



DIGITAL ACCESS TO SCHOLARSHIP AT HARVARD

Deconstructing the Regulatory Facade: Why Confused Consumers Feed their Pets Ring Dings and Krispy Kremes

The Harvard community has made this article openly available. [Please share](#) how this access benefits you. Your story matters.

Citation	Deconstructing the Regulatory Facade: Why Confused Consumers Feed their Pets Ring Dings and Krispy Kremes (2006 Third Year Paper)
Accessed	November 10, 2013 1:40:36 PM EST
Citable Link	http://nrs.harvard.edu/urn-3:HUL.InstRepos:10018997
Terms of Use	This article was downloaded from Harvard University's DASH repository, and is made available under the terms and conditions applicable to Other Posted Material, as set forth at http://nrs.harvard.edu/urn-3:HUL.InstRepos:dash.current.terms-of-use#LAA

(Article begins on next page)

Microsoft Word 10.0.6612;

**Deconstructing the Regulatory Façade:
Why Confused Consumers Feed their Pets
Ring Dings and Krispy Kremes**

Justine S. Patrick

Class of 2006

April 2006

Combined Course and Third-Year Work

Abstract

Americans own more than 130 million cats and dogs and spend over \$12 billion per year on commercial pet foods. The commercial pet food industry faces minimal substantive regulation, despite navigating several layers of regulation from various groups including the FDA, the American Association of Feed Control Officials (AAFCO), and state regulators. The FDA entrusts AAFCO to issue regulations governing ingredients, feeding trials, labels and nutritional claims. But AAFCO's rules fall short of ensuring that America's pets receive adequate nutrition, or even foods that won't cause chronic digestive, skin, eye, and coat problems. The influence by the pet food industry over AAFCO manifests itself through AAFCO's irrational regulations, including ingredient definitions which effectively prohibit organic chickens and vegetables, while blindly permitting thousands of euthanized cats and dogs to make their way into pet foods through the unsupervised rendering industry. Trusting, but uneducated, consumers purchase these commercial pet foods under the assumption that the FDA or some other regulatory body has ensured that the foods contain "balanced" meals, and "complete" nutrition. These consumers naively believe veterinarians that endorse and sell pet foods from their offices while neglecting to mention that these "pet doctors" are often "on the take" and can earn up to 20% of their total income from such sales. This paper will examine the ways in which inadequate regulation results in confused consumers and sick, malnourished pets. Ultimately this paper seeks to reveal that multiple parties, including consumers themselves, share the blame for the current muddled state of regulation.

Table of Contents

I. Introduction	1
II. A Brief History of Pet Food	2
III. The Current Regulatory Structure	5
A. FDA	6
B. CVM	9
C. AAFCO	12
1. Overview of AAFCO	13
2. AAFCO Members	15
3. Feeding Trial and Nutrient Requirement Regulations	17
4. Label Regulations	20
D. State Regulation	22
E. Pet Food Institute	23
F. American Pet Products Manufacturers Association	24
IV. How Current Regulations Result in Confused Owners and Diseased Pets	25
A. Confusing the Consumer at Every Turn	26
1. Pet Food Labels	26
2. Ingredient Names	28
B. The Rendering Industry – Exposing Pet Food Processing	33
C. Nutrition	40
1. Overview of the Nutritional Needs of Dogs and Cats	40
2. The Fallacy of the 100% Complete Claim	43
D. Diseases	47
1. Mad Cow Disease	47
2. Obesity and Other Diseases	49
E. Toxins in Pet Foods	50
V. Failing the Pets: Who is at Fault	51
A. FDA Missteps	51
B. AAFCO, Again	53
C. Blind Faith in the Veterinary Industry	54
D. Manufacturer’s Misconduct	59
E. Consumer Folly	63

VI. Conclusion 66

I. Introduction

Pet food is big business in the U.S. ¹ Over fifty percent of American households have at least one pet, these homes providing shelter to 60 million dogs and 70 million cats.² More than 60% of these animals eat commercial pet food.³ Most pet owners don't think twice about the pet food they buy. Some buy what the vet recommends (solicited advice or not), others buy the most eye-catching bag found in the grocery store aisle, and still others buy foods advertised on TV with frisky kitties scrambling into the kitchen to scarf down adorable fish-shaped food bits. The fascinating thing is that very few pet owners stop to consider whether the food they're feeding their pet is nutritious. They assume that because the food is vet recommended or backed-up by health claims scrawled on the bag and announced in commercials, then it must be okay. After all, they figure, the FDA regulates what we eat – don't they regulate what our pets eat?

The answer is neither simple nor short. Like most issues of regulation, pet food's history is long, complicated and, of course, fueled by money. Pet food is a \$12 billion industry in the U.S., with exports adding another \$1 billion.⁴ What is interesting is that despite multiple layers of authority, the pet food industry has enjoyed

¹This paper defines "pet food" as foods intended for consumption by dogs and cats. While there is a substantial market for ferret, hamster, fish, bird, and other "exotic" animals, the consideration of such foods and their regulation is beyond the scope of this paper.

²Claudia H. Deutsch, Mad Cow Disease in the United States: Industry; Makers of Pet Food Voice Little Worry, N.Y. Times, Dec. 26, 2003, at A40.

³Laura Cunningham, Pet Food Esthetics: A Human Concern, N.Y. Times, December 16, 1981, at C1.

⁴Deutsch, *supra* note 2.

relatively little substantive regulation.

The purpose of this paper is not to point fingers or serve as an emotional shock triggering pet owners to home-cook each of their pets' meals. Rather, this paper should serve as a comprehensive examination of the pet food industry and reveal its inadequacies. The paper begins with a brief history of pet food followed by a discussion of the various regulatory bodies, their relationship to the industry, and the rules ultimately governing pet food. This section also considers the role of non-governmental bodies and trade groups that significantly influence the regulations. Next, the paper discusses the effects of the regulatory regime by examining pet food labels, permitted ingredients, and the current state of pets' health. Finally, a discussion on why the industry fails America's pets will be followed by possible solutions that consumers, veterinarians and regulators can pursue in order to resolve the industry's shortcomings.

While there are many problems with the commercial pet food industry, not all commercial pet foods are detrimental to your pets' health. Some pets are able to live for years on commercial foods and never encounter any significant health problems. Nevertheless, thousands of pets develop severe allergies and diseases directly related to their "regulated" diets. So who is responsible for our pet's declining health? The answer, is everyone.

II. A Brief History of Pet Food

Before analyzing the regulation of pet food it is worth noting the development of the industry over the last 100 years. Prior to the introduction of commercial pet food, dogs ate table scraps salvaged from their

human companions. Cats, kept for their rodent hunting abilities, mostly subsisted on their own kills.⁵ Companion animals survived for decades on these diets and while it is impossible to determine if those animals were healthier than their modern day commercially fed counterparts, it is enough to note that the current generation of dogs and cats inherited the genes of their ancestors, complete with their digestive tendencies and capabilities.

An American by the name of James Spratt produced the first commercial dog food, a biscuit, in 1860.⁶ Spratt was a salesman in London when he noticed dogs on docks being fed left over biscuits from the ships.⁷ Spratt decided to create his own biscuit using “wheat meals, vegetables, beetroot, and meat.”⁸ His product proved profitable and was sold to English gentlemen who owned sporting dogs.⁹ In 1890 his formula and production were taken over by a large company which then began operations in the United States.¹⁰

Soon U.S. firms began entering different formulations of fortified dog biscuits and dry kibble into the pet food market.¹¹ Subsequent to World War I pet food manufacturers introduced canned horsemeat, followed by canned foods for cats in the 1930s.¹² The industry diversified in the 1960s with the production of dry cat food and semi-moist products.¹³ This marked the beginning of the “boom” for pet food companies.¹⁴ Soon soup companies such as Campbell and Lipton competed with cereal manufacturers like Post and General Foods to add pet foods to their “human lines.”¹⁵ Not to be outdone, candy companies (Mars) and dairies (Carnation) also entered the fray, leading to the production of over 500 pet food brands.¹⁶

⁵Eating their prey had an added benefit for cats: they ingested all the nutrients found in the stomachs of their victims, which explains why cats are unable to digest vitamins like A and D which were found already digested in their prey. Cats, kept mainly as outdoor pets until approximately 50 years ago, have not had time to adjust to the changes human companionship has created in their diets, especially when compared to dogs which have been domesticated for 20,000 years.

⁶Pet Food Institute, History of Pet Food, available at http://www.petfoodinstitute.org/what_is_history.cfm.

⁷*Id.*

⁸*Id.*

⁹*Id.*

¹⁰*Id.*

¹¹*Id.*

¹²*Id.*

¹³*Id.*

¹⁴Cunningham, *supra* note 3.

