Canine Nutrition 1

Good morning. Good evening. Good afternoon, wherever you may be. My name is **Kate Klasen.**

Today I'm going to be bringing to you what's in a pet food, I think as a pet professional. And it's really helpful to understand what we're buying, especially nowadays with so many different choices out there. So, I figured we would start this series with just talking about what's in a food. Then Dr. Jody and I are going to expand on that throughout the series.

A little bit about me, I'm a professional, I own a grooming salon in Arizona. I've been a professional now for about seven years. Prior to that, I've always been a pet parent, first and foremost, and I've had some of the greatest teachers, my own dogs to teach me along the way. I also own a frontline coalition where I teach emergency, pet first aid, CPR, and also human CPR, first aid CPR, as well. I am getting out there and teaching as many people as I can. And pardon me here for a minute. I'm trying to move and get this out of the way.

So, this is a true story. I thought somebody may have taken my picture at one point and put it out there on the internet, because this is what I look like when I try to keep my opinions to myself and the topics which is alright, maybe it's not that bad. I've learned over the years when I first started digging into this topic, I definitely that is a true story right there. That's what I look like. And I was going in and I was like, you guys, he stopped buying that dog food, stop doing this, stop doing that. And people just shut me down. They thought I was crazy.

I learned over the years to pull back a little bit. Now I just go out there, and if people have questions, I'll answer the questions. Or two little classes like this. So, is food important? Absolutely. It's important. I thought that this movie was an excellent documentary. Excellent. And if you haven't seen it, it's older. If you haven't seen it, I would highly recommend it. How does this pertain to what we're going to be learning today?

This movie was about just a very basic and broad overview. What this movie was about this guy here, he says, I'm going to do this experiment where I'm going to do absolutely nothing but eat processed food, fast food for every single meal of every single day for 30 days. And the reason that's called **Supersize Me** is because the fact that if he went through a drive thru and they say, did you want supersize it? That's an automatic, yes.

So, this was looked after with the doctor. He saw a doctor prior to God measurements, and as far as blood measurements and stuff like that. And he was going every couple of weeks to check in with his doctor to make sure everything was okay. And what that food did to his body in less than 30 days is absolutely amazing. That's where you're going to have to watch the movie to find that out. And I thought, that is such a great documentary because not only do we eat processed food ourselves, but we feed a lot of processed food to animals. And that reminded me of Dr. Pottenger study.

Dr. Pottenger was a regular doctor. He was looking into tuberculosis and looking at adrenal gland deficiencies. And they were using a lot of cats in their experiment. And I know I put the link on there for the YouTube but if you go to YouTube, and you type in the pot under study, you'll be able to watch the whole video and it's a very old video, but it explains everything in his experiment.

So, a little bit of a broad view of what this experiment was. He had perfectly healthy cats, and they were going out there and because they had some in the cats, they had a local butcher that was given them like cooked meat scraps, raw mill cod liver oil, and they were feeding those to the cats. And what he started noticing was there was a very high mortality rate with that. And then they were, he thought, *I'm going to look into this*.

When he expanded his study with it, he got so many cats that were given to him for this study, and what they started doing was getting extras from the packing plant. So, they were getting raw meat. And they were getting raw milk, raw organs, raw bones. And then he noticed that the mortality rates started dropping, and that these cats were in better health. That started his curiosity, as far as the effects of food and what the effects of food on cats are doing cooked versus raw.

It started a 10-year study. It was from 1932 to 1942. And what he found was really interesting. He found that the cooking the meat was insufficient. And that experiment showed different, not only for the cats that were eating that, but for generations of cat. So, the first generation of cats see there is coordination, deterioration, dental deterioration. They were nervous, that impaired balance, lack of energy, those cats then reproduced and super still fed that the cook diet, the process diet, and they had bone development issues.

They had skeletal changes, bones that became spongy instead of root and, and rubbery. They had nasal & ocular allergies, and they were more exhausted. And he found that generation after generation deteriorated and deteriorated. So, he thought, *well, if this deteriorated in three generations, then how many generations would it take to bring them back to health status*.

He found that it took about four generations to bring them back to a healthy status. It's a very interesting study, which why this study reminded me of that movie **Supersize Me**, and how affect food affects us. And not only affects us, but can affect generations down the road. I think we need to start breaking down certain perceptions instead of looking at things as well, this is broken.

