat dog food or cat food their whole life – yes, those

foods are minerally fortified. That's a big difference. There's a multivitamin in every bite of dog and cat food. Synthetic multivitamin. But there's also all these tag-along unwanted byproducts included in pet foods, like advanced glycation end products (AGEs), mycotoxins [and] glyphosate. There are all of these other unwanted contaminants that impact health and wellbeing, even on a microscopic level as well. So, humans and animals do have a lot of nutritional woes in common.

Dr. Joseph Mercola:

Yes, indeed. And that's one of the reasons I wanted to discuss that with you, to review what I perceive as some major atrocities. It's a crime against humanity what they did with COVID and the vaccines and the jabs and the lockdowns and the masking and social distancing. But it's almost on a comparable level, especially if you [have a] great affinity for pets, of what they have done and are continuing to do in the pet world. And most, I would say the vast majority of people are absolutely unaware of this. It really is shocking that they can get away with it, but they pulled it off. They really have, in many ways, even more effectively than in human nutrition.

And you had mentioned the AGEs are in the pet foods, and I'm sure they are, advanced glycation end products. But they're loaded with linoleic acid, I am certain. And this linoleic acid elevation is 23 times more potent than sugar at producing these AGEs. So yes, they're in the food, but the food they're feeding them is going to exponentially increase the AGEs and the ALEs, the [advanced] lipoxidation end products, which are these catalysts for causing this incredible amount of excess oxidative stress in the body and just really accelerating our destruction towards premature death. And pretty much almost every single degenerative disease that we encounter, and in pets, it's cancer. It's a big one. And so many of these – and we'll talk about that too – but some of these pets are dropping from cancer. And they don't have to. They don't have to if you give them the right food.

So, let's start down the road of the food that almost everyone is feeding their pets and mostly out of ignorance, I think. So, give us a deep dive on the – and I think it's a conspiracy and collusion with the veterinarians, other than veterinarians like you, that go along with this. Many of them unknowingly, but many of them know this and they still agree with it. So, it's just a shocking crime.

Dr. Karen Becker:

It is shocking. But Joe, I would actually argue that, at least in my profession, kids go into vet school just like kids go into medical school. And in veterinary school, they are indoctrinated. They-

Dr. Joseph Mercola:

Brainwashed.

Dr. Karen Becker:

It is. If you go in with the foundation of nutrition, you have something to balance it with. And that was, thankfully for me, that was my situation. My parents are wildly proactive. I grew up, my grandma Shaw taught me how to grow and juice wheatgrass when I was 12. My parents, my mama made three homemade organic, garden-fresh meals a day. We never had soda, we never had white bread. But I believe even [as] a 1971 baby, I was the exception. So, I went to vet school understanding the power of food. That is not true of my peers.

So what happens is during veterinary school, you contract large or small animals – Actually, large animal veterinarians have a much more robust knowledge of how to nourish animals because they're growing animals for food production, so they understand how much protein, how much fat. They understand how to grow animals quickly for slaughter, for consumption. So large animal veterinarians actually have a much better grasp on how to construct diets that are necessary, what mineral and vitamin deficiencies look like. If I was a cow or pig vet, I would've graduated knowing more about those types of nutritional details.

For small animal veterinarians like myself, I didn't even have an independent board-certified veterinary nutritionist teach my nutrition class. I had a rep from the ultraprocessed pet food diet company teach my nutrition class. Joe, that's the equivalent of having a drug rep teach your pharmacology class. There's a serious conflict of interest. Not to mention, every single veterinary school in the world has a professional relationship with one of the major pet food companies that supplies the hospital and university with not just foods for the animals in the clinic, but they supply veterinary students free pet foods. So, when I brought Gemini to veterinary school, Waltham was the sponsor at Iowa State School of Veterinary Medicine, and I had the opportunity to give Gemini free Waltham food. This is also when I started making homemade food for my dog. And that's a whole different story.

But Joe, that being said, I think the biggest overwhelming aspect is that veterinarians are still the only health and wellness professionals that graduate with doctorate degrees that still truly believe – And I know you're thinking, they know in their hearts that, "Oh, we shouldn't be doing this, but we are." I really would argue that. They graduate thinking, "I got this laminated book, and when I have liver disease, I'll prescribe a liver diet. And when I have kidney disease, I'll prescribe this ultraprocessed kidney diet."

It's a little bit like being indoctrinated that baby formula is better than breast milk, but you have to go on to then construct baby formula. Pet food really is a lot like baby formula. It has to have all the protein, all the fat, all the minerals, all the vitamins in it so that every single meal, you're feeding a complete and balanced nutritional meal. The problem is, Joe, that is not how any animal has ever eaten or consumed food ever in the history of ever. No dog or cat. Just in the last 100 years is when the ultraprocessed pet food industry has come about. And that is-

Dr. Joseph Mercola:

Let's go into the history because there's so many parallels with human nutrition. Because they captured the medical schools in 1910 with the introduction of the Flexner Report catalyzed by

Rockefeller and Carnegie. And [the] medical school curriculum was never the same after that. To this day, it remains the same. Essentially, natural therapies and nutrition was excised from the curriculum. So how did they capture the veterinary industry and when did it occur? Is it 100 years ago or longer?

Dr. Karen Becker:

So in 1945, Purina made rice and wheat Chex with this brand new machine called an extruder. And it was in 1951 that their pet division said, "Hey, can we borrow the extruder to extrude the very first bag of Purina dog chow?" 1951. And they borrowed it from the human food extrusion line. And what they realized is, "Oh my gosh, this extrudes an all-in-one, ready to eat, stored in the pantry, dump it in the bowl, from birth till death. All you have to do is feed this little brown crunchy ball. We'll take everything left over from the human food industry that can't be fed to humans. We'll add a synthetic multivitamin and mineral to it, we'll extrude it at high temperatures, and then we'll package it and sell it as complete and balanced nutrition." That was the beginning of the decline of overall health and wellbeing for companion animals.

Dr. Joseph Mercola:

So, it was only about 50 years ago?

Dr. Karen Becker:

Canned foods. Dog food and cat food came in canned foods prior to that. And then actually, baked foods prior to that.

Dr. Joseph Mercola:

But that was probably healthier and everything.

Dr. Karen Becker:

Yeah, exactly. However, so originally, James Spratt in about 1895 in England, he was a lightning rod salesman, a US salesman, went to London and found that ships were dumping hardtack, which is the leftover, moldy food for sailors on the docks, and that stray dogs were coming to eat it. So, James Spratt had this brilliant – he was an entrepreneur, he was like, "Oh my gosh, there's those dogs eating that leftover human food. Maybe I could make a dog food that looks like this."

So he started Spratt's Cakes, which is actually the claim to fame is the "original dog food," which is a human selling an easy product for convenience. It's like Betty Crocker cakes. Don't make homemade cake, just buy a cake mix. Don't have to feed your dogs leftovers. Farmers don't have to throw scraps. You don't have to worry about sharing human food with your dog. You just buy your dog his own set of food. And that original formula was wheat flour, leftover fat, lard salt and water, and then they baked it. The problem was it became moldy and rancid.

So mycotoxins, Dr. Mercola, were a huge issue. All throughout the early pet foods, from late 1800s, early 1900s, animals kept dying of nutritional deficiencies, as you can imagine. So, kitties are obligate carnivores and dogs need some meat protein. I would argue that they're scavenging carnivores. They need a lot of meat protein. And because there were so little amino acids in those

original baked dog foods, animals, dogs and cats, still died of nutritional deficiencies quite regularly.