¹⁵*Id.*

¹⁶*Id.*

The industry managed to sow the seeds of problematic regulation during the height of its power in the 1970s. During the pet food boom, the industry and the U.S. government were “especially close.”¹⁷ The chairman of Ralston Purina’s board of directors, Earl L. Butz, effectively swapped jobs with the U.S. Secretary of Agriculture, Clifford Morris Hardin.¹⁸ Meanwhile, the national guidelines for pet nutrition originated with Ralston Purina’s own research department.¹⁹ No one seemed to mind the industry’s self-regulation.

During the 1980s the pet food industry’s monstrous profits diminished when inflation combined with increased advertising budgets started eating into earnings.²⁰ But the biggest blow came in the form of newfound skepticism by consumers. During the 80s, the revelation that the world’s food supply was lagging behind population growth attracted substantial media attention.²¹ Consumers began wondering why they were paying so much money for their pets’ food when there might not be sufficient food for humans. This forced a once booming industry to defend the need for its products. Ironically, this meant that instead of selling their products as “fit for humans” complete with peas and carrots in canned dog foods, the industry began insisting that their “principal ingredients are not suitable for human use.”²² Considering that the industry and its regulators claim that pet foods are *safe* for human consumption, and indeed, are ingested by some humans, any assertion that the main ingredients are not “suitable” for humans appears hypocritical.²³

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ *Id.*

²¹ *Id.*

²² *Id.*

²³ See e.g. Sharon Benz, *FDA’s Regulation of Pet Food*, FDA Veterinarian, Vol. XVI No.1. Benz notes that FDA regulations require that “pet foods, like human foods, be pure and wholesome, contain no harmful or deleterious substances, and be truthfully labeled.” *Id.* Benz’s interpretation of pet food regulation is supported by Dr. Leland Shapiro, a professor of animal nutrition, who believes that although commercial pet foods are too high in salt and fat, the food is still regulated to the point where it is safe for human consumption. See Kathie Jenkins, *Pet Food Special; It’s Dining Cats and Dogs*, L.A. Times, June 22, 1995, at H14. See also Kenneth N. Hall, Ph.D, *FAQ: The Safety of Food and Food Related Products*, The Food Domain available at http://www.foodomain.msu.edu/consumer_faq_safety.htm#10, where Hall states that pet food sales increase concurrently with the unemployment rate, implicating that those on limited incomes chose to survive on cheap and convenient pet foods. If there exists an unspoken understanding that some humans eat pet food, then the FDA’s persistence in permitting ingredients rejected for human consumption under EPA, USDA, and FDA restrictions to make their way into pet foods is even more troubling.

Unfortunately, the pet food industry survived the 80s relatively unscathed and continues to thrive today. In fact, despite never reforming, the industry currently enjoys annual sales of \$13 billion worldwide.²⁴ But the success of the pet food industry should not in and of itself trouble consumers, rather, consumer concern should focus on the inadequate regulatory regime that the industry has established and maintained. Many commercial foods rely on sub-standard ingredients and yet bear claims of “complete” and “balanced” with defenseless pets paying the price and unsuspecting owners paying avoidable vet bills.

III. The Current Regulatory Structure

Several different groups at various levels of authority regulate pet food. Pet food is regulated by the FDA at the federal level under the Federal Food, Drug, and Cosmetic Act. More specifically, within the FDA, the Center for Veterinary Medicine regulates “animal drugs, animal feeds, food additives and ingredients.” A non-governmental organization, the Association of American Feed Control Officials, sets nutritional standards, label requirements, and feeding trial protocols for pet foods. Additionally, each state may have its own animal feed regulatory agency which regulate pet foods sold or manufactured within their state.²⁵ The Pet Food Institute, a trade group representing 97% of the U.S. pet food manufacturers, serves as the “voice” of the industry to Congress, state and federal agencies.²⁶ With so many different groups regulating what goes into your animal’s mouth, one would assume that commercial foods are safe. How ironic then, that this

²⁴Deutsch, *supra* note 2.

²⁵R. L. Wysong, DVM, *The Truth About Pet Foods* 59 (Inquiry Press 2002).

²⁶Pet Food Institute, *What is PFI?*, available at http://www.petfoodinstitute.org/what_is_pfi.cfm.

over-regulation often results in misinformed owners with malnourished pets.

A. FDA

Pet food, like human food, is regulated under the Federal Food, Drug, and Cosmetic Act (hereinafter “FFDCA”).²⁷ The FFDCA defines food as “articles used for food or drink for man or other animals. . .” and requires that all foods be free of adulteration and misbranding.²⁸ Without further analysis, one could conclude from this definition that all pet *foods* are regulated and approved for human consumption. This could not be further from the truth. In fact, the website of the Center for Veterinary Medicine states that “animal feeds provide a practical outlet for plant and animal byproducts *not suitable* for human consumption,”²⁹ a statement seemingly contradictory to the regulations of the FFDCA, which apply equally to human *and* animal foods.³⁰

The FFDCA does not require pre-approval of new foods, whether intended for humans or animals. Rather, the FFDCA merely requires that foods not be “adulterated” or “misbranded.” Adulterated food includes “food packaged or held under unsanitary conditions, food or ingredients that are filthy or decomposed, and food that contains any poisonous or deleterious substance.”³¹ The FFDCA also states that a food may be

²⁷It should be noted that while the phrase “animal feed” is interpreted to include livestock feed, this paper addresses only the issue of pet food regulation, more specifically the foods fed to cats and dogs. Regulation of “exotic pet foods” as they are called in the industry, i.e. foods intended for birds, fish, ferrets etc., are beyond the scope of this paper.

²⁸21 U.S.C. §321(f) (2006).

²⁹Center for Veterinary Medicine, *CVM and Animal Food, Feed Ingredients, and Additives*, available at http://www.fda.gov/cvm/animalfeed_info.htm#ingredients (emphasis added).

³⁰21 U.S.C. §321(f) defines food as “articles used for food or drink for man or other animals. . .”; the prohibitions against adulterated or misbranded foods include only the term “food” within their definitions – therefore they apply to both animal and human foods.

³¹Center for Veterinary Medicine, *Animal Food (Feed) Product Regulation*, available at:

deemed adulterated if it contains “any part or product of a diseased animal.”³²

Misbranded food includes those with a false or misleading label, or that fail to list required information such as the name and location of the manufacturer or the net quantity of the package’s contents.³³ The regulations regarding misbranding require that pet food labels comply with the same labeling requirements as human foods.³⁴ When a manufacturer desires an exemption from the federal labeling requirements, the FDA must be directly involved.³⁵

The FDA’s involvement also extends to the processing and packaging of animal foods. All pet food manufacturing plants are subject to FDA inspection.³⁶ Canned pet foods face further oversight in the form of the low acid canned food regulations.³⁷ In addition, the United States Department of Agriculture (hereinafter “USDA”) offers a voluntary inspection of canned foods through its Food Safety and Inspection Service.³⁸ Manufacturers utilizing the voluntary inspection service may attach a USDA “seal” to their product labels signifying that the product is a USDA Certified Product for Dogs, Cats and Other Carnivora.³⁹

Manufacturers violating FDA regulations face penalties ranging from prison and fines to product seizure and warning letters. The FDA often sanctions companies through its informal enforcement powers such as deten-

<http://www.fda.gov/cvm/prodregulation.htm>.

³²21 U.S.C §342(a)(5) (2006).

³³21 U.S.C. §343 (2006). Further regulation applicable to pet food labels include the Fair Packaging and Labeling Act which prevents unfair and deceptive packaging and labeling. Pet food manufacturers are also subject to the Federal Trade Commission’s regulations regarding misleading advertising and therefore must conform to the Commission’s truth in advertising standards. See Katharin Hillestad DVM, *Government Regulation of the Pet Food Industry*, available at <http://www.peteducation.com/article.cfm?cls=2&cat=1661&articleid=2645>.

³⁴See Peter Barton Hutt & Richard A. Merrill, *Food and Drug Law Cases and Materials* 638 (2d ed Foundation Press 1991) (1980).

³⁵See e.g., 51 FR 11456-01, 1986 WL 136354 (F.R.) (FDA denied an exemption request by the pet food industry from listing ingredients by their common or usual name. The FDA decided that the use of class or collective names for ingredients would confuse consumers. The FDA relied upon evidence that consumers purchase foods based on the presence or absence of certain ingredients due to pets’ allergies or dietary restrictions, and that many consumers would not be familiar with the class or collective names utilized by the industry.)

³⁶Hillestad, *supra* note 33.

³⁷Benz, *supra* note 23; see also 21 U.S.C. §113.

³⁸Hillestad *supra* note 33.

