

## **The Truth About Raw Foods For Our Dogs and Cats**

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This paper was inspired by the vast amount of misinformation that is given to professionals responsible for animal care, by professionals in the pet food industry, friends and family, and the "guy down at the off leash park." It was also inspired by a deep love of animals.

The information in this paper provides what detractors of a raw diet have been demanding - proof. In this article you will find independent studies, and studies done by pet food manufacturers themselves, demonstrating that diets including raw ingredients are superior. You will also find direct quotes from the veterinary bodies in both Canada and the U.S., and the organizations that are tasked with policing the pet food industry. The body of proof in this article demonstrates two things. First, it shows that the food many people take for granted as complete and balanced is, in fact, potentially dangerous to your pets health. Second, it shows conclusively that a raw diet is a healthy option for your dog or cat.

### **Be Careful Who You Ask For Nutritional Advice**

The sales and marketing efforts of various pet food companies are sophisticated. So sophisticated, in fact, that they have manipulated our most trusted partners in pet care - our veterinarians.

When looking for answers regarding pets' health, most people turn to their veterinarian for advice. While vets are a critical partner in the overall well-being of our pets, they are just that - a partner. Why does this matter? Many vets make recommendations on nutritional matters for our pets with little grounding or education in the subject. And what education does exist is biased as it is largely funded and conducted by pet food manufacturers.

Hill's, for example, funds professorships and scholarships at each of the 27 veterinary schools in the U.S. It writes textbooks and provides them free to students, and helps fund students' educations by providing what is essentially free pet food while they are in school. Hill's sends practicing vets on seminars on wringing more profit from clinics and offer its own nutrition certification program.[TJ

But what's worse is that much of the teaching itself is done by representatives of manufacturers. Dr. Corinne Chapman, a graduate of the Western College of Veterinary Medicine in Saskatoon explains. "My clearest recollection of Small Animal Nutrition was evening seminars put on by Iams, Hills & Science Diet, Medi-Cal, Waltham, and Purina. They fed us pop and pizza, then bored us to death with chemical analyses... Sadly, a lack of knowledge concerning nutrition has become the basis for recommending processed pet food. I have yet to go to a veterinary seminar on nutrition that wasn't hosted by a multimillion dollar pet food company." Dr. Ian Buffett, another veterinarian, spoke about the problem on the November 7, 2001 episode of Marketplace on CBC: "The clinical nutrition that we got was provided by actually a representative of one of the pet food companies, so there certainly was a bias there, and I don't remember any mention of homemade diets." According to the host of that same CBC show, the

veterinary colleges they contacted said that there's often no one qualified on staff, so they ask nutritionists from the pet food companies to teach. Since the companies aren't interested in raw diets, the students don't learn about them.

Decisions we make on behalf of our pets should be made carefully, by weighing facts from a variety of sources. One of those sources should definitely be your veterinarian. There is a lot of misinformation about feeding raw foods to our pets, both promoting and attacking the practice. As guardians to our pets, it's up to us to make informed decisions and to make those decisions for ourselves.

## **An Inherent Conflict Of Interest**

If you go to a doctor for yourself, and he tells you that you should be eating only one type of food, and that you can pick up a bag in the waiting room, how would you feel? The majority of vets have their clients' best interests at heart. But they are put in a dangerous situation (by the sales and marketing pitches from pet food companies) by receiving money for medical advice, and receiving money from the sales of recommended/prescribed products.

The power and influence of our veterinarians has been exploited by pet food manufacturers. John Steel, retired VP of Global Marketing and Sales explains: "It's just like taking drugs: You go to the doctor and he prescribes something for you and you don't much question what the doctor says. It's the same with animals." [2]

It's this conflict of interest that can lead to disaster. The Wall Street Journal reported that the marketing and sales activities of Hill's Pet Foods include a "bounty" on the pets in a given veterinary clinic. For each pet that was put on a special diet, the clinic received a "kickback." The clinic would have a quota of pets to get on the diet each day, and then use that money for it's own purpose (a party, etc.). [3] The recommendation of the food may or may not have been the best thing for the pet. This shocking report even featured direct quotes from sales reps and vets who obviously saw no problem with this practice. If this were ever to come to light in the human health industry, the company and doctor would both be disgraced and the doctor would surely lose his license and be banished from the community. So why are our pets deserving of any less?