Then came canned food. And canned food came about very interestingly, because after horses – with the invention of the car, we had 60,000 horses that no longer provided transportation. And there again, humans capitalized on then selling horse meat as dog food. And that was a canned option for dog foods. Those early canned products for dogs and cats were primarily horse meat. When there was a metal ration during World War II, they said, "No more. We will not be using any cans for pet food." And that is when Purina took advantage of, "Okay, if we can't provide canned foods and baked foods become moldy, what can we do? We will use an extruder."

And that really was the beginning of high heat temperatures. Now remember, by that time, Purina was already adding in the synthetic vitamins and minerals that they knew were required, like calcium to make strong bones. Those basic minerals that are needed to sustain life, Purina was already adding them in. But then this is where it gets a little dubious, where marketing claims, including "nutritionally complete and balanced," pet parents started believing that. And during that time, women were primarily at home, the ones making food, and they were in charge of feeding whatever dog or cat around the house, or inside [or] outside of the house. And buying dog food became one way to minimize the workload in the house. So, it was just convenience, like oftentimes fast food is.

And from that point going forward, then marketing expanded to, "This is all you ever need to feed your dog or cat. All you have to do is buy this convenient prepackaged food. You feed it from birth to death, and your animal will thrive because it's everything that they need." So, that was the start of the misconceptions. But because veterinarians are indoctrinated to believe, "Hey, this is scientifically formulated. This is all animals need," they are parroting that misinformation to worldwide pet parents who are also believing it.

Now, what we have seen, thank goodness, is in the last 35 years, common sense starts to rise up. And people are saying, "Wait a minute. It doesn't seem logical to me at all that we should be feeding animals a little brown crunchy ball from birth to death, any more than you and I should be eating meal replacement bars." Or Total Cereal is actually the best example. Total Cereal is an extruded food with a synthetic multivitamin mineral. And when you read the site of Total Cereal, it says, "100% of all the RDA. Of everything you need." Just imagine feeding your kid Total Cereal from birth to death. It's the equivalent of dog or cat food.

So, in the last 30 years in modernized countries, there's been an awakening of people saying, "I believe my animal needs more." And there have been a small but growing handful of veterinarians like myself who were raised knowing that animals could not solely exist on dog or cat food. My parents did buy ultraprocessed food for all of our family dogs, but my mother always topped off with whatever she was chopping in the kitchen. All of our animals always got leftovers. And I do believe that that's one of the reasons that my dog that ate ultraprocessed food, our family dog, Sooty, lived to almost 20. He lived to 19 eating really bad ultraprocessed food, but the trade-off was-

Dr. Joseph Mercola:

Supplemented.

Dr. Karen Becker:

He was supplemented every day with all my mama's amazing leftovers. And now when we're talking leftovers, we're talking low-glycemic, high roughage, good carbs. We're talking the tops and bottoms of broccoli. We're talking the bottom stems of mushrooms, which we know now have more fiber and beta-glucans than the cap. So, my mama was inadvertently sharing all these goodies with our family animals that I firmly believe extended their lives, in addition to my mother practicing intermittent fasting with our dogs, in addition to my mom walking our dogs five miles a day. So, what I have learned in my 25 years of being a veterinarian, is that nutrition is the foundation of health, no doubt, but it's not the only thing that matters. Movement, fresh air, detoxification-

Dr. Joseph Mercola:

Sunshine.

Dr. Karen Becker:

And stress management. Stress meaning chemical stress, emotional stress, physical stress, all of those things together are what either dictate health span in a long lifespan or the beginning of chronic degenerative disease midlife, which is what we typically see in veterinary medicine. Cancer, obesity, diabetes, organ failure, autoimmune disease, allergies, all of them are expected in the exam room. And that's a shame.

Dr. Joseph Mercola:

Yeah. That's just like it is with humans. Those variables are equally important. And it's not just about the diet, although the diet is one of the most important. So, what is your best estimate as to the decrease in lifespan and increase in morbidity as a result of the adoption of these convenience foods for pets that were optimized to create massive amounts of profits for the companies producing them and had nothing, absolutely nothing to do with the health of the pets?

Dr. Karen Becker:

Well, let me give you two examples. First of all, I also have that obsessive question. And as a proactive wellness veterinarian, I'm obsessed with the science of how and why animals either die young. Even with genetic predispositions, we all have genetic predispositions, but just like the hip dysplasia set of genes that can be expressed or don't have to be expressed. I did some DNA (deoxyribonucleic acid) testing on my own dog. He's got basically the equivalent of the genes for degenerative issues in his eyes. It's called progressive retinal atrophy in dogs. In humans, it would be similar to macular degeneration, let's say.

Dr. Joseph Mercola:

AMD (age-related macular degeneration). Yeah.

Dr. Karen Becker:

And so, even though my dog has the DNA for that, I am putting food into action. And he's 16 years old and he has not expressed that DNA. I'm also super interested in how you up and downregulate your dog and cat's epigenome to either quiet down genetics that you don't want to express. Or if you do nothing, if you are not intentionally working on creating health, you are inadvertently allowing your animal's health to slip away. Because by just doing nothing, your animals will degenerate and almost always begin expressing whatever DNA's lurking, and that is going to come out midlife.

So, I do believe that my desire to want to know why and how animals live longer – that was actually behind why we wrote “The Forever Dog” book. My co-writer is obsessed with the oldest dogs in the world, and I'm obsessed with the science of why. So, Rodney Habib went out and found the verified oldest dogs in the world, and went and interviewed all of their owners around the world about what those owners did and didn't do. And Dr. Mercola, it's as much what owners didn't do as what they did do that ultimately created health.

All of the longest-lived dogs' owners that we interviewed – Buksi, 28 years old, 30-year-old Maggie from Australia. Every single one of these dogs had some key variables in common. They all moved their bodies every day. They all were allowed to make choices. They were able to go outside and sniff and have direct sunshine, ground themselves. They had access to fresh food every day. These animals had an entirely different set of variables that allowed them to have all the resources they need for appropriate detoxification as well as this robust nutrient intake from a whole variety of different foods over their lifetime.

So, then we took all that information to the top longevity scientists around the world, and we had those longevity specialists, geneticists and doctors [and] human specialists reverse-engineer these oldest dogs. And that's what we put together in our book, “The Forever Dog.” Just recently, we learned that there's a 30-year-old dog in Portugal.

So, to your point of what are the variables, when Rodney found out that there was a 30-year-old dog in Portugal, we didn't know if it was true or not. Social media is full of this and that. But around January 1st, the Guinness Book of World Records verified through some DNA testing. They got the original veterinary rabies certificate from 1992, they talked to the Portuguese Veterinary Medical Association, they talked to this man's neighbors, and they actually crowned a new winner of the Oldest Dog of the World title to Bobi, who lives in Portugal.

So we tracked down Bobi's dad, Leonel, and we invited ourselves over to interview him. And Dr. Mercola, exactly the variables that you would anticipate for human longevity, health and wellbeing are exactly in place for why Bobi lived and is still living at 31 years of age. How can a dog be over double his lifespan? Well, number 1, he's never eaten one bite of commercially available dog food in his life. His dad, Leonel, and his family have cooked and shared their own food with their dog since birth.

Bobi was born in the woodshed in the back of the house. And from that time – there's this huge 3-acre garden in the front of their house [where] the family grows about 75% of their own food. They raise chickens and rabbits for their protein. And during the winter, there's this beautiful local farmers market where they're buying all fresh, non-chemically treated produce. So, they have this amazing variety of fresh fruits and veggies that are going into Bobi's body every day.