³⁹See 9 C.F.R § 355 et al. This option is not widely utilized by the industry. A recent survey of pet food stores in the Boston area found no canned foods bearing this seal.

tion authority, recalls and negative publicity. The December 2005 recall by Diamond Pet Foods illustrates the speed with which a manufacturer will recall its own product once harmful effects are discovered. In that case, the manufacturer initiated their recall before the FDA even began an investigation. The Diamond dog food was discovered to contain aflatoxin, a toxin produced by fungus found on corn and other crops that usually develops as a result of hot, arid weather.⁴⁰ The risk of bad publicity and losing market share is often enough to force manufacturers to right their own wrongs. Unfortunately, even Diamond's relatively quick recall came at the expense of the lives of over 76 dogs, plus dozens of others left with permanent liver damage.⁴¹

B. CVM

Within FDA, the Center for Veterinary Medicine (hereinafter "CVM") is responsible for the regulation of "animal food (feed) products."⁴² Although this sounds as though the CVM would set standards for pet foods, AAFCO (discussed below), an organization almost entirely independent of any governmental control, bears this responsibility. The CVM, in fact, is only responsible for the regulation of animal drugs, medicated feeds and food additives.⁴³ In relation to pet foods, this means that unless a food contains drugs, additives, or proffers "health claims" on its label, the CVM, and thereby the FDA, has virtually nothing to do with whether that particular pet food can be sold to the public. There is no requirement of pre-market approval

⁴⁰ *Toxic Pet Food Limited to Eastern States*, MSNBC.com, Jan. 12, 2006, available at <http://www.msnbc.msn.com/id/10807001>.

⁴¹ *Id.* The recalled product was distributed to 23 states and at least 29 countries. Veterinarians believe that as many as over 100 dogs may have died from aflatoxin poisoning, and that many dogs died undiagnosed. Diamond had noticed an increased rate of fungus-contaminated corn deliveries as early as September. New tests to detect the presence of aflatoxin were implemented by Diamond in November of 2005, but the contaminated dog food was shipped out in October. See also *FDA Investigation of Diamond Pet Food Finds Some Product Exported*, Dec. 30, 2005 available at http://www.fda.gov/cvm/CVM_Updates/bse123005.htm.

⁴² Center for Veterinary Medicine, *supra* note 29.

⁴³ Center for Veterinary Medicine, *CVM and Animal Food, Feed Ingredients, and Additives* available at: <http://www.fda.gov/cvm/animalfeed.htm>.

for pet foods.⁴⁴

Pet foods that contain drugs or medication are uncommon and the resources CVM expends in this area are generally limited to medicated feeds for the nation's livestock industry. Food additives require pre-market approval and are defined as any substance *not* generally recognized as safe by qualified scientists (hereinafter "GRAS) if such substance results, directly or indirectly, "in its becoming a component or otherwise affecting the characteristics of any food."⁴⁵ Thus, any food additive designated as GRAS is exempt from pre-market approval.⁴⁶

For non-GRAS additives the pre-market approval process requires the submission of a food additive petition to the FDA.⁴⁷ The petition generally contains, among other information, a description of the chemical identity of the additive, the manufacturing process and controls, human food safety data, target animal safety data, and product labeling.⁴⁸ Interestingly, CVM "has used regulatory discretion and *not* required food additive petitions for substances that do not raise any safety concerns."⁴⁹ CVM explains that since food additive approval is time-consuming, regulatory action will only be taken if the label is inconsistent with the accepted intended use of the additive or if new data "received" raises concerns regarding safety or suitability of the additive.⁵⁰ One has to wonder how closely the CVM monitors the "intended use" of the additive considering they have already chosen not to use their resources for pre-market approval *as mandated by Congress* in the FFDCFA. Moreover, it is unclear from where the CVM expects to "receive" data that calls into question the "safety" of the additive. Certainly, it will not be provided by the pet food manufacturer.

The result of CVM's resource decision is that CVM's involvement with pet food regulation primarily consists

⁴⁴It should be noted that there is no pre-market approval for foods intended for humans. Unlike drugs, which undergo an extensive pre-market approval process, food is permitted to be sold in the market so long as it is unadulterated and not misbranded. *See* 21 U.S.C. §§ 341-42 (2006).

⁴⁵21 U.S.C. §321(s) (2006).

⁴⁶Benz, *supra* note 23.

⁴⁷*Id.*

⁴⁸*Id.*

⁴⁹*Id.*, emphasis added.

⁵⁰*Id.*

of monitoring health claims. A “health claim” is a statement that a product can “treat, prevent or reduce the risk of a disease.”⁵¹ Such statements are considered drug claims and are generally prohibited by the CVM. Examples of such claims include “improves skin and coat,” “hypoallergenic,” and “treats feline lower urinary tract disease.”⁵² In other words, any “food label bear[ing] a claim that consumption of the product will treat, prevent or otherwise affect a disease or condition or affect the . . . body in a manner distinct from what would normally be described as its ‘nutritive value’ is considered to offer the product as a drug.”⁵³ However, the Nutrition Labeling and Education Act (hereinafter “NLEA”) requires that the FDA promulgate regulations specifically permitting certain health-related claims on human foods.⁵⁴ By incorporating the philosophy of the NLEA, CVM attempts to allow “meaningful health information on pet foods.”⁵⁵ Thus, the CVM now permits such claims as “reduces urine PH to help maintain urinary tract health” and “helps control plaque”⁵⁶

To illustrate how the CVM evaluates such claims, consider their recent decision regarding hairball control claims. The CVM stated that they would not likely take regulatory action for a hairball control claim on cat food

⁵¹Linda Bren, *Pet Food; The Lowdown on Labels*, FDA Consumer Magazine May-June 2001.

⁵²*Id.*

⁵³David A. Dzanis, *Interpreting Pet Food Labels—Part 2: Special Use Foods*, FDA Veterinarian, Volume XIV, No.1 (1999).

⁵⁴Benz, *supra* note 23.

⁵⁵*Id.*

⁵⁶Bren, *supra* note 51.

provided the effect is achieved by ingredients already permitted for use in cat food, such as fiber sources. In this case we ask that the firm submit information for review on the quantitative diet formulation, nutrient analysis, and labeling, and discussion for the basis of the claim, i.e. scientific studies or common knowledge of ingredients' biological properties. If novel ingredients are used to achieve the effect, then we believe data demonstrating the ingredient's safety should be obtained prior to marketing.⁵⁷

The omission of a request for proof that the food has undergone testing for effectiveness is striking.

One could claim that the CVM's requirements appear adequate, especially considering the number of health claims that appear on human foods. Cereals, oatmeals and dairy products have all begun aggressive advertising campaigns championing the health benefits of their products. However, arguably the impact of pet food health claims on pet owners is significantly different from the impact of a health claim on a human food. To demonstrate, think back to the number of news stories surrounding 2005's study of the effect of dairy products on dieting. Countless accounts of the study were discussed on television, in the newspaper, and in various editorials across the nation. Now consider the amount of news coverage allocated to hairball control in cats. Zero. Thus, while humans are relatively informed and exposed to different views regarding the accuracy of health claims on their own foods from the glut of scientific studies advertised and discussed in the daily media – such studies, if even reported, are uncommon in the case of pet foods. The absence of information necessary to allow informed decisions requires that pet owners rely on more effective regulation of the health claims made on pet foods. Yet, under CVM's aforementioned relatively scant requirements, it appears pet owners receive less regulation, not more.

C. AAFCO

1. Overview of AAFCO

The FDA chose to fulfill Congress' mandate of pet food regulation through cooperative agreements and partnerships, rather than forming its own binding regime of rules and regulations. One such agreement exists with the Association of American Feed Control Officials (AAFCO). As the FDA explains "continued partnership with AAFCO is vital to the continued regulation of pet food products because FDA has limited enforcement resources that are focused on human food safety issues."⁵⁸ In other words, because the FDA, like most regulatory agencies, is understaffed and overworked, they are forced to rely on another organization for the majority of pet food regulation. It is important for pet owners to recognize that the FDA has made a choice: to focus its attention on human foods, and leave the pet foods to someone else.

The origin of AAFCO asserting its role in this area remains unclear.⁵⁹ Early animal feed regulation consisted of laws governing only the weights and measures of the feeds.⁶⁰ These early forms of regulation were not in place to protect the animal, but rather the consumer from a deceptive merchant.⁶¹ Later, when feeds were made with ground grains, fats and protein, rather than the traditional whole grains, consumers needed additional regulation to ensure the new feeds met certain standards.⁶²

⁵⁸Benz, *supra* note 23.

⁵⁹AAFCO's authority is not limited to pet foods. AAFCO has established feed ingredient definitions and model regulations for livestock feed as well. Information regarding the allocation of AAFCO's resources to pet food v. livestock feed is not available. However, the scope of this paper is limited to AAFCO's role in pet food regulation.

⁶⁰Association of American Feed Control Officials, *Official Publication 73* (2006) [hereinafter AAFCO].