The above is not to suggest that every vet has a "quota" based on a bounty he/she will receive from a pet food company. But obviously some do. It's a situation that is unregulated, and consumers should not be subjected to a system that is subject to such alarming abuse.

It doesn't make it any easier on vets when they have pet food manufacturers coaching them on how to sell their product. Medi-Cal, for example, tells vets to focus on veterinary-exclusive products because they encourage people to visit the clinic more often resulting in increased revenue and compliance. They also coach vets to limit customer choice, and to lower the markup of puppy/kitten food so customers will be more likely to start their pets on the Medi-Cal brand. [4]

## **Pet Foods Are Manufactured Using Guesswork**

The people responsible for producing food for your pet, and even worse, the people responsible for policing the manufacturers, really have no idea what the optimal diet is

for your dog or cat. In the U.S., where the majority of the manufacturing for North America is done, the FDA governs the industry. It operates through a group known as AAFCO (Association of American Feed Control Officials). This group sets the standards for ingredients and nutritional guidelines for petfood.

The need to question the standards becomes apparent when you listen to the industry regulators:

- Dr. David Dzanic, FDA Center for Veterinary Medicine: "The formulation method does not account for palatability or availability of nutrients. Yet a feeding trial can miss some chronic deficiencies or toxicities."
- Animalhealthcare.ca (the "official site of the veterinary profession in Canada"): "Despite advances in nutrition research, little remains known about what exactly constitutes an optimal diet for the cat. While guidelines do exist regarding the minimum and maximum requirements for a feline diet, much still needs to be done to determine the effects of various excesses and deficiencies on feline nutrition." [5]
- Dr. Quinton Rogers, DVM, PhD, one of the AAFCO panel experts: "Although the AAFCO profiles are better than nothing, they provide false securities. I don't know of any studies showing their adequacies and inadequacies." Rogers also states that some of the foods which pass AAFCO feeding trials are actually inadequate for long term nutrition, but there is no way of knowing which foods these are under present regulations. [6]

AAFCO regulations, in the words of AAFCO themselves, are not based entirely in knowledge:

- "The absence of (nutrient level) maximums should not be interpreted to mean that those nutrients are safe at any level. Rather, it reflects the lack of information on nutrient toxicity in dogs and cats." [7]
- "Although a true requirement of crude fat per se has not been established..." [8]
- "Sodium minimum level was more a matter of convention than as was supported by data." [9]
- Levels of copper, iron, and zinc for dogs are set based on tolerance in swine. [10]
- Even the science that AAFCO does have isn't used to create useable guidelines for pet food manufacturers. The recommended calcium/phosphorus ratio is between 1.2:1 and 1.4:1. Yet the maximum limit is set at 2:1. LU1 Why such a wide range? The ranges for specific vitamins are even wider. The maximum allowable levels for vitamins A, D and E respectively are 50, 10 and 20 times the minimum amounts. In cats, the ranges are the same except for vitamin A which is 150 times the minimum allowable limit. [12]

The "studies" carried out by pet food manufacturers are little more than exercises in marketing and public relations. Take a recent result quoted by Hill's about their Science Diet product. "The double-masked, randomized two-year study of 38 dogs concluded that dogs fed Prescription Diet® k/d live twice as long as dogs fed a composite grocery dog food brand. At the study's conclusion, four times as many dogs fed Prescription Diet® k/d® were still living." [13]

The study above "proves" nothing. First, what exactly is a "composite grocery store food brand"? And why on earth would Hill's choose to test against it? Second, when it says their dogs live twice as long, how long is that exactly? Third what kind of an endorsement is "... four times as many dogs were still living"? All this study shows is that their product kills fewer dogs than the "composite grocery store brand."