He's got access to a garden to which he self-forages every day. He goes on walkabouts in the woods every day. And there is no pesticide chemical application in or around the house. In addition to his incredibly stress-free life, there's clean air, clean soil, and he lives this almost magical life of being able to make choices about what he wants to do on a daily basis. That's basically a blue zone dog, Dr. Mercola. He's got a rich social life. He has natural movement every day. He's eating a Mediterranean diet. He basically is a blue zone dog. So, I think that that combination of healthy natural movement, a rich social life and an amazing diet are probably the key factors for extending health and wellbeing [of] our pets.

Dr. Joseph Mercola:

So, it sounds like my chickens and geese. They've got [a] magical environment to grow and stay healthy. But I still didn't get – I love the beautiful description, but you didn't really answer the question as to what percentage reduction you think is present as a result of adopting this commercial convenience food? It seems like it's 50%.

Dr. Karen Becker:

There's no way, sadly, to qualify that. I wish I could tell you-

Dr. Joseph Mercola:

But your opinion is valid. You're in the field, you're in the trenches, you see this every day.

Dr. Karen Becker:

I do believe that owners that raise their dogs like Bobi was raised, owners that are cognizant of all of the variables that are necessary for wellbeing, absolutely. Those dogs not only may have a potentially longer lifespan, but I think more importantly, they have a better health span. They are not degenerating midlife from preventable degenerative diseases. Their bodies are moving along, not degenerating, because their owners are cognizant of the steps that they need to take to intentionally create health and wellbeing.

So, if I had to guess, I would say that at least 50% of the degenerative diseases that we're seeing today are directly related to lifestyle. And actually, if we include all of the other aspects of lifestyle, research says that it's about an 80-20 split, Joe, that 80% of degenerative diseases in dogs and cats are related to genetics that cannot be changed.

We can't change our pet's DNA, but we can modulate their environment around it to whether up or downregulate expression. Eighty percent, Joe, is related to lifestyle and diet, 80% of wellbeing. So, if you are making good choices, then you'll have a better outcome. If, god forbid, and this is also another reason why I wrote the book. After 20 years in the exam room, I am so

heartbroken from hearing my clients say, "If I only would've had this information before. If I would've known that I should have been feeding my dog healthy, organic, fresher foods. I didn't know. My vet told me just to feed ultraprocessed food. I just followed my vet's advice."

But this is exactly why you set up a pet site. You emailed me in 2009 and said, "Hey, listen, you have the exact same views I do about health and wellbeing. That animals, including human mammals, need unadulterated, fresh, chemical-free whole foods for health and wellness. And obviously you believe that, would you come and be a consultant?" And that is exactly how our relationship got started, it's because you and I align on how mammalian physiology should be nourished.

Now, as a wildlife biologist, my degree before I became a veterinarian, I'm a big believer in species-appropriate foods. That's the second issue, Dr. Mercola, with pet foods, is that right now, the pet food industry – first of all, you have to keep in mind step number one of the biggest issue of the pet food industry is we got a serious quality control issue. All of the raw materials going into pet foods, Joe, have failed human food inspection, which means everything in North America, foods come in, and thank goodness we live in a modernized country that has food inspection services. Yay. USDA (United States Department of Agriculture) food that passes inspection goes into the human food market. Everything that fails inspection goes into animal feed, including dog and cat food.

So unless your pet food is labeled "Made With Human-Grade Ingredients," it is made from rendered USDA inspected and failed raw materials. Now, the food failed for a reason. Maybe mycotoxins, could be heavy metals. You're never going to know how the raw materials got into your pet's pet food. But the quality control is issue number one.

The second issue, Joe, is species appropriateness, which means right now, the pet food industry is trying to convince pet owners that dogs are vegans and cats are omnivores, and that is not true. Dogs are scavenging carnivores, and up until 100 years ago, they oftentimes caught and killed their food. And even farm dogs today will still. If they find a litter of baby bunnies, they're going to eat every single one of them. Like a little Tootsie Roll, they're just going to eat them. Kitties, if allowed to hunt mice, will still hunt mice. Barn cats still very efficiently consume, catch their own food on a regular basis.

Dogs' and cats' physiology has not evolved in the last 100 years to eat a bunch of highly processed refined carbs and oils. They just haven't. So, when we put metabolically stressful foods into physiology that was never meant to process this, there are serious metabolic consequences. And that is exactly what we're seeing in terms of degenerative disease today.

Dr. Joseph Mercola:

Excellent. So, the practical question becomes, now that we have this understanding and grounding, that we need to essentially replicate what we're doing to improve our life and health span with the animals. And I just wanted to, before I go into the question, I had to highlight one

of the variables you reviewed and point out that animals do not run marathons, animals do not do weight training, but what they do is they move all day long if they're allowed or given the opportunity to.

And it's the movement that probably is one of the most important parts of the equation. And if you had limited time for exercise, probably the highest priority is to get the movement in, to walk ideally an hour and a half a day. That's probably what you're required to do to optimize the expression of your genetics. So, I would just highlight that. And if you have time afterwards, definitely do resistance training because sarcopenia and frailty is a big issue as you age. You do not want to wind up there. So that's just my tangent. But the question was, can you help us understand how to identify or construct a species-appropriate diet for our pet companion?

Dr. Karen Becker:

I can certainly do that. But first, I do want to thank you for bringing up exercise, because Dr. Mercola, there is not – Some people have reached out after “The Forever Dog” book and said, "Listen, I agree with everything. I am on a very restricted budget. I can barely afford food for myself. Or I am getting food from the food bank for myself."

Dr. Joseph Mercola:

Sure.

Dr. Karen Becker:

"Help me take the best care of my dog on a shoestring budget." So, thank you for highlighting the importance of exercise, because there are so many things we can do for free that dramatically extend the health and lifespan of our animals that we don't take advantage of. So, for people that are not on a budget, oftentimes they have this beautiful 2-acre fenced-in backyard. So, when I say to my clients, "Hey, how many miles are you doing heart-thumping, aerobic, muscle-building endurance, tongue-out panting, really good aerobic exercise with your dog a day?" Their response is, "I have a fenced-in backyard with a doggy door."

Well, that's a little bit like people who have pools that never get in them. That's great that you have a tool and a resource for exercise. But unless you are actually doing the exercise, it doesn't matter. Most dogs that have [a] fenced-in backyard, unless they are fence runners, they typically lay around their backyard and they are not getting exercise that they need. We come home exhausted, we're tired at night. We don't really feel like helping our dogs who've been stuck in the house all day move their bodies. But I do believe it is our ethical and moral obligation to give them the opportunity to do that, for two reasons.

Dogs are wired as athletes, Joe. Even the tiniest Chihuahua. A lot of people just say, "Oh, I just carry my dog everywhere. And their exercise is going up and down the stairs in the house." All animals need daily aerobic exercise. They need to be outside. They need to have morning sun hit their retinas to be able to secrete adequate biologic hormones. They need to go for a walk at night to be able to secrete adequate melatonin. Dogs need to be outside and ground themselves and sniff to be able to take in their environment.

So, we do have an obligation to exercise our dogs. And really, unless your dog has a physiologic injury or can't – you need to pace the exercise. And if your dog is out of shape, of course you want to make sure that you are getting your dog back into shape slowly. However, daily aerobic exercise is the best longevity gift you could ever give your dog, and it's free. So, thank you for touching on exercise.

Dr. Joseph Mercola:

Yeah, and you don't have to run. You can just walk.