We just fix this and that is broken. We just fix that and looking at is like a car engine, that we actually look at a more holistic approach, that we actually look at things as a whole. And a lot of times, I'll see the more mechanical way of dealing with things. As a groomer, I see a lot of skinning code issues. We see a lot of times its diagnosis, allergies.

So, we see them on medications, and we see them on special shampoos, and we're dealing with it's just one symptom at a time, when ultimately, even though we're covering up one symptom, we're not getting to the base of that problem. We're not looking at them as a full energetic whole being and looking at the body as a community of symptoms, or systems working together as one.

Let's start out here as far as who is AAFCO. Because I think a lot of times, we hear AAFCO, we hear that term. And we say well, it's called approve and AAFCO is a huge part of it, but who exactly is AAFCO and I am one of those crazy people that spent the money and got my AAFCO book. This is about over $200 and this is his definitions of AAFCO for pet food. So, who is this AAFCO and what do they do? So AAFCO is a private nonprofit corporation. It’s people from the industry that and put together guidelines of what should go into pet food.

They are not a governing body, they are a recommendation body and they recommend their findings to the FDA and at that point, the FDA is the one that has the final word and is the governing body. They are the process for defining ingredients used in animal feed. And this consists of people from state agencies, federal agencies, industry, personnel, and they are the ones that make the recommendations on what should go into pet food.

So, let's look at what goes in a bag. So, what is AAFCO? Say can go into a bag, while feed fear is actually considered freedom of speech. Alright, so what does that mean? Means if key words are labeled on a bag, and it says dinner formula or nugget, it means that it only has to contain 25%, meaning that bag, the word with means it only has to contain 3% net that if it's made with ocean fish, it only has to be 3%.

A picture of a nice meaty steak can be labeled on the bag. And if that word flavor is on the bag, it doesn't have to contain any meat. It can say beef flavored, and it doesn't have to contain any meat at all. But they can picture a nice big mistake on their belly to make you think that there's more meat in there than there actually is. All ingredients don't have to be listed on the bag.

If the ingredients weren't manufactured in the processing plant, the bad could be labeled made in the USA and still have ingredients included, which came from China, most of the time are Co-Packer. So, let's look at the recall of 2007. And the melamine issue where a lot of that came as a mixture from a Co-Packer was added into the food. And it didn't have to list that on the bag. So, it was a lot harder for them to trace it.

I think this is really important because I know a lot of people are visual so they just go and look what's on the bag. And it looks like it's a healthy food, when really ultimately, they don't realize that because of certain verbiage is on that food, that it's not as healthy as what it appears. The pictures on the bag and the price of the bag doesn't necessarily mean that you're getting quality product. So, is there a fee grade versus food grade? Well, yes, there is. And this I got straight from the definition from the AAFCO book.

So, feed grade is material that has been determined to be safe, functional, suitable and intended use and animal food. It's labeled and handled appropriately and confirms to the FDA otherwise expressly permitted to the appropriate state or federal agencies suitable for animal food. This is going to be different than food grade, human food grade. Every ingredient and resulting product are stored handled process to transport it into a manner that is consistent and compliant with regulations for Current Good Manufacturing Practices for human edible food.

All ingredients and manufacturing processes meet human food law, human food is much more rigorous, rigorously regulated, say that three times really fast. Is there a difference? Yes. And this is why when I talk to my clients, I say, *well, is it feed graded?* Or is it food grade because if it's feed graded, we're going to learn here what exactly that means versus food grade, where what we see is pretty much what we get. So, if we see that steak, we see those carrots, we see those peas, and we know that it's food grade, then we know that it went through the same requirements that human food goes through. All right, feed grade is not the same.

Let's look at the back of that bag. And we're going to see the guaranteed analysis. And this is where this verse food comes into play here. I have a picture of a nice big like Brontosaurus rack of ribs there. And I think the reason I put that there is because I think a lot of people think that's how it is measured. So, we have meat, and we put it on the scale. That's how we get the protein percentage on a guaranteed analysis. And that's not how it works at all.

Actually, how it works is through the ketone method which is an analytical chemistry method that determines the amount of nitrogen contained in the organic substance plus the nitrogen that's contained in inorganic compounds, ammonia and ammonium. It measures all nitrogen in that sample, it's not protein specific, it does not reflect a protein digestibility and it does not provide estimates of essential amino acid balance and availability. What basically happens is this chemical process measures the nitrogen in the mixture, and that is then what they put on as a crude protein percentage measurement.