Companies like Hill's are quick to denounce raw diets (although many high quality kibble manufacturers do in fact recommend that their food be supplemented with raw products). But ask yourself why, with all the resources at their disposal to conduct ridiculous studies against "grocery store composite brands", they never test their products against raw diets.

The "standards" that govern the pet food industry are always evolving, and manufacturers constantly learn more about what is "essential." In the 60's, we saw sick "Alpo Dogs"; dogs that were fed an all-meat diet promoted by pet food companies as being "complete and balanced." In the 60s and 70s we saw sick cats until manufacturers realized that taurine was an essential amino acid. In the pet food regulations in 1978, the vitamin A minimum level for cats was 10,000 IU/kg. In 1985 it was 3,333 IU/kg. Now it's 5,000 IU/kg.[14] Science is a continuum. Are we so arrogant to assume that we have now learned everything there is to learn, that we can learn nothing new?

Nutritionists recommend switching among two or three different pet food products every few months. The FDA Centre for Veterinary Medicine, in their newsletter to consumers, says "nutritional advice for people to eat a wide variety of foods also applies to pets. Doing so helps ensure that a deficiency doesn't develop for some as yet unknown nutrient required for good health." [15] But then later in the exact same article, the following appears: "The nutritional adequacy statement assures consumers that a product meets all of a pet's nutritional needs." What is missing is the statement "as far as we know, which may be very little."

What is credible science today was laughable yesterday. For 100 years doctors scoffed at the idea that ulcers could be caused by bacteria, and cured by simple antibiotics. Meanwhile, millions of people suffered. Of course we now know that the majority of ulcers are caused by bacteria, and can easily be cured in the course of 10-14 days. This learning shows us the importance of ensuring that we continually learn with an open mind. We don't know everything, and we likely never will.

## **The Standards Governing The Pet Food Business Are Abysmal**

Even within the framework of "guessing" at what is the optimal diet for a dog or a cat, the standards that govern production and ingredients are questionable at best. The majority of the pet food that is manufactured in North America follows the protocols of AAFCO. These standards, when met, allow the manufacturer to claim that his product is complete and balanced and it is supposed to be the criteria that the consumer uses to make informed choices.

Unfortunately the standards fall short of providing even the slightest reassurance to anyone who questions them. The first point to consider is that if one wishes to receive a copy of the AAFCO handbook, which contains the feeding protocols, allowable

ingredients, etc., one must pay \$65 U.S. for it. Shouldn't such information, vital to our decisions for our pets, be in the public domain and available free of charge?

According to the 2003 AAFCO Handbook, there are four ways to meet the AAFCO protocols:

1. Feeding trials
2. Chemical analysis
3. Products that are in the same "family" as approved foods
4. Products that pass growth or gestation protocols do not need to pass maintenance (adult) protocols.

The feeding trial is obviously the most strenuous of all the methods, but the feeding trials provide little confidence for consumers interested in their pets' health. In the feeding trials 8 dogs (or cats) over the age of 1 and of "optimal body weight and in good health" are fed only the food being tested for a period of 26 weeks.[16] Only water is added. A "passing" grade is given based on the following conditions:

1. No obvious nutritional deficiencies. But with a test of only 26 weeks many deficiencies may not be apparent at the end of the test, and many may not yet be "obvious. \*
2. 6 out of the 8 animals that entered the test must remain at the end of the test. Animals may be removed for "poor food intake." The protocols do not provide a definition of "poor food intake" but I've never heard of a dog suffering from anything like this.
3. No dog shall lose more than 15% of his body weight, and the average body weight loss of the dogs that finish the trial must not be more than 10%. How can a food that causes double-digit weight loss in only 26 weeks in an animal that is of "optimal body weight" when they enter the test be considered healthy?
4. Hemoglobin, PCV, albumin, serum alkaline phosphatase (and in the case of cats, taurine), must also not drop by extreme proportions (similar to the body weight levels above).