Dr. Karen Becker:

Just walk. Yeah, that's all. Yes. In fact, you could walk, and if you could walk uphill for dogs, it helps shift their weight around. You can walk on and off curbs. There's a bunch of things, you don't have to run. Of course, walking and allowing your dog the opportunity to walk with you on a daily basis is the best gift for both of your bodies.

And because humans don't do it for themselves, they deny the opportunity and actually the requirement, they deny their dogs that. And what we tend to do then is replace it with food. We get home, we're too tired to walk our dog around the block, and around the block is not sufficient, and we tend to say, "I feel guilty, so I'm going to feed you instead." So now we have this growing obesity issue.

Dr. Joseph Mercola:

And it's the wrong food. It's the wrong food, too.

Dr. Karen Becker:

About 60% of dogs in the U.S. are overweight, and we're treating them with high-starch, highly refined, high-glycemic, no nutrient value, empty calories. Oftentimes how we're treating our own bodies. So, when we talk about species appropriateness, it's such a good question when it comes to food because-

Dr. Joseph Mercola:

Oh, wait, before we go there, let me just top this off because there's a recent study you may not be aware of, at least in the human literature, that shows that moderate, moderate, not high-intensity physical activity, has a more profound impact on longevity than the high-intensity. And actually, the high-intensity after a certain period is counterproductive, it actually starts becoming negative.

So, what that means is simple walking. It's like the foundation. You're going to get the absolute most return on the investment of your time for you and your pet. But break it up, go up curbs and do these other things and uphill and stuff. So, I just wanted to reinforce such a basic, free thing to do.

Dr. Karen Becker:

Free. And Joe, when it comes to the animal world – This is a little question for you, what do you think is the No.1 reason animals end up at animal shelters in the U.S.? Hands down, what's the glaring, overwhelming [reason]? Is it that people can't afford them? Is [it] that people are moving? Is it divorce? Why are animals recycled to shelters?

Dr. Joseph Mercola:

That's a good question. I really don't know. I haven't had a companion pet for decades and it's not something I've researched. But probably some psychological issues that they just-

Dr. Karen Becker:

Yes. Yes, Joe.

Dr. Joseph Mercola:

They're just not cooperative in the home for whatever reason, because they're not getting what their requirements are to optimize them neurologically and psychologically,

Dr. Karen Becker:

You are full of common sense. The No.1 reason dogs are dumped at shelters are behavior problems, and the level of anxiety in dogs, Joe, mirrors the level of anxiety – One 2019 study out of Europe said that in their research group, in their cohort, about 80% of humans had some component of anxiety and 80% of dogs in their study. So dogs' anxiety and stress levels not only mirrors that of the owner in the home, but if dogs are kept in crates all day or not given the opportunity to put their joints through natural range of motion, not given the opportunity to smell and take in their environment, then there is physical stress because the body's losing muscle tone, muscle mass, and they're starting to shrink, which is going to predispose animals to injuries. ACL (anterior cruciate ligament) tears are the No.1 thing that we see in veterinary medicine, partly nutritional and partly lack of exercise.

So, we don't have strong resilient tendons in our animals. We don't have amazing muscle tone in our dogs or cats. They are over-fat and under-muscled, and they are malnourished. Malnourished in the sense that in the pet food industry, they're trying to convince you that we don't need meat protein anymore to be fed to cats or dogs. That they can get by with vegan formulas that have all the added amino acids into the food that dogs and cats require. And they're putting together this blend of the scientific formulation of all the amino acids, all the synthetic vitamins, all the minerals. They extrude it at high temperatures. They spray a palatant on the outside or the animals would never eat it. And then it has a two-year shelf life and it sits in a warehouse until you buy it.

And that's where we're at when it comes to trying to convince pet parents that that's nourishing food, and because it's vegetarian or vegan, it's good for the environment. So, we're in the exact same situation with human food propaganda and pet food propaganda. And it's wildly frustrating, Joe. Dogs and cats don't have a carb requirement. They don't need any starch, none. So, if we're going to put together a species-appropriate diet for dogs and cats-

Dr. Joseph Mercola:

But let me stop there for a moment, for a respectful dialogue. Humans are the same; they don't have to eat carbs, but that doesn't mean it's optimal for longevity and health. Because if you don't eat carbs, your body can make it through gluconeogenesis, but that's usually catalyzed by cortisol, which increases stress, which we know chronic stress is definitely not good for your health. So, I have not studied pet metabolic biology, but I would suspect that maybe that's not ideal. They don't need it to survive, but maybe some are useful to optimize their health.

Dr. Karen Becker:

There again. Brilliant on the common sense, because Joe, just feeding animal meat, bone [and] organ, which means you're trying to replicate their evolutionary diet, you're trying to replicate prey, research has shown that the microbiome crashes, so you are spot on. But here's the difference between trying to teach clients and you're trying to teach your human patients the difference between good carbs and bad carbs. Dogs and cats don't have a starch requirement, but they do have a fiber requirement. They need a lot of low-glycemic roughage. Not a lot, but they need more than you would think. Dogs are out nibbling grasses in the wild. They will self-forage. When we were at Bobi's videotaping him, he spent about three hours a day-

Dr. Joseph Mercola:

For those who forgot, Bobi is the longest-lived dog in the world.

Dr. Karen Becker:

He's a 31-year-old dog who still moves shockingly well.

Dr. Joseph Mercola:

Some people might be thinking you're talking about Bobby Kennedy.

Dr. Karen Becker:

Yeah, no. Bobi, the oldest dog in the world, spent several hours a day foraging greens, and when he is foraging from the garden, he's eating weeds, he's eating herbs, he's self-selecting the plants that he needs. His owners have allowed him to do that his whole life. I do believe that that's one of the reasons that he has had an exceptionally long life, is that his microbiome has been so well diversified. He has not undergone antibiotic abuse. He has not been put on an ultraprocessed diet that has all of these ALEs and AGEs that totally demolish his organ systems.

He's been on some cooked food, but it's freshly cooked food. There's a lot of moisture included with that food, and he's allowed to forage. And I think that that combination of fresher foods, high-glycemic roughage, fresh lean meats that are human-grade in the sense that they would pass inspection, we're not sweeping the slaughterhouse floor or giving abscesses or tumors or pieces and parts or disease meats, which is what goes into pet food now.

None of that is occurring when you are knitting together a biologically appropriate diet with the goal of intentionally creating longevity. You're picking healthy, lean, pastured meats. You're

picking low-glycemic, unrefined fresh fruits and vegetables that have not been contaminated with pesticides. And you're also then making sure that you are following a nutritionally complete recipe that allows you to make sure that you have the micronutrients necessary for health and longevity.

That's one of the reasons I do like you allowed me to create Meal Mix for Dogs, which allows guardians to take veggies and meat and then Meal Mix, and it creates a homemade, nutritionally complete and balanced meal. And I love that because it was really the first product on the market that made homemade feeding accessible, affordable and, most importantly for veterinarians, nutritionally complete. And so, Meal Mix for Dogs has been a real blessing to the pet community because-

Dr. Joseph Mercola:

It's on the website, too. Right?

Dr. Karen Becker:

It is.

Dr. Joseph Mercola:

And you can get there, which is pets.mercola.com, I think. And there's a shop and you can just go there and type it in. But is that – just type in Meal Mix?

Dr. Karen Becker:

Yep, Meal Mix. You can also go to mealmixfordogs.com.

Dr. Joseph Mercola:

Okay. So the other thing that I wanted you to go into on that is we wanted to do that for a long time but, it's a huge but or however, there are regulatory hurdles that are intentionally put in place to inhibit competition to provide a healthy food for pets, so that they [pet owners] literally are steered and they really only have one choice, which is to buy the food that's going to generate the industry profits and create premature demise of your companion pet. So, can you describe those regulatory hurdles that had to be overcome before we were allowed to offer this for sale?