⁶¹*Id.*

⁶²*Id.*

Feed control officials first met as an organized committee in 1909.⁶³ The committee's objectives included: answering the industry's questions with composite opinions, preparing a uniform feed bill, formulating definitions and regulations, the acceptance of new feed ingredients and establishing labeling requirements.⁶⁴ Today, AAFCO claims that protecting the consumer remains its primary goal.⁶⁵ Yet by falling under the overwhelming influence of the \$13 billion pet food industry, AAFCO turns a blind eye to dangerous ingredients and the vagaries of the manufacturing process in general.

AAFCO's members include state and federal officers charged with promulgating and enforcing animal feed regulations, heads/chiefs of agriculture departments and labs, feed examiners and state and federal researchers.⁶⁶ AAFCO does have some ties to the FDA: an FDA representative serves on AAFCO's board of directors and staff from the CVM serve on AAFCO committees and as investigators.⁶⁷ AAFCO issues model regulations for animal feed, cat and dog food, and exotic pet foods.⁶⁸

AAFCO has no enforcement authority and does not perform any analytical testing on pet food.⁶⁹ A pet food manufacturer is only required to comply with the pet food regulations of the state in which it manufactures or sells its products.

In relation to its responsibilities regarding pet foods, AAFCO sets model regulations for pet foods including labeling requirements, ingredient definitions and nutritional requirements. But AAFCO does not determine permissible *sources* of protein or other essential nutrients – AAFCO's only requirement is that the manufacturer comply with AAFCO's extensive list of ingredient definitions. This means that a pet food manufacturer could use rubber tires as its main source of protein so long as the manufacturer is able to list

⁶³*Id.*

⁶⁴*Id.*

⁶⁵*Id.*

⁶⁶*Id.* at 66.

⁶⁷Benz, *supra* note 23.

⁶⁸The term exotic pets excludes dogs and cats and is typically used to refer to ferrets, fish, birds, hamsters, guinea pigs and other animals commonly kept as pets.

⁶⁹Ann N. Martin, *Food Pets Die For: Shocking Facts about Pet Food* 85, (NewSage Press 1997).

this ingredient as one of the “approved” AAFCO ingredients discussed in Section III.C.4 below . In addition, AAFCO establishes nutrient profiles for pet foods and protocols for feeding trials. If a pet food manufacturer wishes to claim that its product is nutritionally adequate, then the manufacturer must comply with either AAFCO’s nutrient profiles, feeding trial requirements, or formulate a product that consists of substantially similar components to another food that has already passed an AAFCO feeding trial.⁷⁰

2. AAFCO Members

As noted above, AAFCO members include officials from the FDA, CVM, and the cooperative states. But AAFCO also consists of members from the pet food manufacturing industry. In 1994, the AAFCO Official Publication listed a group of members charged with developing and reviewing standards for terms found on pet food labels. Of the group’s six members, four were pet food company employees.⁷¹ Discovering who works for pet food companies has become more difficult since 1994. But a close look at the current AAFCO Official Publications reveals continued influence by the pet food industry over the regulation of their own products. While the listings of committee members in the Official Publication do not reveal any organizational affiliation, the listings of committee *advisors* do provide such information. These committee advisor listings are polluted with industry members. In 2006, the Pet Food Committee Advisors consisted of twelve people.⁷² Six of these advisors were associated with pet food industry organizations such as the Pet Food Institute or the American Pet Products Manufacturers Association.⁷³ This board of twelve directly “advises” the Pet Food Committee which consists of only seven members.⁷⁴ Apparently it takes twelve

⁷⁰ See AAFCO, *supra* note 60, at 124-26. See *infra*, Section III(C)(3), for a detailed discussion of AAFCO’s feeding trial requirements.

⁷¹ William D. Cusick, *Who Regulates the Pet Food Industry*, The Animal Advocate available at: <http://home.att.net/~wdcusick/03.html>. According to Cusick, the employees and their respective pet food employers were: Ken Johannes, Hill’s Pet Products Inc.; Dan Chauslow, Westreco, Inc.; Dave Bebiak, Ralston Purina Co.; and Mark Finke, Alpo Petfoods, Inc.

⁷² AAFCO, *supra* note 60, at 16.

⁷³ *Id.* See *infra*, Section III.(E) & (F) for a discussion of the Pet Food Institute and the American Pet Products Association.

⁷⁴ AAFCO, *supra* note 60, at 11.

people to advise a committee of only seven. Similar infiltration of industry members on the advisor lists can be found on the Model Bill and Regulations Committee, the Inspection and Sampling Committee, the Feed Manufacturing Committee and the Feed Labeling Committee. Remembering that this is a \$13 billion industry, the incentives for improving food ingredients or general regulations are not best served by allowing industry employees to influence the committees that write the regulations. As one frustrated veterinarian put it: “talk about the fox guarding the henhouse.”⁷⁵

The argument that advising committees serve strictly as “lobbyists” to the AAFCO officials charged with writing the model regulations ignores the reality that a non-profit organization such as AAFCO does not have sufficient resources or time to conduct its own research or seek opposing viewpoints. AAFCO issues model regulations and ingredient definitions for pet foods and livestock feeds. There are approximately 9 billion chickens, 60 million hogs, and 150 million cattle in this country that subsist on domestically produced feeds requiring regulation and oversight.⁷⁶ Already not a priority for the FDA, pet foods must compete with the livestock industry and its billions of animals for AAFCO’s limited time and resources. With the multi-billion dollar pet food industry heavily represented among the lobbying contingency, consumers and the few veterinarians educated in animal nutrition stand little chance of influencing the feed control officials.

3. Feeding Trial and Nutrient Requirement Regulations

To regulate claims of nutritional adequacy, AAFCO established pet food nutrient profiles and feeding trial methods. A manufacturer does not have to comply with both the profiles and testing methods before selling its product. Because the pet food industry found the feeding trials too expensive and restrictive, AAFCO

⁷⁵Douglas Knueven DVM, *The Five Supplements Every Dog Needs*, Clean Run Magazine, Vol. 11 #12.

⁷⁶See the Economic Research Service from the United States Department of Agriculture. Statistics represent 2004 production taken from newsroom and briefing room reports available at <http://www.ers.usda.gov/briefing/hogs/> and <http://www.ers.usda.gov/news/BSECoverage.htm> and <http://www.ers.usda.gov/News/broilercoverage.htm>.

adopted Regulation PF7.⁷⁷ Regulation PF7 states that if the manufacturer intends to represent that its food is nutritionally complete (“complete and balanced,” “100% nutritious,” “perfect,” etc.) they need comply with only *one* of the following: establish that the product’s formula meets the nutrient requirements of the applicable nutrient profile, complete an AAFCO recognized animal feeding protocol, or establish that the product is nutritionally similar to the lead product in the same product family. If a manufacturer intends to rely on the product family method, they must also establish that the family product “meets criteria for all life stages” and that the nutritional similarity can be substantiated according to procedures established by AAFCO.⁷⁸ Thus, the options provided under PF7 allows a manufacturer to make nutritional adequacy claims by performing something as simple as a standard chemical analysis proving that its product formulation meets the AAFCO nutrient profiles.⁷⁹

AAFCO’s nutrient profiles are based on those created by the National Research Council Committee on Animal Nutrition (hereinafter “NRC”).⁸⁰ The NRC establishes minimum nutrient requirements for growth based on diets with extremely high digestibility, yet AAFCO modified the NRC profiles for practicality purposes. “Values for specific nutrient requirements were added or modified. . . supported by recent scientific publications, practical experience, and *unpublished data*.”⁸¹ In other words, AAFCO believes that an organization with close ties to the pet food manufacturing industry is sufficiently qualified to alter nutrient profiles created by NRC scientists. One example of AAFCO’s tinkering is the reduction in the amount of recommended protein from 22% to 18% for adult maintenance in dogs.⁸² Considering that protein is among the most expensive ingredients in pet foods, it’s worth questioning AAFCO’s motivation behind these “practical” alterations. According to a veterinarian within CVM, “the formulation [testing] method does not account

⁷⁷Animal Protection Institute, *What’s Really in Pet Food*, available at <http://www.api4animals.org/facts?p=359&more=1> [hereinafter API].

⁷⁸AAFCO, *supra* note 60, at 124.

⁷⁹API, *supra* note 77.

⁸⁰AAFCO, *supra* note 60, at 131.

⁸¹*Id.* emphasis added.

⁸²*Id.* at 133.

for...the *availability* of nutrients.”⁸³ Meaning, that although the formulation physically contains protein, the testing does not ensure that such protein is digestible (and therefore available) by your pet.