In the case of puppies and kittens the quality of the test is even worse. Puppies must be at least 75% of the average weight for their breed, and kittens must be at least 80% of their average.[17] How can a diet be considered quality if it results in body weights as low as 34 of the average? What's worse, there is no upper limit on how far above the average pets in the test are allowed to weigh.

The second way that a food can "pass" is to avoid the feeding trial altogether and show on paper that the food has the same end nutrients to match foods that would pass the trials. But this process assumes that the end nutrient composition of feed is all that matters, not the source of the nutrients. And even pet food manufacturers, such as Medi-Cal, acknowledge this fact: "The "Guaranteed Analysis" is an analysis performed in a laboratory. It tells us nothing about ingredient quality. Shoe leather, hair, feathers, beaks and chicken feet would be high in crude protein, but provide poor nutrient value for your pet.[18] Worse yet, AAFCO themselves acknowledge that foods can pass feeding trials yet fail the chemical analysis.[19]

The Canadian Veterinary Medical Association goes so far as to say: "Whether the reference is to the NRC (National Research Council) or to AAFCO, it must be borne in mind that neither one of these organizations tests pet foods, and statements that the product meets NRC or AAFCO standards do not imply endorsement by either group or that the product in fact meets the nutrition standards set by them." [20]

It also surprises many people to learn of the kind of products that receive the "complete and balanced" seal of approval. Many people recoil at the idea of feeding their dog or cat the "no name stuff from the grocery store." But the Canadian Veterinary Medical Association, under their certification program, says that "No Name Special Dinner" is all you need to feed your dog. It is designed to be complete and balanced and meet all the nutritional needs of your dog/cat. By the rules defined by the CVMA themselves, using the name "No Name Special Dinner" requires the manufacturer to use no minimum percentage of meat in the formula. (If the name were to be "Special Dinner With Beef" than they would be required to have a whopping 3% of the product be actual beef.) [21]

But the CVMA wants you to know that No-Name Special Dinner, while "less expensive...meets optimum standards of nutrition and consistently prove their quality in independent feeding trials." [22] The CVMA also wants you to know that "there are no government regulations for assuring food quality and consistency of pet foods in the Canadian marketplace. Commercial pet foods on the market are generally good; however, there can be extreme variations in their nutritional quality." [23] Extreme indeed.

Think the label tells you what you need to know? Think again. In a New York Times article dated December 16, 1990 Dr Bruce Little, executive vice president of the American Veterinary Medical Association said about pet food, " 'Natural' is a figment of the advertising industry's imagination." In the same article Richard Sellers, chairman of AAFCO's pet food committee said, "Labeling is a marketing tool. You can list everything that's in a can of food and that still won't tell the consumer anything about what the animal will actually ingest." He gave as an example rawhide, an indigestible byproduct of leather, which is frequently found in inexpensive pet food and listed as protein.

The minimums that are set are enough to only prevent the appearance of obvious deficiency symptoms. What's more, there is no law governing that nutrient levels be kept below safe maximums. For example, "since payability would suffer, no maximum level of sodium is given." [24]

Flavors are often added to get animals to eat what would otherwise be passed over. If a label says "chicken flavour" then there only has to be enough flavour so that pets can "pick out that it tastes like chicken." [25] Upon questioning, the authors of the report, The Pet Food Institute, could not explain exactly how they get dogs to pick out chicken versus other flavours.

Of course there are good kibble products out there, products that have consistency and high quality proteins and other standards don't tell you which ones they are.