Dr. Karen Becker:

Well, the regulatory hurdles that are in the pet food industry, it wasn't that – AAFCO, the American Association of Feed Control Officials, which is a private organization that sets the parameters for minimum nutrient requirements for dogs and cats in the U.S., they don't have any enforcement capabilities. They're not enforcing anything, but they do set these minimum nutrient requirements.

The frustration about AAFCO is that AAFCO and FDA (Food and Drug Administration) work in partnership to set what these minimum nutritional requirements are, which is one conversation. A different conversation is that the ingredients that go into pet foods have to be approved by

AAFCO. And that if you are a big company and you have a leftover rendered byproduct that can be peanut holes or can be whatever leftover commodity from the human food industry, a byproduct that you want to sell, these byproducts are recycled into pet food and they have annual private meetings to approve ingredients.

And probably the biggest frustration for me, and not only as a pet parent but as a veterinarian, is that you have to buy this expensive AAFCO handbook from AAFCO, you have to join AAFCO, and if you want to attend this private meeting, you have to pay to be a member in order to attend. And then only the big ultraprocessed pet food manufacturers really have a seat at the communication table about what ingredients get approved and why.

So, it's this bureaucratic red tape that's quite frustrating, certainly, to deal with, especially for all of these small, independent, fresh human-grade pet food companies that are springing up. Joe, the fastest growing segment of the pet food industry is this fresher segment because people are starting to wake up and realize, "Oh my gosh, I don't want to be feeding my pet this ultraprocessed, terrible, rendered, not human-grade approved ingredient full of toxic byproducts. I don't want to feed that to my dog or cat anymore."

So, passionate people are starting to produce better foods, and it's giving the ultraprocessed feed-grade big boys who have controlled the market for 50 years, it's giving them a run for their money. The problem is the politics of AAFCO can make it very, very difficult, for instance, to find out if your food is human-grade or not. They have intentionally made the labels on pet food very difficult to be able to interpret correctly. When you see a char-grilled steak on your pet food bag, that is not what's in the product. It's totally false marketing.

You may see a little handful of blueberries or cranberries and you think, "Oh, you know what? I have a dog that has recurrent urinary tract infections, I see cranberries." Or it might say, "With cranberries" on the label and you flip it over, they can have 0.02% cranberry palmer's extract powder, a byproduct of the human cranberry industry in that food, and then label it as, "With cranberries for urinary health." That's false marketing, but you have to know enough to be able to-

Dr. Joseph Mercola:

Well, I wouldn't say false. I would say intentionally-

Dr. Karen Becker:

Deceptive.

Dr. Joseph Mercola:

Deceptive and fraudulent. Yeah.

Dr. Karen Becker:

Very, very, very deceptive. Now, pet parents that have been educated about these topics understand it. However, my heartbreak is, all of the either brand new pet parents who don't know enough to make good decisions, or people that have said, "You know what? I'm relying on my veterinarian. I'm abdicating my animal's health to my vet and my vet's going to make all the decisions for me."

And those two issues are where regrets can come in. I do believe if we have two-legged human kids or if we are caring for animals, those are creatures that can't make good decisions about their health and the health of their environment on their own. They have to have a guardian step in and make wise decisions. How do you know you're making wise decisions? You educate yourself. How do you educate yourself? You do enough reading and enough of you knowing in your heart that you trust the company you're feeding, that you like the raw materials going into your pet food.

You can call customer service, you can ask them, "Hey, where did you source your meat from? Are you human-grade? What country of origin are your veggies from?" You can call and ask those questions, and transparent, human-grade pet food companies are so fired up that you do because they can carry on a conversation that allows them to express where the raw materials for their pet food comes from, who's processing it. They're happy to answer those questions.

If you were to call the top pet food manufacturers at big box stores, or most food sold at, let's say, PetSmart, Petco, all the grocery store foods, you call them and ask them [about] country of origin or sourcing or for third party testing, they won't even return the email. So, I do believe it's up to us to not be bamboozled. We have to know in our hearts we're making the right decision, and that means you have to learn enough to not have regrets.

Dr. Joseph Mercola:

Absolutely. Well, that's really good information that people need to have to be inspired and understand what's going on so they can be proactive. And prevention, as we know, is so much more exponentially effective than treatment. And taking care of pests can be very, very expensive. I have so many friends that wind up with thousands, tens of thousands of dollars of bills to try to rescue their animals, when if all they had done is pay attention to the simple foundational basics, they would've never had these problems. They would've been far healthier and died a natural death, [or] maybe [be] 30 years old like Bobi.

Dr. Karen Becker:

Well, thank you, Joe, first of all, for bringing up costs. You have to remember that the human medical system has insurance. So human medical costs and animal medical costs are exactly identical. When you take an X-ray, when I take an X-ray, we [use] about the exact same x-ray machine. When you do surgery, I use the exact same brand and type of suture that you did.

So, when we're buying supplies to set up a hospital, it's the exact same supplier, exact same cost. The big difference – and so, a [pet] MRI (magnetic resonance imaging) cost is the [same as a human] MRI. The difference is humans have health insurance, and most pet parents don't have health insurance for their animals. So, you are literally paying just raw costs. A lot of people say, "My veterinarian's trying to gouge me." Honestly, veterinarians are really kind, loving people who truly love animals, who have to spend exorbitant amounts of money to run a human hospital for animals without insurance. It just costs a lot.

And in veterinary school, my community medicine, my wellness medicine rotation, was giving vaccines to puppies and kittens. That was the wellness rotation. So, when you ask your professors, "Hey, thanks for teaching me how to treat kidney disease. Thanks for teaching me how to treat heart disease." I know how to do that. What I don't know how to do, and what I didn't learn in veterinary school was how to prevent those diseases from occurring.

And that's the conversation I am trying to get started with every veterinary school around the world right now is, "Thank you so much. I graduated learning two important things. I learned how to do trauma medicine. So, if a dog is hit by a car, I know what to do. I also know how to treat infectious disease. And so, if a dog has parvo viral infection, I know what to do." What I didn't learn was how to prevent degenerative lifestyle diseases from occurring. I didn't learn how to prevent kidney disease, heart disease. I didn't learn how to prevent arthritis from occurring. And all of those things are totally possible and doable, but I didn't learn them in veterinary school. So, here's my plug for partnering with a functional medicine veterinarian, a holistic veterinarian, a proactive wellness veterinarian.

The conversation that you need to begin having with your veterinarian is, "Hey, Dr. Johnson, I love you. My mom went to you. My grandma went to you. Our whole family's been to you for three decades. We love your practice, we love your clinic. I'm interested right now in pivoting from a reactive type of medicine, where I wait for my animals to get sick, and then I come to you devastated and then we make a treatment plan with drugs that treat the symptoms that never address the root cause. That's what we're doing right now. I don't want to do that anymore. I want to begin moving towards preventing disease and degeneration from occurring. And if you don't have the tools and maybe the continuing education to do that, I'm going to start adding." Like in human medicine, we add different health and wellness specialists to our team.

We may have a chiropractor, a nutritionist, a podiatrist, [a] dermatologist, a massage therapist. We add people to our healthcare team to take care of our own human [inaudible 00:53:02], and we can do the exact same thing in veterinary medicine. You may need to have an ER (emergency room) veterinarian for middle of the night emergencies. Then you have your general practitioner, who's beautiful, and you can go there once a year and do internal blood work to make sure vital organs are functioning great. Yes.