As an alternative to formulating a product in accordance with AAFCO’s nutrient profiles, a manufacturer wishing to claim the nutritional adequacy of its food may conduct feeding trials in accordance with AAFCO standards. The trials for dog and cat foods are relatively similar. Each requires a minimum of eight animals and the trial must last 26 weeks.⁸⁴ The same formulation of food must be fed throughout the trial, although different production batches may be used.⁸⁵ AAFCO permits up to 25% of the animals starting the study to be removed from the study for “non-nutritional reasons or poor food intake.”⁸⁶ Data recorded from the dispatched animals does not have to be included in the final reports.⁸⁷ Finally, even if an animal loses 15% of its initial body weight throughout the course of the trial, the feeding trial is still considered a success.⁸⁸ It is worth recognizing that there are no limits to the amount of weight an animal can *gain* during the trial. This is how AAFCO assures consumers that the pet food label exclaiming “nutritionally adequate!” managed to sustain eight dogs for an entire six month period. Growth food testing is similar to maintenance food testing, except that growth food testing need only run for 10 weeks.⁸⁹ Never mind that most pet foods designed for growth recommend feeding such formulas for the first 49 to 52 weeks of the animal’s life.⁹⁰

Manufacturers disagree as to which method, animal testing or nutrient profiles, is superior.⁹¹ Realistically,

⁸³Knueven, *supra* note 75. The failure of AAFCO to consider the digestibility of protein sources used in pet foods bothered the American Animal Hospital Association and the American Veterinary Medical Association to such an extent that the two groups proposed independent testing of pet foods. However, AAFCO agreed to revise its standards to include procedures showing the digestibility of a pet food’s nutrients. See John Eckhouse, *Why Pet Food Labels Baffle Most Consumers*, The San Francisco Chronicle, Feb. 20, 1990 at B1. However, a thorough review of the AAFCO 2006 Official Publication revealed no mention of a requirement that foods bearing nutritionally “complete” claims prove the digestibility of their nutrients.

⁸⁴AAFCO, *supra* note 60, at 147.

⁸⁵*Id.* See *infra*, Section IV(B) which shows that due to the rendering practice, different production batches contain different sources of protein and varying amounts of potentially harmful substances.

⁸⁶AAFCO, *supra* note 60, at 148.

⁸⁷*Id.*

⁸⁸*Id.*

⁸⁹*Id.* at 151.

⁹⁰See Iams Kitten Food, which suggests feeding its growth formula for the first 49 weeks of the feline’s life. Purina Kitten Chow encourages exclusive feeding of their growth formula for the first year.

⁹¹Dzanic, *supra* note 53.

both methods have shortcomings. The nutrient profile method does not test nutrient bioavailability in the same way as the “feeding test” method. Nor does it test the palatability of the foods. In contrast, the “feeding test” method doesn’t always test the actual product sold. Because of the AAFCO “family member” rule, products that are nutritionally similar to other products tested under the “feeding test” method do not need to be tested themselves.⁹² Since these family member products aren’t directly tested, they suffer the same problems as those undergoing the nutrient profile method: uncertain nutrient bioavailability and palatability.⁹³

4. Label Regulations

To understand the impact of the gaps in pet food regulation, it is necessary to review AAFCO’s labeling requirements in detail. To comply with AAFCO Regulation PF2, “Label Format and Labeling,” a manufacturer must list their name and address, brand name, product name, quantity statement, species statement (specifying for which species the food is intended), guaranteed analysis, ingredient statement and, if required, a statement of nutritional adequacy and feeding directions.⁹⁴ While this sounds like a comprehensive list of requirements, in reality it proves quite fallible. For example, the listing of the ingredient statement is not as straight forward as the moniker implies. “Federal regulations require ingredients be listed on the product label by their common or usual name in descending order of predominance according to weight. A common or usual name is one that accurately identifies or describes the basic nature of the ingredient.”⁹⁵ The FDA recognizes only the AAFCO ingredient definitions as the “common or usual name.” Thus, if an ingredient is not recognized by AAFCO, then it has no AAFCO ingredient definition and no common or usual name,

⁹² See Reg. PF7(c)(1)(C). AAFCO, *supra* note 60, at 125.

⁹³ Dzanis, *supra* note 53.

⁹⁴ Regulation PF2. AAFCO, *supra* note 60, at 119-20.

⁹⁵ Center for Veterinary Medicine, *supra* note 29.

thereby prohibiting use of the ingredient in pet food.

Such a requirement might seem logical, but consider Dr. Wysong's account of trying to include organic ingredients in his pet food. Because AAFCO's list of approved ingredients excludes "organic," attempting to label a pet food product organic requires "third party confirmations, affidavits, and proofs like those needed in some kind of criminal case."⁹⁶ Costly and time-consuming requirements such as these necessitate Dr. Wysong's listing of his organic ingredients as simply "meat." These organic products are then sold on the same shelf as a mass market pet food containing inferior ingredients such as chicken beaks and cow intestines, yet also labeled "meat."⁹⁷ AAFCO allows no distinction.

Some of the most common ingredients found on commercial pet food labels, such as meat meal and animal by-product meal, reveal almost nothing of their true nature through such cryptic, yet FDA approved, "common or usual" names. Meat meal is "the rendered product from mammal tissues, exclusive of any added blood, hair, hoof, horn, hide trimmings, manure, stomach and rumen contents *except in such amounts as may occur unavoidably in good processing practices.*"⁹⁸ Animal by-product meal is defined as "the rendered product from animal tissues, exclusive of any added hair, hoof, horn, hide trimmings, manure, stomach and rumen contents, *except in such amounts as may occur unavoidably in good processing practices.*"⁹⁹ Rendering, the melting down of animal parts, is discussed in detail below. But it is important to recognize that the AAFCO definition leaves much to be desired. Until AAFCO defines "good processing practices" in specific

⁹⁶Wysong, *supra* note 25.

⁹⁷Wysong, *supra* note 25, at 59. Dr. Wysong notes that not all food ingredients that have been approved by AAFCO are necessarily "beneficial" for your pet. Among the long list of questionable approved ingredients are dehydrated garbage, hydrolyzed hair, peanut skins and hulls, ground clam shells and poultry, cow and pig feces and litter. *Id.* at 8. While one has to wonder why on earth anyone would even consider putting such items into pet food, remember that pet food is often the outlet for the waste of large manufacturers. Conglomerates like Nestle and Mars Inc. don't produce just pet foods. As Wysong so aptly puts it "approved' ingredient regulations cannot be trusted. Banning nutritious natural ingredients and approving dehydrated garbage and feces makes it clear that the agenda of regulation is something different than encouraging optimal nutrition." *Id.* at 10.

⁹⁸See Ingredient Definition 9.40. AAFCO, *supra* note 60, at 259, emphasis added.

⁹⁹See Ingredient Definition 9.42. AAFCO, *supra* note 60, at 259.

terms, it takes little imagination to wonder how much hair and stomach contents are included in bone meals, considering the time and cost it would take to remove such items in mass quantities.

D. State Regulation

Each state, if it so chooses, has the power to enact its own regulation regime for pet food manufacturing in the form of Feed Control Laws, Food and Drug Acts, and Weights and Measures Acts.¹⁰⁰ If in place, such regulations apply to all foods sold or manufactured within the state. This includes foods sold in veterinary offices, feed stores and grocery stores.¹⁰¹ Many states simply adopt the AAFCO regulations in their entirety.¹⁰² Other states adopt parts of the AAFCO regulations while also enacting their own pet food regulations for labeling and ingredients. Massachusetts, for instance, adopted the AAFCO ingredient definitions in their entirety but enacted its own separate regulations for pet foods which contain some distinctions from AAFCO.¹⁰³ For example, the Massachusetts pet food regulations require that the labels of pet foods prominently display the words “Dog Food” or “Cat Food,”¹⁰⁴ but until recently the AAFCO regulations proposed no such requirement. Massachusetts also requires that all manufacturers register with the Department of Food and Agriculture prior to distributing commercial pet foods within the Commonwealth.¹⁰⁵ The Massachusetts regulations are fairly comprehensive and comparable to those of AAFCO, but not all states have

¹⁰⁰Hillestad, *supra* note 33.

¹⁰¹*Id.*

¹⁰²Over half of the states have adopted AAFCO’s model regulations. See Dr. J.C. Hofve D.V.M., *Pet Supplements: Can This Industry be Saved?*, available at http://www.critterchat.net/pet_supplements.htm.

¹⁰³See generally Mass. Regs. Code tit. 330 §13.00 (2006).. Massachusetts adopted the AAFCO ingredient definitions, but has separate provisions governing registration, labeling, brand and product names, expression of guarantees, ingredients, drugs and pet food additives, and statements of calorie content.

¹⁰⁴Mass. Regs. Code tit. 330 §13.03(6).

¹⁰⁵Mass. Regs. Code tit. 330 §13.02.

been so diligent. At least Florida, Alaska and Nevada have no pet food regulations at all.¹⁰⁶ Some states without specific pet food regulations consider pet food to fall within their general animal feed regulations.