## **Survive Or Thrive?**

Our pets, dogs in particular, can be described in a few choice words: scavenger, hunter, opportunist. In other words, dogs have the ability to survive on some very minimal

requirements. Your dog can probably live for a year or more simply on what he finds in your weekly garbage. But this brings up an important distinction between survive and thrive. As pet guardians, it's our responsibility to provide our pets a diet that will allow them to thrive, not merely survive. The entire regulatory industry, as we have seen from the AAFCO handbook, is built around the MINIMUM amount of nutrition required to keep a dog alive. If your pet "seems" fine, consider the long term. Consider the increases in obesity we have seen over the years, to the point that it has been estimated that 44% of the North American dog population is obese.[26] Consider the fact that 86% of pets over the age of one have periodontal disease.[27] Consider the fact that 20% of all dogs over the age of one have some form of osteoarthritis.[28] Consider the rise of chronic illnesses, cancer, and diabetes in our pets.

Grain makes up a considerable portion of both commercial and many homemade diets. It has been stated that, "dogs do not have a dietary requirement for carbohydrate" and "grains are used only because they are a less expensive source of energy than fat or protein." [29] These foods will keep your pet alive, but they will never allow him to thrive.

### **Complete And Balanced Is A Myth**

There is no single food that is complete and balanced. If there were we would all be eating it right now. Our dogs and cats, like us, were designed to eat a variety of healthy foods over time. A wild dog would eat a diet largely comprised of meat but also of internal organs, fruits and vegetables, pre-digested grains perhaps, bugs, grass, dirt, and even feces. They would never ever eat a meal that was all at once all of the above items. A wolf doesn't finish eating a rabbit and say "hmmm, I think I'm a little short on zinc today, I'd better go find some."

The corresponding myth to complete and balanced is that a pet guardian couldn't possibly know how to feed a dog or cat, as they lack the specialized skill and training required to make those decisions. The first problem with this is as we have seen, the pet food industry and even veterinarians shouldn't be our sole source of information. But what about the millions of mothers out there, both human and animal, that have raised their babies, puppies and kittens into strong, healthy beings? How many of them had degrees in nutritional science?

The wild ancestors of our dogs and cats have survived for millions of years without our help. They have something valuable in their natural diet that has allowed them to thrive for so long at the top of the food chain.

### **Your Dog Is A Wolf. Your Cat is Wild**

Research tells us that our pets are really just wild animals in disguise. Their disguises have come as a result of selective breeding, much of it for aesthetics. But what hasn't changed is their biology. Not for any breed, from Chihuahua to Great Dane.[30] Researchers now know that the DNA of *canis lupus familiaris* (domesticated dog) and *canis lupus* (wolf) differ by less than 1%. Note that they are both considered the same species, with the dog being a subspecies of the other. The dog and wolf are even more closely related to each other than the wolf is to the coyote. [31]

A look at their respective digestive systems shows that our dogs and cats today are designed to consume the same diets as their wild cousins. They both have short intestinal tracts (about 1/3 the length of humans') and acidic stomachs (pH is approximately 5 times our human stomachs). This is how they are able to handle the nasty bacteria they pick up from each others' anuses, filthy carcuses in the park, and yes, things like salmonella in raw meat. In fact, about 1/3 of all dogs naturally have salmonella in their digestive tract.[32] Despite carrying this bacteria in their intestines, they show no signs of disease.[33] Our healthy dogs contain normal flora in their intestinal tracts, no doubt the result of millions of years of scavenging and opportunistic feeding patterns.

According to Dr. Stephanie Wong, spokesperson for the Center for Disease Control, salmonella is not a problem for dogs and cats: "If dogs and cats do suffer any effects from salmonella, the illness will most often be a mild gastrointestinal disorder." Further, she states that it is not a risk to humans: "Potentially dogs and cats can transmit salmonellosis to humans, but it is extremely unlikely." [34] In the September/October 2000 issue of Consumer Magazine, the FDA agrees that "...healthy pets rarely become ill from the bacteria."

The wild cousins of our domesticated dogs and cats, contrary to some reports, do live long, healthy lives. One of the world's foremost wolf researchers, L.D. Mech states "in the wild, wolves can live to be about 16 years of age." [35] Certainly the animals must have some degree of health as they have been able to sustain themselves at the top of the food chain for millions of years. Wolves in captivity are fed raw diets and regularly live as long as 20 years.