When it comes to setting up proactive preventive wellness strategies, your veterinarian may be interested in saying, "Hey, I'm going to learn more. My next continuing education classes, I'm going to do this." Or you may end up going on over to civtedu.org, which is the College of

Integrative Veterinary Therapies. [It] has online classes that pet parents can take, veterinarians can take, but there's also a directory. So, if you would like to do a consultation with a proactive wellness vet to get a proactive wellness strategy or protocol for your dog or cat, that's possible as well. And that's probably the very best thing you can do. If you don't know quite where to go and your vet doesn't either, you can bring someone onto your pet's healthcare team to get the answers you need.

Dr. Joseph Mercola:

Wow, that's an unexpected bonus. I did not know that was a resource, so thank you for sharing that. Perhaps we can put the cherry on the cake, or the icing on the cake might be [a] better metaphor. I don't know what's a more popular pet, if it's cats or dogs? Just to guess, maybe it's cats, I think. I don't know. [inaudible 00:54:22]? Are they equal?

Dr. Karen Becker:

There are more cats in U.S. households than dogs. There are more cats.

Dr. Joseph Mercola:

Okay. All right. So, I believe that kidney disease – the intention of the question is for cats and dogs, can you name the one or two, maybe even three most common chronic degenerative diseases and what we can do easily and simply to be proactive and prevent those diseases?

Dr. Karen Becker:

So, I am right there with you. When it comes to heart disease, we have to be thinking about amino acid deficiency. And not amino acid deficiency from corn and wheat and rice. Amino acid deficiency from not having enough clean, fresh whole meat, which is a dog and cat's evolutionary, god-given diet. There are not enough amino acids to maintain healthy organ structure, including heart and kidney wellbeing.

So one of the things I would encourage all of your listeners or readers that have pets to do is look at the category of food that they're feeding. Let's say right now they're feeding extruded dry food. There's this spectrum from raw food – And just so your listeners or readers know, raw means unadulterated raw meat plus ground up veggies with appropriate sources of vitamins and minerals that's put together to mean a nutritionally complete and balanced diet.

There's also pet food companies that are now using high pressure pasteurization. And so, if you're like, "Ooh, I'm nervous about the bacteria in raw meat," you can actually buy basically pasteurized raw food diets, which means it's bacteria-free. So if the hang-up for raw food diets is bacteria, know that there's a pasteurized option that literally makes it bacteria free.

The other thing I just want to mention is that with a Food Safety Modernization Act that was passed, pet foods are included in that. So, every single bag of fresher food, raw food diets that you purchase in the U.S. have a zero-tolerance policy for potentially pathogenic bacteria. That means they have to have no E. coli, no salmonella. So, the raw foods that you are buying have to demonstrate to be salmonella-free, if that's a concern for you. So commercially available raw

food diets are in the unadulterated, raw, fresh food category. That's the best category of pet foods you could feed as long as they are well-formulated, meaning you can call the company and say, "Hey, I want a complete nutritional analysis to make sure that you're not guessing at a recipe." Good raw food companies are happy to provide that.

Then there's gently cooked foods and freeze-dried foods, which take all of this good organic, fresh, raw meats, and then either freeze-dry them quickly or gently cook them and then freeze them. That would be second best. That's one adulteration step. Then there's baked, or actually dehydrated. It's right there in the middle. And dehydrated pet foods range from really great, if it's just dehydrated raw meat, wonderful, to actually really high carb, starchy, depending on the brand. So dehydrated pet foods are one of the hardest categories to discern because you have to do your research about, did they start with all raw meat-based, or did they start with a bunch of corn, wheat, and rice and peas? So, you need to flip over the label, make some phone calls, send in an email and discern the raw materials that dehydrated pet foods came from. But they're still less heat treated than dry.

So what I want pet parents to do, is to look at where they're at on the spectrum from fresh raw foods to gently cooked, freeze-dried, dehydrated, air-dried, baked and extruded. And then what can they do to start moving pet food categories to fresher, less processed styles of pet foods? That's step number one. If people say, "I can't," then I would say, if you got to continue feeding all extruded, ultraprocessed fast food to your dog or cat, then start thinking about how you can occasionally add in maybe one or two of the 14 meals you feed your pets during the week, could you swap in one or two homemade nutritionally complete meals, which are fresher foods? Could you swap out four meals of a homemade diet? Could you do a commercially available rawer fresh food in the morning and a dry food at night? How could you incrementally and stepwise go from all ultraprocessed calories to fewer and fewer ultraprocessed calories over the course of 14 meals in a week? That would be my first recommendation.

Second, is adding some moisture into the food. Dogs and cats were never meant to eat an entirely dehydrated, desiccated food their whole lives. And for cats, especially Dr. Mercola, that plays into kidney disease. Terrible quality protein, like rendered, not human-approved, USDA-inspected or failed meats that are dehydrated, result in chronic kidney stress for cats. So, get your cats and dogs onto human-grade, USDA-inspected and passed meats that have not been dehydrated or extruded, and that's going to help preserve kidney wellbeing.

And then add in those fresh food toppers that contain all the bioactives and polyphenols, all of the enzymes that have not been processed. That means the tops and bottoms of carrots. That means the tops and bottoms of your snap and peas, feed those to your dogs. Everything that you're cutting off of your fresh fruits and veggies, all those dented blueberries that you're like, "Ooh, they're too soft for me," feed them to your dogs. That's the daily, ongoing source of table food or table scraps that you can share with your animals that provide these potent polyphenols and bioactives that are necessary for the rebuilding and the maintenance to prevent degeneration as animals go through life. So share your fresh foods. The only foods that you will not be sharing

with your dogs and cats are onions, so no chives, leeks, onions, none of those. No chocolate, obviously, and no raisins and grapes.

Dr. Joseph Mercola:

Why no chocolate?

Dr. Karen Becker:

So, chocolate contains theobromine, a byproduct that dogs' and cats' bodies can't break down.

Dr. Joseph Mercola:

Oh.

Dr. Karen Becker:

Yeah, isn't it interesting? Their liver metabolism of theobromine doesn't happen and thiosulfates in the onion family, at high quantities, can cause what's called Heinz body anemia. There again, they lack the enzyme to break down thiosulfate from onion families.

Dr. Joseph Mercola:

Is that true for most pets or just dogs?

Dr. Karen Becker:

Great question. And actually, this is a whole different podcast. Dogs and cats, and actually, I don't know about other species, but other animals it appears can eat some onions with less potential Heinz body anemia than dogs and cats. Cooking onions dramatically reduces the likelihood of any toxicosis. Dogs and humans co-evolved, so I do think historically, evolutionarily, dogs probably ate a lot of cooked onions, but raw onions, and there is no if, ands or buts, and no veterinarian will argue this, raw onions fed in significant enough quantities can create problems for dogs and cats. So, I just across the board, recommend not feeding onions. Yeah.

Dr. Joseph Mercola:

Well, excellent.

Dr. Karen Becker:

But other than that, when you open your fridge, if you've got food that's going bad, I recommend never throwing out any fresh fruit or veggie. Just don't do it. If it starts to go soft or weird, whiz it up, chop it up, throw it in some ice cube trays and pop it out when you want a fresh food topper and feed it to your dog or cat. One of the best ways that you can recycle your human foods, your fresh living, whole foods that you spent good money on. Don't ever throw them out. Recycle them into your dog's bowl.