We're not taking just a big thing a steak and putting it on a scale and getting the percentage of its protein that way. This is how things like the recall 2007 happened because of the fact that mixture produced nitrogen, and therefore came across as a protein versus what it actually was, which was a melamine product, which comes from wheat that measured out nitrogen, and therefore, that's what the animals got sick on.

I just wanted to picture what the method looks like and how it is more of a chemical process. Those of you that like the science of things, let's look at carbohydrates. Notice there's no category for carbohydrate in a bag. So how much sugar is actually in that food? And how do we figure out a carbohydrate percentage? So, we add up the percentage of moisture, the fat percentage of protein, and the percentage of fiber. And after we add all those numbers together, we subtract that from 100. And that results in the percentage of carbohydrates in that bag.

So, if you are curious, I would say go grab your bag of pet food. And on that back, look at your guaranteed analysis, look at the percentage of moisture, that protein and fiber, take all those numbers, add those up together and subtract from 100. And that's going to be your carbohydrate base. For an example, let's look at here, we're going to take 29 + 14. I'm going to redo this while I have you here to make sure my math is right. So, 29 + 14 + 5 + 12, that equals 60; I take 100 minus 60. And that's going to be 40%. So, this food is 40% carbohydrate base.

Now if we apply carbohydrates the same way to animals, as we do with us, we know that carbohydrates break down into simple sugars. And if that's not used up right away that gets stored as fat. So, 40% of a food at as a carbohydrate base. That's a pretty sugary food. So, let's look at the ingredients. Ingredients are listed in order of weight. The first five holds the most weight and are the major portion of what is in that food.

So, let's say I have some labels that are going to be coming up here. But the first five are the most weight and that is weighed before the cooking process. If we have something that says chicken meal, it is the first, then the next one is meat meal. After that, that is prior to the moisture taking out of it. That is going to bring down on the scale after the cooking process.

As we know, as we're showing here where it falls on the ingredient list because of the fact that it might not actually be the first ingredient, it might in the end be the third ingredient. Then we'd have ingredients splicing that gets played and tricked on, so what does that mean? The first five ingredients we know are the heaviest amount in that food. That means if I have corn as the first ingredient, then let's say I have soy is the second ingredient. Corn Grits is the third ingredient and I have corn holes as the fourth ingredient, then I have the fifth ingredient is like chicken flavoring.

Excuse me. So really, I can sit there and I can look at that and basically what they did was took a piece of corn and split it down into its different parts to make it look like it's not the bulk of that food. But if I know what I'm reading then I know the bulk of that food is actually corn. So that's the trick of placing ingredients that are listed which can be from rendering is animal fat, meat and bone meal, meet meal and comes to meat meal.

Read your product except exclusive and any added contents. So, what exactly is rendering, it converts dead animals and animal parts that otherwise would require disposal into a variety of materials including edible and inedible tallow, lard and proteins such as meat, bone meal, the materials are sold, the manufacturers have a wide range of industrial and consumer goods such as livestock feed and pet food, soaps, pharmaceuticals, lubricants, plastics, personal care products, and even krans.

Let's take a look into rendering a little bit, so renter's annually convert 47 billion pounds or more of raw materials into approximately 18 billion pounds of products. Sources for these materials include meat slaughtering, and processing plants, animals for farms, that's marketing barns, animal shelters, facilities, and fats, grease and other food raised from restaurants and stores. Just going to let that sit there for a minute so you could read through that one more time.

So, ingredients are in rendered mixes, this is where we have the four Ds. So, we have dead, diseased, drugged and down you see animals. These animals are addressed or rejected for human use, but are allowed in animal use. So, I include these slides not because I wanted to gross people out but because of the fact that I wanted to show you what rendered meat processing plants actually look like. And this was just taken from a Google search. I typed in rendering plants and these are the pictures that come up.

You know, I can go a little bit more in depth with this. But that does tend to gross people out. I just want to make you guys aware of it, not gross you out. So, this is how meat is allowed to be stored. It can be stored outside. When it's being transported, it doesn't have to be covered. It doesn't have to be refrigerated. It can allow roadkill, it can allow downed animals that we don't know why they passed away, it can have diseased animals that have passed away in there, it can basically have just about anything in there.

There are some testimonials from that I've worked in render plants that basically say the stuff that comes from grocery stores doesn't even get pulled out of the plastic wrap and the whole package goes right into the rendering mixture. Rendered means that we have this meat, as we saw in the previous picture. So, once it goes into the processing plant, it has to be cooked thoroughly to kill all the bacteria.