Even Waltham (a subsidiary of the Mars Corporation, makers of Pedigree Pet Food, Uncle Ben's Rice, etc.) agrees: "Throughout the ages of domestication dogs have had to survive on a mixed diet of hunting, scavenging and handouts from man. Those which were able to pick out the best things to eat have survived, whereas those which could not will have failed to breed, particularly since pregnancy and lactation are the most nutritionally demanding times in the animal's life. The process of learning which foods to eat requires considerable skill to ensure that only those food items which are nutritionally beneficial and non-toxic are incorporated into the diet." [36] In other words, every day Nature shows us the optimal diet for our dogs and cats.

Finally, from the May/June 1999 issue of the FDA Veterinary Newsletter: "Just by comparing the dentition of dogs and cats with that of humans and herbivores (plant-eaters, such as cattle and horses), it is readily apparent that their teeth are designed by nature for eating a diet largely comprised of animal tissue. Their short intestinal tracts compared to humans and especially to animals like sheep or horses also indicate that they are not designed to accommodate diets containing large amounts of plant materials. Their nutritional requirements, such as the need for relatively high amounts of protein and calcium, reflect these dietary limitations." From the same newsletter: "To be honest, all commercial pet foods are to varying degrees "unnatural" (no company sells raw, whole rodents or small birds as "cat food")." Well, actually, there are lots of companies that do just that.

People who claim that Fido or Fluffy are different from their wild ancestors are confusing emotion with fact. Most importantly, they have yet to provide any evidence to suggest that our pets differ from their wild cousins when it comes to nutrition.

Just like a tree is genetically adapted to absorb certain nutrients, so are our pets. The majority of foods fed to pets today (kibble) have only been in existence for about 150 years. The natural genetically-adapted food for pets (or any living creature) must pre-date their existence. In other words, how could animals exist before the food they needed to survive existed? The simplicity of this logic is its beauty.

Some people claim that raw food and cooked food are nutritionally identical. This is not true. Cooking alters and binds nutrients, making them either less digestible or useless to our pets.[37] Even the Canadian Veterinary Medical Association admits "liver is most nutritious when fed raw (especially to sick, anemic or weak pets)"[38] and that "cooking may also deplete certain nutrients and result in a deficient diet." [39] Through the process of rendering, raw animal by-products are chemically transformed. Even watch what happens to animal fat when it is fried in a hamburger or bacon? Higher temperatures with low moisture content can damage the protein quality. The availability of essential amino acids (i.e. those required from food to sustain life) has been found to decline as the processing temperature increases.[40] Cats eating heat-processed foods have been shown to have lower plasma taurine concentrations.[41][42] AAFCO, the organization that sets the guiding principles for pet foods, is forced to make allowances for nutritional degradation due to processing.[43] AAFCO also provides specific examples of nutrients that are lost due to processing: "Processing may destroy up to 90% of the thiamine in a diet" for dogs and cats,[44] with canned food resulting in even greater deficiencies than kibble, requiring even more additive nutrients.[45]

### **Variety May Be The Most Important Factor**

We have already heard from the FDA about the need to keep variety in your pets' diet. You ensure that a wide range of nutrients is available to your pet by feeding a variety of proteins and other ingredients through a wide variety of foods. A truly natural diet would consist of at least a few different sources of protein. One day might be a rabbit, the next couple days might be a calf, etc. The important thing is that our animals naturally eat a variety of foods over time, and grains do not comprise the majority of their diet. Cooked grains are never part of their diet.

Many pet food companies (and even vets) will recommend that a pet's food not be changed, or that if a change is made that it be made slowly. The reason behind this recommendation is the potential for upset to the digestive system of the dog. But when you consider the origins of the dog, and the words we use to describe the dog - hunter, opportunist, scavenger - their natural diets are varied. Any healthy dog would have no problem immediately adapting to new foods. That's what they are designed to do.