Dr. Joseph Mercola:

All right. I want to continue to the expanded answers of my initial question, but I want to take a tangent first, since you're a small animal vet. And I don't have any cats or dogs. I have nine

chickens and four white geese now, which is pretty interesting. And I don't feed them commercial – These animals only have one stomach. They don't have multiple hydrogenation chambers where they can saturate fats or foods that contain polyunsaturated fats, such as grains that are loaded with linoleic acid. And almost all organic commercial feed for these pets or these animals are loaded with that.

So as a result, that's why chickens really shouldn't be consumed as meat. I know you're a vegetarian, so that's not an issue for you, but I don't think anyone should be eating chickens because unless you're raising them yourself, they're going to be high in linoleic acid, but even the chicken eggs would be problematic.

So, I prepare the food for them, somewhat similar, and I just wanted to get your feedback on it. So I'm giving them field peas as the primary protein. I soak a pound and a half for them in water for six hours, and then I rinse it for two days. So, it's essentially sprouted field peas. And then I cook it in a pressure cooker. It's called Instant Pot. And I also use some saturated fat, like beef tallow and coconut oil, and then supplement it with nutrients like dehydrated liver powder that we sell for humans, so I give them that. And some other minerals and calcium-

Dr. Karen Becker:

Do you give them bugs?

Dr. Joseph Mercola:

No. Well, I'm on 2 acres and they're free-range all day. So, they just get the bugs. I was giving them mealworms, but then I realized that is not a good idea, even though they love them. The standards for raising mealworms are just atrocious. They're just feeding them terrible food with these crazy fats.

Dr. Karen Becker:

Yes, and I agree with you. I would say black soldier fly larvae. If you're going to buy bugs, buy black soldier fly larvae born, bred and raised in the U.S., not mealworms imported from other countries. They'd have been irradiated. Yeah, don't do that.

Dr. Joseph Mercola:

Okay. That's good to know. That's why I asked. And then I give them barley, too.

Dr. Karen Becker:

Good.

Dr. Joseph Mercola:

As a snack and then-

Dr. Karen Becker:

And fresh fruits?

Dr. Joseph Mercola:

Oh, yeah-

Dr. Karen Becker:

Do you throw all your-

Dr. Joseph Mercola:

Yeah, that's exactly the reason that your comment catalyzed this question is that, yes, I don't have good dogs or cats, so I give all the food that I don't eat, I give it to them.

Dr. Karen Becker:

Yes, there you go. And that-

Dr. Joseph Mercola:

Especially the fruits, they love the fruits.

Dr. Karen Becker:

And Joe, that's what's creating that gut microbiome diversity. That is the number one thing. When we asked Dr. Tim Spector, one of the 100 most cited scientists in the world, he's a microbiologist out of King's College, we asked him, "If you could pick one health and longevity tip?" We asked this to all of the top scientists. Dr. Tim Spector said, "Diversify your dogs' microbiome. Diversify your chickens' microbiome." Feed as many different foods and fiber sources as you can think of to diversify their microbiome."

Because 70% of your chickens' and dogs' and cats' immune systems lie along the GI tract. So, the more resilient and strong their gut is, the more resilient and strong their immune system is. So, you recycling all of your human leftovers, as long as it's minimally processed, which it is, of course, in your diet, I know exactly what you eat, then the best thing you're doing is you're giving them something different every day.

No animal was meant to eat the exact same food every day. That creates a mono gut. That creates a lack of diversification, colonies collapse. You end up with small intestinal bacterial overgrowth because you're just nourishing one species. So, it's the nutritional diversity that you are giving your chicken, along with their ability to self-forage in your 2 acres, that is going to hopefully create exceptional longevity.

Dr. Joseph Mercola:

And healthy food, too. One of the reasons I think it's a great, I guess, survival strategy with the – Who knows what the next crisis is going to be and what type of challenges we're going to do with respect to supply chain. And chicken eggs are really good to have. We had a crisis of chicken eggs not too long ago.

Dr. Karen Becker:

Yeah, yeah, we sure did. We sure did. And listen, if you had a dog, Joe, sharing your chicken eggs, that's the other way that you could radically improve dry food. Just crack an egg on that food. That's a beautiful way to give amino acids to dogs and cats that are probably amino – If they're eating ultraprocessed dry food, they are amino acid deficient. So, an egg is a great topper. So, sharing eggs, if you happen to have chicken, sharing eggs with your dogs or cats is a brilliant strategy as well.

Dr. Joseph Mercola:

Yeah, yeah. And obviously, you can buy the eggs yourself. The problem is that each egg, even if they're organic, free-range and they're fed organic chicken feed, is full of linoleic acid. So, they have about a gram or more each egg, so it adds up over time and you have to be careful. In my diet, the number one source of my linoleic acid is from my chicken eggs, and even I feed them really low linoleic acid. And the commercial eggs are just totally a challenge, I guess.

But anyway, I wanted to continue with the most common diseases. You gave us the antidote for all of them, I guess, with the foods, and thank you for those tips. But maybe, could you name the most common diseases in cats and dogs, and if there are any other tips other than food and exercise that you might recommend?

Dr. Karen Becker:

So, when it comes to degenerative diseases, we're talking across the board, every breed has some breed predispositions. If you have purebred dogs, certain breed predispositions pop up. Both for dogs and cats. When it comes to degenerative diseases, the three that plague dogs are very similar to the three that plague humans: obesity, cancer and Type 2 diabetes or lifestyle-induced diabetes, are very high, as is arthritis.

Dr. Joseph Mercola:

So cancer before heart disease?

Dr. Karen Becker:

Yes, dogs have way more cancer than heart disease and way more cancer than heart disease. Now, heart disease is up there, but heart disease in animals is nutritionally induced, in my opinion. Can there be genetic anomalies and genetic predispositions? Sure. For instance, Dobermans and Cavalier King Charles Spaniels, they have a genetic predisposition for having heart issues, which is why when I see a little Doberman or someone says, "Hey, I just rescued a Cavalier." I'm like, "All right, let's get them on some wholly absorbable fresh meat-based diet. Let's add in some ubiquinol. Let's make sure that that taurine content's there. Let's make sure that we have these animals on carnitine and carnosine."

There are some great things you can do to prevent genetics from expressing themselves. Heart disease is an issue, but obesity, first and foremost, just like humans, we are struggling with both dog and cat obesity at epidemic levels. Cancer is right up there as well, followed by organ degeneration. That includes liver disease, heart disease, kidney disease. But Joe, when it comes

to the top five reasons dogs and cats go to the veterinarian, chronic gut issues, so IBS (irritable bowel syndrome), IBD (inflammatory bowel disease), chronic vomiting, chronic diarrhea, all microbiome-related.

Dr. Joseph Mercola:

Wow.

Dr. Karen Becker:

So gut issues take dogs to the veterinarian as one of the top reasons. Microbiome imbalance from [the] environment, but primarily diet, of course. Then we also have allergies. So, on the immune spectrum, you know this, we have immune failure cancer, and then we have autoimmune disease, which also plagues dogs and cats. Over here on the hyperactive side of things, we have allergic conditions.

And dogs and cats, both, I would venture to use the word epidemic as well. We have an epidemic of food-based allergies because of inappropriate foods that are fed in perpetuity, that are not appropriate for the species. And we have, out of the leaky gut microbiome dysfunction, then we have secondary environmental allergies that plague primarily dogs.

So, between allergies for the chronic veterinary visits and IBD, IBS, irritable bowel [and] chronic GI (gastrointestinal) issues, dogs and cats are at the veterinarian for a lot of symptoms. And our bodies give us symptoms, thankfully, especially for dogs and cats, as an SOS sign. So, if our dogs and cats have any symptoms, if they are shedding excessively, [that's] something to stop to think about. If they have bad breath, something to stop and think about. If they have intermittent constipation and diarrhea, if your cat puked twice a week, that's not okay. These are their bodies saying, "I'm having a problem here."