Basically, a mix cooked to the point that there's really nothing nutritious left it in, it destroys the bacteria but it destroys nutrients as well. What they have to do is ten they get a synthetic mixture that gets added into that food to give it vitamins & nutrients and give it some sort of nutrition back. But that's the stuff that doesn't have to be on label so we don't know the source necessarily of where that Co-Packer got its supplies, but that's what's added into the food to give it some nutrition.

If listed as a specific protein, then it has to be that protein. Let's say it’s chicken meal, that means that it has to be chicken. You're not going to see chicken meal and have it been beef meal, it's going to be that specific animal if that was specified on the label. The thing with meal is, we don't know what part it is. So, we can have chicken meal. We know that it came from chickens, but it could be any part of the chicken.

That could be the others, it could be the weeks it could be in the feed. We don't know the quality of that chicken meal. Let's take a look at some ingredients labels here. This is a common food that most animals are placed on who display skin issues. So, as a prep professional, one of the things that I see as a groomer, I see a lot of skinning code issues. And typically, one of the things that I will ask is, *if you don't mind me asking what do you feed in?* And it usually has this Cognitive Dissonance that goes along with that, because people don't correlate what the dog is eating with the fact that it's gotten skin code issues.

And I've never really understood that because I remember when I was a kid, growing up and going through puberty, and your face would start to break out. And even still, even though I'm not in puberty anymore, and I'm becoming an old lady, if I go and I start eating junk food and start eating pizza or anything that my body is not necessarily used to, I still break out from that. And I know that when I start breaking out that it was because I had that greasy food.

Same thing, your kid growing up, you're told to stay away from the chocolate, stay away from the greasy foods, it's going to make your face break out. So, we know that what we eat affects us and it comes out on the skin. But for some reason, we don't correlate that with our animals as well. Here's one that dog goes in has a lot of skin issues. So, they're put on this diet, this specific diet. And when we look at what this specific diet is, its corn starch is the number one ingredient hydrolyzed, chicken liver, powdered cellulose, soybean oil, calcium carbonate by calcium phosphate.

And from that point, it's all nothing but synthetic vitamins & minerals, because there's absolutely nothing in this food that's nutritious. So, we put them on this and what you might start to see a temporary fix to it, because their body's not really processing anything, there's nothing to really process. It doesn't have to break anything down; it just goes through it. So might see a temporary fix, and then it's just going to flare up again because we're not getting to the root cause of that problem.

Another thing, I'm going to come back to this one another thing that I want to point out too when it comes to ingredient labels. We have our first five which we know is the bulk of that food. Now, let's say we go down and let's say this is a food that says they have a whole bunch of fruits and vegetables. I'll see this like even including blueberries, for blueberries is going to be a weed towards the end of that label. The further down it goes, the less of it is enough food.

We have our first five and then anything after that, it really depends on where it's placed on that label. So, if I have blueberries, and it's all the way down at the end, that can literally mean there's one blueberry in that product, they can list it as blueberries and because it's freedom of speech, they can sit there and listen and say, oh no, including antioxidants with blueberries, and yet be at the very bottom of the list so like getting any benefit from that blueberry at all.

So certain things to take a look at, other things that we need to take a look at is some byproducts. You know, secondary products produced in addition to the principal product can include any part of any animal slaughtered animals not fit for human consumption. This one, you know what, I see both sides of the coin on this one, I used to make my own dog food back when I was in Illinois and had access to a farmer, I was able to get all the organs, mix all that stuff up and make my own pet food product.

It's a lot of work. But really technically what I was adding into that are byproducts because I was adding in kidney, I was adding in heart and I was adding in other parts of that animal versus just the muscle meat. So that's considered a byproduct. I don't think all byproducts are bad. I think the quality of that byproduct is what we need to start asking. So, it's not that you know, including heart as a bad thing. *It's what is the quality of that?* *What is the quality of the byproducts put in there?* Are we just putting in chicken feathers? Or we just put it in chicken feet? Are we putting in byproduct that actually has nutritional sources to it?

Another thing that I like to bring to my clients when we go over food is what the preservatives are because of the fact that we can have dogs that may be being classified as for example allergies when ultimately it could be the fact that they're responding to the preservative that could be in the food. One of the preservatives that is used animal feed is *Ethoxyquin*, which is an art to prevent artificial preservative banned from human consumption and it's considered a pesticide by the Department of Agriculture.