107

E. Pet Food Institute

The Pet Food Institute (hereinafter “PFI”) serves as the “voice” of the U.S. pet food manufacturing industry.¹⁰⁸ Founded in 1958, PFI is “the industry’s public education and media relations resource, representative before the U.S. Congress and state and federal agencies, organizer of seminars and educational programs, and liaison with other organizations.”¹⁰⁹ Active members of PFI include every major pet food manufacturer in the country, from Natural Balance Pet Foods Inc. to Nestle Purina PetCare Company.¹¹⁰ PFI members constitute 97% of domestic pet food production.¹¹¹

PFI lists laudable goals on its website, such as supporting research in pet nutrition and informing and educating the public on proper pet feeding and care.¹¹² But one of its mandates also includes serving as the “voice” of the industry in front of the U.S. Department of Agriculture, FDA, FTC, AAFCO and Congress. Members of PFI such as Steve Wawrzyniak and Angele Thompson serve on AAFCO advisory boards including the Ingredient Definitions and the Pet Foods Committees.¹¹³ Surely an organization made up entirely of pet food manufacturers exists to promote its own interests, namely, opposing potentially costly legislation. Indeed, PFI claims to have been “instrumental” in opposing state legislation that would have imposed taxes

¹⁰⁶Hofve, *supra* note 102.

¹⁰⁷*Id.*

¹⁰⁸Pet Food Institute, *supra* note 26.

¹⁰⁹*Id.*

¹¹⁰*Id.*

¹¹¹*Id.*

¹¹²*Id.*

¹¹³AAFCO, *supra* note 60, at 15-16.

on pet foods.¹¹⁴ PFI cites this as a victory for the consumer, saving them from being “penalized.”¹¹⁵ But such a victory depends upon the purpose for which the tax dollars were intended. If the tax dollars were meant to provide increased resources for food sample testing and plant inspections, then perhaps this was simply a victory for an industry seeking to avoid stricter regulations. One has to wonder, if PFI is serving as the voice of the industry, who is serving as the voice of the consumer?

F. American Pet Products Manufacturers Association

The American Pet Products Manufacturers Association (hereinafter “APPMA”) also founded in 1958, consists of over 850 pet product manufacturers, importers and livestock suppliers.¹¹⁶ Unlike the PFI, the APPMA contains members from around the globe. This diverse group constitutes a not-for-profit trade association dedicated to promoting the pet products industry and providing “the services necessary to help its members prosper.”¹¹⁷ Such services consist of conducting its own research and holding education seminars and conferences which includes the Global Pet Expo, the largest annual pet industry trade show.¹¹⁸ APPMA also has its own Government and Regulatory Affairs Department, dedicated to identifying and responding to regulations and legislation.¹¹⁹

Similar to PFI, the APPMA places representatives on a variety of important AAFCO advisory committees.

Gina Valeri, the director of legislative affairs and general counsel to APPMA, is currently serving on the Pet

¹¹⁴Pet Food Institute, *supra* note 26.

¹¹⁵*Id.*.

¹¹⁶American Pet Products Manufacturers Association, *APPMA Backgrounder*, available at http://www.appma.org/about_backgrounder.asp [hereinafter AAPMA].

¹¹⁷*Id.*.

¹¹⁸*Id.*.

¹¹⁹*Id.*.

Food Advisory Committee as well as the Model Bill and Regulations Advisory Committee.¹²⁰

With so many regulatory bodies and non-governmental organizations attempting to participate in the process of regulating pet food it is no wonder that the resulting regime leaves gaping holes and allows confused consumers to buy shiny bags containing the equivalent of junk food for their pets. If the CVM will not, or cannot, fulfill its responsibilities regarding pet food and if AAFCO continues to lack enforcement power, then the industry has no one to fear except the consumer. Unfortunately for pets, the industry has proven effective at confusing their owners to the point of insuring that few consumers possess the information necessary to challenge the industry's shoddy practices.

IV. How Current Regulations Result in Confused Owners and Diseased Pets

Despite the overabundance of labeling requirements and regulations, the majority of commercial pet foods fail pets and their owners; the myriad of rules serving only as obstacles too easily cleared. While the American public buys bags of pet food plastered with appetizing pictures of chicken and fish, the contents themselves often contain anything but the chicken and fish we envision. This section reveals the true contents of most commercial pet foods, and proves that the current system of regulation is slowly killing our nation's pets via confusing labels, misleading ingredient names, and inadequate regulation of the manufacturing process. The final portion of this section discloses how the missteps of AAFCO and the industry result in malnourished

¹²⁰AAFCO, *supra* note 60, at 16. I.J. Shenkir is also listed on these AAFCO committees, but his exact role in the APPMA could not be determined. *Id.*

pets suffering from a variety of diseases.

A. Confusing the Consumer at Every Turn

1. Pet Food Labels

Although AAFCO's labeling requirements appear modest, the complexities of the rules, such as the different "percent" rules, often result in confusion over the product's ingredients. Consider the "95 percent" rule and the "3 percent" rule. The "95 percent" rule applies to products that primarily consist of meat, poultry or fish.¹²¹ The rule requires that if an ingredient is to be used in the name of the product, such as "Beef for Dogs" then the named ingredient must constitute at least 95% of the product.¹²² Seems simple enough. Compare the "3 percent" rule; originally the 3 percent rule applied only to ingredients highlighted on the food container, but not included in the name of the product.¹²³ Under the "3 percent" rule if the manufacturer wished to include a side statement of "with cheese" then at least 3% of the product must contain cheese. However, recent amendments to AAFCO regulations now permit manufacturers to use "with" as part of the product name. The result? It is now perfectly legal for a manufacturer to name a product "Cat Food with Tuna" even if the product only contains 3% tuna. Even more confounding, this product sits on the grocery shelf next to a product named "Tuna Cat Food" which consists of 95% tuna.

After navigating the 95% rule and the 3% rules, the consumer then faces the perplexing 25% rule, or the "dinner" rule. A manufacturer wishing to include an ingredient name in its product name (i.e. "Chicken

¹²¹David A. Dzanis, *Interpreting Pet Food Labels – Part 1: General Rules*, FDA Veterinarian Newsletter Vol. XIII, No. VI (1998).

¹²²AAFCO, *supra* note 60, at 120.

¹²³Dzanis *supra* note 121.

Formula Cat Food”) must comply with the 25% rule, which requires that the ingredient constitute at least 25% of the product (excluding water for processing) and that the label include a qualifying descriptive term such as “dinner” or “formula”.¹²⁴ The purpose of the descriptive term is to imply to the consumer that the product contains other ingredients.¹²⁵ Confusion arises due to the fact that the “named” ingredient on the label can constitute as little as one quarter of the ingredients. Moreover, such a rule permitting the product name to include something other than the *primary* ingredient results in a confusing ingredient list. It is perfectly plausible that a consumer will find that “Beef Dinner for Dogs” lists beef as the third or fourth ingredient on the list, after corn, grain, and rice.¹²⁶ The results are even more perplexing when one considers the fact that “Chicken Formula Cat Food” could contain salmon or beef or liver as its primary ingredient. Since many pet owners do not understand pet food labels,¹²⁷ this 25 percent rule can have damaging results if a pet has an allergy to any of these ingredients. For example, the owner of a cat with a lamb allergy could feasibly purchase Chicken Formula under the logical assumption that the product contained only chicken. But under AAFCO’s rules, it is permissible for a product labeled Chicken Formula to contain 25% chicken, and 50% lamb or beef or fish.

Past the product name, the consumer must decipher the nutritional adequacy statements found on labels indicating for which life stages the product is suitable. Examples include “for maintenance,” “for growth,” and “for all life stages.” While the “for maintenance” and “for growth” claims must meet strict nutritional AAFCO standards, the labels claiming that a product is intended for “senior” animals or specific breeds of dogs have no such requirements.¹²⁸ The result is that a consumer buying a dog food “for seniors” could be

¹²⁴See PF3, Brand Name and Product Names. AAFCO, *supra* note 60, at 120-21.

¹²⁵One has to wonder how many consumer perceive this implication when they read the word “dinner” on a bag of pet food.

¹²⁶Dzanic, *supra* note 121. Recall from above that AAFCO Regulation PF5(a)(2) requires the listing of ingredients in order of predominance by weight. AAFCO, *supra* note 60, at 123.

¹²⁷A recent survey of 200 pet owners shows that while most read ingredient lists and health claims, the information is virtually meaningless to the average consumer who has no knowledge of AAFCO’s labeling rules. The survey, conducted at various Pet Supplies Plus stores in the Pittsburgh, PA area, revealed that although 79% of those surveyed read the label, only 17% grasped what the ingredient list was telling them about protein content.

¹²⁸Dzanic, *supra* note 121.

buying something that is either exactly the same formula as the “for maintenance” product at a higher price, or even worse, something that is of a lesser quality and actually accelerates the onset of related maladies such as arthritis and hip dysplasia.

2. Ingredient Names

All ingredients must be listed according to AAFCO’s “common or usual” names; labels list “poultry meal,” “meat meal,” and “animal by-product meal” as ingredients, rather than poultry guts, feet and beaks. These common and usual names leave consumers asking: what the heck are meals and by-products? Are they good or bad for pets? Are some of them better than others?