And then it's up to us to be able to say, "I'm not going to panic. I'm going to identify root causes, and if I don't have enough information to be able to go down the path of my veterinarian, I'm going to partner with a proactive wellness veterinarian who can, and I'm going to start putting into place a system of first diagnostics. Let's find out why my animal has these symptoms, and then let's start with nontoxic protocols to heal and restore the underlying disease or damaged tissue to get my animal's body back on track." That's the logical progression of what pet parents can do to stop treating the symptoms of potential degenerative disease and start getting to the root causes of symptoms that are there months to years before the body breaks.

Dr. Joseph Mercola:

Well, that is just beautiful. Thank you for sharing that. It's just exactly what I was looking for and it just amazes me how many parallels there are with pets and humans. And my guess is that the primary contributor for most of those issues are the introduction of seed oils, which happened in humans in about the 1870s, and really started to grow quite dramatically at the turn of the 20th century and early 1900s.

So, I'm assuming, I have not done a deep dive on this, but you would know that probably one of the biggest and most pernicious components of the ultrapasteurized food that these pets are eating are seed oils, because it's a totally cheap form of calories, widely accepted and adopted by the authorities as being useful and essential, when it isn't.

Dr. Karen Becker:

Hey, I'm just going to have you guess what the omega-6 to omega-3 ratio [is]?

Dr. Joseph Mercola:

Probably 20 to 30-to-1.

Dr. Karen Becker:

30-to-1.

Dr. Joseph Mercola:

I was not too far off. 20 was giving them a good – Do you know what [it] should be?

Dr. Karen Becker:

For animals, it should be 2-to-1.

Dr. Joseph Mercola:

Yeah, 2 to 4. Definitely below 5.

Dr. Karen Becker:

Yeah. And I'll take 3-to-1. I'll even take 5-to-1 for commercial fresh food diets.

Dr. Joseph Mercola:

I was actually confusing your question of the ratio with the percentage of fat. I was thinking the percentage of omega-6 might be 30% of the total calories.

Dr. Karen Becker:

I can't tell you about percent of total calories, but the ratio. There's no DHA (docosahexaenoic acid) and EPA (eicosapentaenoic acid) in pet food. There's very, very little, because it oxidizes too quickly. So instead, they put LA (linoleic acid) and ALA (alpha-linolenic acid) in that also oxidizes. We're feeding animals rancid omega-6 fats. That's really what we're feeding. And that creates a whole cascade of chronic inflammation that animals have to walk around with the majority of their lives.

That chronic, ongoing simmering inflammation is the root of the beginning of their bodies not only being uncomfortable and creating symptoms, but it's the root of the beginning of cellular degeneration, which leads to structural degeneration, which leads to organ degeneration, which over time, eventually those organ enzymes pop on blood work and veterinarians say, "I wonder why you have a little liver enzyme elevation? I wonder why the SDMA (symmetric

dimethylarginine) or the BUN (blood urea nitrogen) is elevated? I wonder why these low simmering inflammatory conditions are present throughout the body?" Well, certainly we have to think about food.

And the big difference, Dr. Mercola, between the patients you see, and the patients I see, really, is my patients can't talk. So, we have to be extra vigilant in doing all we can as empowered, proactive guardians for making wise decisions. Your patients can say, "I feel like crap, I'm fatigued, I get migraines, my head is fuzzy, I can't think straight." Our animals can't tell us how they feel. And many dogs and cats walk around feeling horrible in their bodies, but they're blessed, beautiful personalities.

You have to be really keyed in because that's how magnificent animals are. They're so happy to see you. They'll three-legged lame carry their leg that isn't feeling well because they're just so happy to see you. They can be a ball of itching, bloody allergic hot mess, and they're still fired up to see you. So, they're not going to complain about their ongoing degenerative, physical, miserable state because animals don't do that. And because they don't complain, it's oftentimes easy to overlook those initial stages of degenerative disease. So being a really astute pet parent is something that we need to practice as well.

Dr. Joseph Mercola:

All right. Well, this is absolutely great advice. Much better than I ever anticipated it would be, but not surprised at all. So thank you for sharing all these incredible resources. But you've also written a book, which you alluded to earlier. And I guess it was a bestseller too, so congratulations on that. I should have had you on for the book [but] I wasn't in the loop. Tell us the name of the book and where they can get it.

Dr. Karen Becker:

So, I am very proud of "The Forever Dog." It did hit No.1 on New York Times Best Seller. It was the first dog health book.

Dr. Joseph Mercola:

Wait, wait, wait.

Dr. Karen Becker:

To ever hit No. 1.

Dr. Joseph Mercola:

Didn't they know that you were associated with Mercola.com? It can't be No.1 if you had any association with me. It's forbidden by law.

Dr. Karen Becker:

Do you know what's wonderful, is that as a consultant to beautiful companies like yours – here's the beautiful part about being an independent consultant, I get to say and do whatever my heart

tells me to say and do. And as a consultant to you and other companies that are amazing, as an independent consultant, I'm a free agent veterinarian. And that, I think, has allowed me to be able to say and do things that potentially, well, actually, that you would not be able to say and do. You are not a free agent, and I am. So, it did hit No.1, and it's now published in 18 languages.

Dr. Joseph Mercola:

Wow. That's fantastic.

Dr. Karen Becker:

It's called "The Forever Dog" at foreverdog.com. Yeah.

Dr. Joseph Mercola:

All right. Well, that's a good place to get it. So, congratulations on that, and all you do and continue to do. And [for] helping enlighten people with pretty simple strategies. Maybe not easy to implement, but certainly simple and relatively inexpensive, and certainly, absolutely, inexpensive in the long run. Because if you fail to do these things, you're going to pay the price in grief because your pet died prematurely or in veterinary bills. So, I'm a big believer in prevention, so I really thank you for helping us walk through that. And really, it's just extraordinary to find how many similarities there are between human and animal health and nutrition.

Dr. Karen Becker:

Yeah, it is. Our animals are a product of our environment, and if we have a clean and healthy environment, our animals reap the benefits of that. If we eat clean and healthy foods, oftentimes as pet parents, we extend that to include our four-legged family members.

And I think, if people listen to this interview, Dr. Mercola, and they feel overwhelmed and they're like, "Oh my gosh, I am not doing these things. I'm doing these things for my human family. I'm not doing them for my pets." Don't panic, take a deep breath, and you can make one minor change, one bite of food at a time. You can make minor but significant changes in your dog and cat's wellbeing by recognizing that you don't have to change everything this red-hot minute, but you can begin working towards improving the health and the immediate environment that your dog's and cat's DNA is in, to over time ultimately shift the trajectory from a life of probable degeneration to a life of prevention, and making the body resilient and strong through your intentional actions. So, the key is to not be overwhelmed, the key is to be empowered. Thank you. Thank you for hosting me.

Dr. Joseph Mercola:

You're welcome. Well, thanks for everything you're doing. Glad to connect again, and you keep up doing the good work. And you'll have to send me the link to get those fantastic photographs.

Dr. Karen Becker:

I will.

Dr. Joseph Mercola:

We'll put it in the article too, in case [inaudible 01:19:32].

Dr. Karen Becker:

Yeah, sounds good. Okay, my friend. Great to see you.

Dr. Joseph Mercola:

All right. Take care.

Dr. Karen Becker:

Take care. Bye.