Unfortunately, Ethoxyquin is used commonly when it comes to fish-based products. It was initially registered as a pesticide in 1965. The primary target organs affected by Ethoxyquin and experimental animals are the liver and the kidneys. I want you guys to think about that because of what kind of diseases we see very commonly nowadays. I see my clients a lot of kidney disease. I know I've seen liver disease or liver malfunctions. So, I always ask, could that be a preservative?

Intoxication is actually when is most often added by the ingredient supplier not by the manufacturer which means it does not have to be labeled on the bag. The most common ingredient that is preserved with Ethoxyquin is fish meal. Over the years industry representatives have shared with me that other meal ingredients such as chicken meal and beef meal, and rendered fat ingredients.

Animal fat or chicken fat can be preserved with a toxic when to again Ethoxyquin is added by the ingredient supplier and is not required to be listed on the pet food label. Pet owner should ask the manufacturers in writing if the facts Ethoxyquin is added to any ingredient by the ingredient supplier. That pursues it's in truth about pet foods. I'm going to give a shout out *Susan Theakston* because I just absolutely love her. It was Susan Theakston’s book that I found when I started researching this 14 years ago now.

And it was one of the few things that were out there at that time about pet food nutrition. So, I've learned so much through Susan Theakston’s work. So, I love giving her a shoutout because I think she deserves every part of that shoutout. So, *Susan Theakston* is very passionate when it comes to toxic because she did lose one or her dogs to Ethoxyquin toxication.

Unfortunately, it's according to some reports not supposed to be used as a preservative anymore, and yet we're still finding it. It is something to be aware of DHA and BHT are also some preservatives that are used as well. This is artificial and said It's listed as a chemical hazard by OSHA linked to causing cancer in humans. Now, when I was doing some research into this, one of the things that I found was the fact that they couldn't sit there and say that certain amount is what started causing cancer in humans.

Hey put an advisory on there saying just be aware of your DHA BHT intake. And, try not to ingest it. Very minimal allowed at very minimal levels, let's say same time, this is still used as a preservative in dog food and dogs can't sit and look at the labels and measure out how much DHA and BHT is in there. Nor do a lot of people even realize that this preservative is in there. And so therefore these dogs are eating and cats are eating these meals every single day meal for years.

Pay attention to some of the preservatives. Again, it doesn't all have to be listed on there, but sometimes it is listed on there. I will say when I started doing some research into this many years ago, I would write to the manufacturers and specific questions. I highly recommend you guys to do the same, because that was the eye opener for me as far as the answers that you would get, because a lot of times they don't answer the question that you asked they will go around that. So do it.

I highly recommend it as soon as DHA and BHT is widely used to prevent oxidation in fluids meaning fuel and oil and other materials for free radicals must be controlled. DHA is an antioxidant consisting of a mixture or two isometric organic compounds. It is a waxy solid used as a food additive with the E number. So, a vitamin E antioxidant. The primary use for DHA is an antioxidant and preservative in food, food packaging, animal feed, cosmetics, rubber and petroleum products.

This is where you're going to have the argument on the other side of the toking. Basically, saying that it's an antioxidant, it's not that bad for you. And yet at same time, you're still finding studies that it could cause cancer in humans. So, if it can cause cancer in humans, then I think it's safe to say that it can cause cancer in animals as well. Toxins defined by the FDA aflatoxins are toxins produced by the mold, various flavors that can grow on pet food ingredients such as corn, peanuts and other grains.

At high levels, antioxidants can cause illness, aflatoxin toxicosis these are some words, liver damage and death impact the toxins can present even if there's no visible mold on the pet food. Now, this came straight from the FDA website and the reason that I put this on there is because it wasn't that long ago. I think it was just last year that we had an athlete and we do find a lot of aflatoxins because of the fact that a good portion of foods that are on the market are a corn base.

This is something to be aware of because we are starting to see pets that are priced with toxicosis comes to the aflatoxins. Pets that eat food containing unsafe levels of aflatoxins can develop aflatoxin poisoning. Pets are highly susceptible to aflatoxin poisoning because unlike people, and I highlighted this because I think this is really important to pay attention to. Unlike people who eat a very diet, pets generally eat the same food continuously over extended periods of time.