According to the AAFCO ingredient definitions, poultry meal is “the dry rendered product from a combination of clean flesh and skin with or without accompanying bone, derived from the parts of whole carcasses of poultry...exclusive of feathers, heads, feet and entrails.”¹²⁹ Notice this definition says nothing about the muscle of the poultry; thus, “chicken meal” does not necessarily contain even an ounce of chicken meat as conceptualized by humans.¹³⁰ Meat meal is “the rendered product from mammal tissues, exclusive of any *added* blood, hair, hoof, horn, hide trimmings, manure, stomach and rumen contents except in such amounts as may occur unavoidably in good processing practices.”¹³¹ Animal by-product is “the rendered product from animal tissues, exclusive of any *added* hair, hoof, horn, hide trimmings, manure, stomach and rumen contents, except as may occur unavoidably in good processing practices...this ingredient definition is intended to cover those individual rendered animal tissue products that cannot meet the criteria as set forth elsewhere in this section.”¹³² Thus far, we know that each of these ingredients comes from an animal,

¹²⁹Feed Ingredient Definition 9.71. AAFCO, *supra* note 60, at 262.

¹³⁰Kathie Jenkins, *Pet food special; It's on the Bag*, LA Times, June 22, 1995 at H23.

¹³¹Feed Ingredient Definition 9.40. AAFCO, *supra* note 60, at 259, emphasis added.

¹³²Feed Ingredient Definition 9.42. AAFCO, *supra* note 60, at 259, emphasis added.

but what parts of the animal are actually “rendered” and therefore comprise these meal and by-product ingredients? Only about 50% of every food producing animal is used in human foods.¹³³ All components not ingested by humans (bones, blood, intestines, lungs, ligaments etc.) are used in pet foods, animal feed, and other products.¹³⁴

However, before we blame the pet food industry for selling our pets these rejected parts in glossy packages adorned with pictures of wholesome chickens (which arguably constitutes misbranding under the FFDCFA),¹³⁵ consider that by-products might be good for your pet. The heart, liver, lung and brain of animals are considered high quality food ingredients by animal nutritionists.¹³⁶ Furthermore, a cat or dog in the wild most certainly eats these “by-products” every time it consumes its meals. A wild cat doesn’t selectively remove the meaty muscle parts of the mouse while carefully discarding the bones and liver.

Unfortunately, also included in these “other parts” are the so-called 4D tissues, or “meat that came from animals that were dead, dying, diseased or disabled before they reached the packing plant.”¹³⁷ Such animals are rejected for human consumption and shipped to rendering plants where they are made into bone and meat meals.¹³⁸ More importantly, the inclusion of such tissues in pet foods violates the FFDCFA. Such items are diseased and therefore “adulterated” under 21 U.S.C. § 342.¹³⁹ So why doesn’t the FDA bring an enforcement action for the industry’s blatant violation of the FFDCFA? Most likely, the pet food industry uses such ingredients because they are cheap and while consumers remain oblivious to the inclusion of these diseased ingredients into their pets’ foods, the industry faces no opposition. Until the FDA feels external

¹³³API, *supra* note 77.

¹³⁴*Id.*

¹³⁵*See* 21 U.S.C. §343 (2006) which states that any food bearing a false or misleading label shall be deemed a misbranded food. If placing a picture of a plumb chicken on a bag of food containing only chicken beaks is not misleading, then it is at least a violation of AAFCO Model Regulation PF2(c), which requires that a graphic or pictorial representation on a pet food label not misrepresent the contents of the package. *See* AAFCO, *supra* note 60, at 119-20.

¹³⁶Burton Patrick, *Complete and Balanced Pet Food?*, Pet Supplies “Plus” January Newsletter *available at* www.petsuppliespluspittsburgh.com.

¹³⁷Eckhouse, *supra* note 83.

¹³⁸*Id.* *See* 21 U.S.C. §644 (2006) which prohibits the purchase or sale of 4D animals unless such transaction complies with regulations promulgated by the Secretary of Agriculture to ensure that the 4D animals will be prevented from being used for human foods.

¹³⁹*See* 21 U.S.C. §342 (2006).

pressure, either from consumers or the industry itself, the FDA lacks incentive to enforce its own regulations. Comparatively, the FDA stringently enforces its human food regulations where it faces informed and vocal consumers and industries fearful of negative publicity.

Beyond the issue of the quality of the ingredients is the processing of the “meat and bone meals” themselves. Dr. Wysong, a veterinarian who has researched pet foods extensively and produces his own pet foods, notes that “processing is the wild card in nutritional value. . .”¹⁴⁰ This is because the nutritional quality of meat and poultry by-products, meals and digests can vary from batch to batch due to the inconsistency of the raw materials used by rendering plants.¹⁴¹ Even assuming that the by-products possess nutrients pets need, there is no proof that modern pets are able to digest these ingredients after the harsh rendering and cooking processes.¹⁴² Thus, there is no proof that pets are able to obtain any nutrients from these cooked ingredients. Furthermore, rendering does not necessarily destroy the hormones fed to livestock or the antibiotics, drugs, and even barbiturates used to euthanize animals.¹⁴³ Over time defenseless Fido ingests a significant amount of antibiotics and euthanization drugs. It doesn’t take a veterinarian to conclude that the presence of such “extras” can’t be good for your pet. It is important to recognize that AAFCO’s “common or usual name” regulations hide the truly dangerous components of your pet’s diet in benign sounding ingredients such as “meat meal” and “animal by-product.”

Finally, listed after the protein sources and grains are the “chemical-sounding” names which are, incredibly,

¹⁴⁰API, *supra* note 77 quoting Dr. Wysong. Another reason processing is considered the “wild card” is because many forms of processing used by pet food manufacturers reduce the nutritional value of the original raw materials through extreme cooking temperatures. Nevertheless, such harmful processing persists because cooking increases the digestibility of grains – a substantial component in today’s pet foods. In his book, *The Truth about Pet Foods*, Dr. Wysong notes that cold processing is the only form of processing that does not destroy important raw natural food attributes. Wysong, *supra* note 25, at 111.

¹⁴¹API, *supra* note 77. Rendering plants fill up their rendering vats with whatever raw materials arrive, they do not carefully distribute the 4D animals, for example, between several different vats throughout the week. This means that by-product meals produced on any given day can contain higher quality protein than a by-product meal produced two days later if the latter rendering vat contained mostly 4D animals.

¹⁴²As two professors from the University of California at Davis Veterinary School of Medicine explained, “there is virtually no information on the bioavailability of nutrients for companion animals in many of the common dietary ingredients in pet foods.” API, *supra* note 77.

¹⁴³*Id.*

the “common or usual” names for vitamins and minerals, as well as artificial colors and preservatives.¹⁴⁴ Such ingredients are technically food additives that require pre-market approval under the FFDCA.¹⁴⁵ However, the definition for food additives provides that any substance generally recognized as safe (GRAS) under the condition of its intended use, is not a “food additive” and therefore is exempt from pre-market approval.¹⁴⁶ But a “GRAS substance is GRAS only for an intended purpose”¹⁴⁷ and the GRAS determination can only be made based on the views of “experts qualified by scientific training and experience to evaluate the safety of the substance.”¹⁴⁸ An example of one such GRAS substance is propylene glycol, commonly used in soft-moist pet foods for its ability to retain water and provide the semi-moist foods with their unique texture.¹⁴⁹ Propylene glycol is a second cousin to anti-freeze (a substance that is extremely toxic to pets),¹⁵⁰ and propylene glycol is known to cause Heinz Body formation, or the clumping of proteins, in the red blood cells of cats.¹⁵¹ However, for years there was no evidence that Heinz Body formation caused anemia or any other recognizable clinical effect.¹⁵² But recent studies show that propylene glycol “reduces the red blood cell survival time, renders red blood cells more susceptible to oxidative damage, and has other adverse effects in cats.”¹⁵³ In response, the CVM prohibited the use of propylene glycol in cat foods. A strong response, but for many pets and owners the damage is already done. A dangerous, yet GRAS, substance remained in cat foods for 15 years, causing countless health problems and costly vet bills to owners.¹⁵⁴ Dog owners should not rest easy, as the debates over ethoxyquin, an antioxidant chemical preservative, continue despite being

¹⁴⁴Dzanic, *supra* note 121.

¹⁴⁵Benz, *supra* note 23.

¹⁴⁶21 U.S.C. §201 (2006).

¹⁴⁷Benz, *supra* note 23.

¹⁴⁸*Id.* Before a substance can be GRAS, two requirements must be met. First, there must be an expert consensus that the substance is safe for use as a component of food. Second, the expert consensus must be based on either a)generally available data and information showing common use of the substance prior to 1958 or b)scientific procedures requiring the same quantity and quality of scientific data needed for FDA approval of the substance as a food additive. The scientific procedures and data must be published in scientific literature. Dzanic, *supra* note 121.