A varied diet will help avoid allergies in your pet. Lamb and rice foods were originally introduced as foods for pets that had developed allergies from eating solely chicken or beef for such a long time. At the time, lamb was a novel protein. Ensuring your pet is regularly exposed to a wide variety of proteins can help protect him.

You help avoid food addictions by keeping a varied diet. The Whole Cat Journal, in its October 2001 issue, cites the case of a cat that was addicted to a particular flavor of a particular brand of cat food, right down to a specific factory and lot number! This kind of addiction can be difficult to deal with when that last can is gone, but can be easily avoided by feeding a variety of foods from the start. If fed only one type of food or flavour, imprinting can be severe enough to result in some cats choosing to starve rather than switch diets. Nutritional deficiencies (and excesses) are also less likely to manifest themselves later on in life if a variety of diets are fed.[46]

Finally, let's consider our pets' mental health and enjoyment. Why wouldn't our pets enjoy a variety of tastes and experiences in their food as much as we enjoy variety in ours? But manufacturers, all looking to gain a lifelong customer, discourage the process. Medi-Cal goes so far as to irresponsibly claim "dogs really do not mind having the same meal time and time again." [47] Apart from being unhealthy and unnatural, it's boring. We know dogs and cats feel and express emotion, why would anyone doubt their ability to enjoy food?

Anyone that has seen a dog or cat eat raw food can empathize with their joy simply by looking at their body language, their wagging tails, and the way they devour the food. A raw diet ensures that the pet guardian maintains control over the pets' diet, and ensures variety.

## **What About Bones?**

The old myth about never feeding bones to your pet has been distorted. While it's true that cooked bones present a great danger to your pet, raw bones are nutritious and in fact essential to keeping your pets' teeth clean. For millions of years, wolves managed to keep their teeth for tearing into prey without the benefit of a dental cleaning under anesthetic every 6 months, or a guardian to "gently brush their teeth and gums."

There can be no dispute that our dogs and cats are designed to eat and digest bones. "Wild or feral cats and dogs will consume a variety of foods, and even when consuming a prey, they will consume the digestive tract, hide and bones in addition to the meat." [48]

Research has consistently proven the value of bones: In the study "Control of Dental Calculus in Experimental Beagles," by Brown and Park in 1968 it was shown that "manual removal of calculus was not required when dogs were fed one-half or one whole oxtail per week." [49]

Even some of the people you would expect to tell you bones are bad have come on board. PC Higgins, Veterinary Advisor to Uncle Ben's of Australia (makers of Pedigree and Walthams) said in 1987: "Uncooked bones had the most marked effect followed by rawhide chews and super hard baked biscuits. It is imperative that in addition to this basic commercial diet bones, preferably, or rawhide chews or super hard baked biscuits be added to it so that periodontal disease can be prevented."

But what about the myth that hard kibble keeps our dogs and cats' teeth clean? It's not true according to the "official site of the veterinary profession in Canada", animalhealthcare.ca: "Numerous studies have demonstrated that feeding a regular dry diet alone, when compared to a canned diet, will reduce the rate of plaque and

subsequent calculus formation However, what is not thoroughly understood is whether this effect is due to the mild abrasive action of the diet, or the greater likelihood of canned food to become entrapped in the gum tissue, leading to greater accumulation of plaque. Because dental calculus is so hard due to its mineral content, it usually is not removed when a pet eats hard kibble." [50]

The dramatic difference in food form represented by commercial dog and cat foods as compared to the natural prey of wild canids and felids (dogs and cats) is often implicated as a significant cause of the degree of periodontal disease diagnosed in domestic dogs and cats. Colyer examined 1,157 wild canid skulls and reported that suggestive evidence of periodontal disease was present in only 2% of specimens.[51] Compare that to modern estimates that 86% of adult dogs suffer from periodontal disease.