If a pet food contains aflatoxins, the toxins could accumulate in the pet system as they continue to eat the same food. Aflatoxin poisoning can also occur if the pet eats moldy corn grains, peanuts and other aflatoxin contaminated food. This was straight from the FDA website. And the reason that I highlighted pets generally eat the same food continuously over periods of time is because we have to think of the totality of everything when it comes to what's in pet food.

It's not just aflatoxin poisoning that we need to worry about but that same statement can apply for the toxic when that same statement can apply for the DHA and BHT. That same statement can apply to whatever else maybe in the Co-Packer mixture. When we see skin and coat issues, that's one of the first things that I'll always ask as well*, if you don't mind me asking, where do you fit in?* Because we have to look at the whole picture. And if this is coming straight from the FDA website, then there's a realization there that yes, this is because it overwhelms the body.

So again, Susan fix in truth about dog food. Aflatoxins can be present in dog and cat food as well in 1998, 2005, 2011, 2013. And now I think it was 2021 aflatoxins contaminated the dog and cat food, resulting in illness, dog mortalities and extensive recalls of affected dog and cat food. This is not a new problem and it's not a problem that's going away, which is really unfortunate. But it's not going away so we need to pay attention to this type of stuff.

A lot of times, I'll hear people say to me, *well, they don't get people food, I won't feed them people food.* And that one just kind of irks me a little bit because I have to ask*, well, what exactly is people food?* Because of the fact that we all come from the same sources. When we look at what dogs used to eat before 100 years ago, because processed dog food is only been on the market for about 100 years.

What did dogs and cats and other animals survive on prior to that? Well, they survived on what we now consider people food. We have to look at what exactly are we feeding them and it's not necessarily a bad idea to feed them. People food, if we're talking the right foods if we're talking fresh meats or for tacky fresh vegetables if we're talking fresh fruits, and yes, there's definitely going to be certain fruits like grapes and onions and certain foods to be aware of as far as no it's not necessarily good for them.

There's more people food that's good for them not. When we say here, we feed our pets we have to ask Are we giving them a diet for them to just survive on? Are we giving them a diet to actually thrive on? And how does this affect the quality and condition of their life? So, I like including this chart, this chart is from 2019. And yes, there have been some changes to this chart since then, because companies have bought out other companies as well.

There's not a dated one that I have found yet. But this is just to show you that even though we have tons and tons of tons of pet foods that are on the market, that there's ultimately just a little bit over a handful of companies that own them. When we look at, let's say, diamond pet foods, and I go in, and I'm buying something that's a little bit higher on the price spectrum, let's say tasteless, so to speak. Now, I go into Costco, and I'm buying Kirkland Signature, not realizing that it's all from the same manufacturer.

So, do you think that these manufacturers have like this bag for this formula? And this bag for that formula? Well, to answer that question, I pay attention to the recalls because when we see these recalls. We see them across the board in many different formulas because of the fact that they use the same Co-Packers, but it's the same Co-Packer ingredients that are going into the different formulas.

So, this is where I like to educate my clients as well, as far as I always hear, I'm not sure what I'm feeding, I just know that it's really expensive. But just because it's expensive, doesn't mean you're getting a quality product. Hopefully you guys are asking yourselves a lot more questions, because now we have a little bit more of awareness.

And I like to joke around and say, are you feeling like Fred and Wilma right now? Are we a little bit confused? What am I feeding my animal? Are we maybe, feeling like, as we're looking at our pet food bags, and looking at the labels and figuring out that this is a current high carbohydrate-based diet? If we look at the ingredients, labels have a lot of corn in it and then realize that our animal is on allergy medicines and shampoos, and you're spending tons of money on topicals as well when ultimately it may just be the quality of the product.

And ultimately, it could just be a toxicity issue because this is building up in the system over and over and over again every single meal over time. This is where now anglers stem back to the movie Supersize Me; you know, we saw the effects in that movie and what it does for our own buys. Now let's take a look at Pottinger study.

Now let's take a look at what is actually in the bags. And let's take a look at how this is affecting our animals down the road and when we see something on topical is for skin and coat issues, what does that actually telling you about the underlying issue that's going on inside? So, there's a lot to look at. We're going to continue on this series.

Dr. Jody is going to go into in like where your pet food falls on the ladder. Is it a low tier type pet food or is it a high tier type pet food? And we're going to go into breaking down some of the ingredients a little bit more, and hopefully makes this very educational series for you so you guys can really understand what exactly you're purchasing.

Thank you for listening. I hope this to actually learn and treat and entreat you to continue on further. Thank you