## **The Science Behind The Hype**

The Pottenger Cat study, done over a 10 year period in the 30's and 40's, is the best example of a study showing the benefits of raw meat to cats. In his study Dr. Francis Pottenger (at the time President of the L.A. County Medical Board) showed that cats who were fed a raw diet thrived while cats fed a cooked diet suffered from chronic illnesses, many of the same illnesses that plague our pets today.[52]

In discussions with one veterinarian about the results of this research, his response was "taurine was not known to be an essential nutrient for cats at that time." But he missed the whole point of the research. There is no need to build a diet that replicates the optimal diet, we already have the optimal diet! Instead of acknowledging the superior diet, the industry has spent the last 60 years since the Pottenger research trying to recreate it. Based on research presented in this paper, they have not yet succeeded.

But let's turn our perspective on the practice of feeding our pets cooked food, and interrogate the "science" behind that practice. The cooked food industry for our pets began in 1860 in England by James Spratt, an electrician from Ohio. He was in London trying to sell lightning rods when he saw dogs being given left-over ship's biscuits. This electrician thought he could do better with a preparation of wheat, vegetables, beetroot and meat. Formulation was based more on guesswork than science. But his company thrived and an entire industry was born, with no one ever looking back or questioning why the practice began in the first place. Many people are shocked to learn that the practice they depend on for their pets' health is less than 150 years old, and didn't originate in lab, a university, or even a veterinary clinic. It began with an electrician entrepreneur from Ohio who was trying to make a living in London, England. And it began as a business opportunity with nothing to do with science, or even the benefit of pets.[53]

Unfortunately some of the "science" that is used to attack the practice of feeding a raw diet is suspect and does nothing to move the debate forward. Some readers may have been referred to the study "Evaluation of Raw Food Diets For Dogs" (page 705, March 1, 2001 JAVMA) by Freeman and Michel. This study supposedly showed that raw diets were nutritionally inadequate (although I refer back to the AAFCO standards of what is nutritionally adequate and question that assumption overall). But what most people don't know about that study is that authors/veterinarians Freeman and Michel admit their

analysis was not based on exact recipes from the diets and only a portion of the week or month of individual meals constituting the complete diets. Rather the assays were based on one meal of each diet fed to five different dogs. No assay of bio-availability was done on the raw samples and none are available for comparison from commercial kibble manufacturers. A raw diet features variety, and any one component of the diet at any one time may be in fact deficient. But over days and weeks, much like the diets of our pets' wild cousins, the balance is gained.

Another, even less meaningful study, showed that dog feces and raw meat contain salmonella.[54] In a 2002 study the authors "showed" that raw chicken contains salmonella, and that dog feces contains salmonella, and somehow try to use this as a rationale against a raw diet! Anyone will tell you that salmonella is often present in raw chicken, whether it is for our dogs or for us. But as you have learned, these bacteria are not a problem for healthy dogs. In fact, this 2002 study inadvertently proved that salmonella is not harmful to dogs. None of the 10 test dogs suffered any ill effects despite salmonella being present in 80% of the raw food. And the fact that salmonella is found in dog feces should not come as a surprise. Again, about 1/3 of dogs normally carry the bacteria in their system. And besides, who is eating dog feces?

A raw diet has been proven to be beneficial to our dogs and cats. The exaggerated claims of the dangers of feeding raw diets have been promoted by those with self-interests in selling their own brand of food. Objective science demonstrates that not only is raw food not dangerous, it has numerous health benefits for your pet.

### **One Last Thing To Consider**

The information in this document comes from Pet Life Inc. who is in the business of selling pet food. For dogs and cats we sell raw food AND kibble/canned diets. This is important for you to remember because we encourage everyone with pets to understand and question the source of the information they are using to make decisions. **The facts in this document, however, are not ours. They are public facts that we have merely gathered and presented.**

A raw diet isn't right for every pet. Our objective with this information is to clear the misperceptions and misinformation that are sometimes quoted when discussing what has become an emotional subject. And it should be emotional. It's your pet we're talking about. But don't let emotion guide your decisions. Your pet is depending on you to make the right choices.

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