¹⁴⁹Dzanic, *supra* note 121.

¹⁵⁰Martin, *supra* note 69, at 85.

¹⁵¹Dzanic, *supra* note 122.

¹⁵²*Id.*

¹⁵³*Id.*

¹⁵⁴Martin, *supra* note 69, at 85.

linked to allergies, organ failure, cancer and behavioral problems.¹⁵⁵

B. The Rendering Industry – Exposing Pet Food Processing

The processing of many ingredients used in pet foods, a practice known as rendering, adds another layer of complexity to the confusion surrounding the common or usual names found on pet foods. By including the word “rendered” in the official ingredient definitions of such items as meat and bone meal, AAFCO has approved the rendering industry’s participation in the manufacturing of pet foods. But if AAFCO intends to permit the inclusion of rendered products in pet foods, they bear the responsibility of assuring pet owners that such ingredients will not harm their pets. This section shows that such assurance is not provided, and that the FDA, AAFCO, and rendering industry share the blame.

Webster’s dictionary defines rendering as “to extract by melting; to treat so as to convert into industrial fats, oils or fertilizer.”¹⁵⁶ Basically, rendering separates the fat soluble ingredients from water soluble and solid materials.¹⁵⁷ The process kills most bacterial contaminants, but the valuable natural enzymes and proteins contained in the raw materials are also destroyed or altered.¹⁵⁸

Rendering dates back to the days of the early Egyptians, but today it has been reduced to operating in the “shadows of polite society.”¹⁵⁹ The rendering process begins with a large machine slowly grinding a vat of raw materials.¹⁶⁰ After the materials are shredded, they are cooked at 220 degrees F to 270 degrees F.¹⁶¹

¹⁵⁵Dzanic, *supra* note 122. While the FDA permits the use of ethoxyquin in dog foods as a preservative, on August 14, 1997 the FDA issued a request to the industry that the levels of ethoxyquin be voluntarily reduced to a level of 75 parts per million (ppm). Prior to the CVM issuing this request, ethoxyquin had been permitted at levels up to 150 ppm. See CVM Update, *FDA Requests that Ethoxyquin Levels be Reduced in Dog Foods*, available at <http://www.fda.gov/cvm/CVM.Updates/dogethox.html>.

¹⁵⁶Merriam Webster’s Collegiate Dictionary 990 (10th ed. 1996).

¹⁵⁷API, *supra* note 77.

¹⁵⁸*Id.*

¹⁵⁹Sandra Blakeslee, *Fear of Disease Prompts New Look at Rendering*, N.Y. Times, March 11, 1997 at C1.

¹⁶⁰Martin, *supra* note 69, at 50-51.

¹⁶¹*Id.* at 51.

Cooking times vary depending on the raw materials and their intended use.¹⁶² Once the material is cooked, the grease rises to the top where it is removed and used as a source of fat in pet foods, soaps and personal care products.¹⁶³ The moisture is eliminated from the remaining material by putting it through a press, and the finished product is sold to pet food manufacturers as meat and bone meal.

What goes into the rendering vat? The pet food (and rendering industry for that matter) would have consumers think the rendering plants are full of plump chickens, fresh fish and healthy cows. Such images are routinely depicted on pet food packaging. Unfortunately, this couldn't be less accurate of the true contents of a rendering vat. In fact, rendering persists because it provides an essential service: disposing of millions of pounds of dead animals.¹⁶⁴ Proponents of rendering claim that there is no other way to dispose of these dead animals. Dr. William Heuston, formerly associate dean of the Virginia-Maryland College of Veterinary Medicine, argues that disposing of animals via landfills would create a "colossal public health problem," because dead animals are the ideal medium for bacteria.¹⁶⁵ Cost and potential air pollution problems preclude burning the animal carcasses.¹⁶⁶

Instead, United States rendering companies pick up 100 million pounds of "waste material" every single day. This "waste material" includes: heads, feet, stomachs, intestines, spinal cords, tails, restaurant grease, feathers, bones, and dead or diseased animals rejected from slaughterhouses.¹⁶⁷ Remember that under FDA and USDA regulations half of every cow and at least one third of every swine is not consumable by humans.

¹⁶² *Id.*

¹⁶³ *Id.*. The rendering industry considers this fat to be extremely beneficial to pets for several reasons: providing high energy density at a low cost, improving palatability and appearance (that stench you smell when you first open a bag of dog food is attributable to the use of fat to make the puffed up nuggets of food tasty for your pet), improving pets coats. More noteworthy, is that the list of benefits attributable to the use of these rendered fats in pet food manufacturing includes several items that have absolutely nothing to do with the health of the pet. Among these are reducing "dustiness" of pet foods, reducing transportation costs, and reducing wear on machinery. From this, it is fair to conclude that pet owners are supposed to be thankful that their bag of pet food is cheaper and less dusty, despite the fact that their pet is eating food covered in grease in order to make it palatable. See Tim Philips DVM, *Rendered Products Guide*, PetFood Industry Magazine, Volume 36, Number 1 (1994).

¹⁶⁴ Blakeslee, *supra* note 159.

¹⁶⁵ *Id.*

¹⁶⁶ *Id.*

¹⁶⁷ *Id.* See also Martin, *supra* note 69, at 49.

Cancerous tissue, tumors, contaminated blood, injection sites and any tissues treated with a substance not permitted by or in excess of FDA or EPA limits is also rendered.¹⁶⁸ The inclusion of such items in pet food violates the FDA's requirement regarding unadulterated food. Recall that foods containing "any part of a diseased animal" is deemed adulterated.¹⁶⁹ With an understanding of the rendering process and its ingredients, it is then unclear how AAFCO (and thereby the FDA) approves ingredients such as meat and bone meal for use in pet foods.

In addition to the "waste material," six to seven million dogs and cats killed every year in animal shelters make their way into rendering vats.¹⁷⁰ The city of Los Angeles alone sends 200 tons of dogs and cats to a local rendering firm every month.¹⁷¹ Road kill that is too large to be buried roadside, expired grocery store meats, and dead zoo animals are also thrown into the mix.¹⁷² Recall from the discussion of the AAFCO ingredient definitions that meat and bone meal must exclude hair and stomach contents "except as may occur in good manufacturing processes."¹⁷³ Considering that a 40 lb bag of dog food costs only \$15-\$17, that price cannot possibly cover the amount of time necessary to remove all the hair and stomach contents from the thousands of diseased and euthanized animals thrown into the rendering vats, not to mention the Styrofoam and saran wrap packaging from expired grocery store meats.¹⁷⁴ In fact, it seems downright impossible. The rendering industry readily admits that meat wrappers are mixed in with its raw materials, their inclusion betrayed by the presence of polyethylene (used to make saran wrap) in rendered products.¹⁷⁵

¹⁶⁸Martin, *supra* note 69, at 50.

¹⁶⁹See 21 U.S.C. §342 which states that a food shall be deemed adulterated if it is, "in whole or in part, the product of a diseased animal or of an animal which has died otherwise than by slaughter." Furthermore, introducing or delivering adulterated food into interstate commerce is a prohibited act under the FFDC. 21 U.S.C. §331(a).

¹⁷⁰Blakeslee, *supra* note 159.

¹⁷¹*Id.*

¹⁷²Martin, *supra* note 69, at 25-26.

¹⁷³AAFCO, *supra* note 60, at 259.

¹⁷⁴The price of meat meal further supports the conclusion that AAFCO regulations regarding the removal of certain items are ignored. Meat and bone meal sells for as little as 12 cents (Canadian) a pound. Martin at 55. Moreover, one expert reasonably asks "can you imagine trying to remove the hair and stomach contents from 600,000 tons of dogs and cats prior to cooking them?" David C. Cooke, *Animal Disposal: Fact or Fiction*, Euthanasia of the Companion Animal, The Impact on Pet Owners, Veterinarians and Society 224 (Charles Press 1998).

¹⁷⁵While polyethylene melts at low temperatures, it does not stay soluble throughout the manufacturing process. This results in polyethylene sticking to the inside walls of pipes and flaking off while causing some blockages in soap manufacturing. See

Although pet food companies claim they don't buy meat and bone meal from rendering plants that accept cats and dogs, the rendering industry acknowledges it would be impossible for a manufacturer purchasing products from rendering firms to know the exact raw materials of what they're buying.¹⁷⁶ An employee of the rendering industry points out that cats and dogs can easily be included in chicken by-product meals because of the similar protein content.¹⁷⁷ Moreover, a rendering executive claims that Ralston purchased meat meal from his rendering facility for years, which included dogs and cats.¹⁷⁸ Although somebody at the rendering plant finally revealed the true contents of the meat meal, the industry executive is quick to point out that only Ralston stopped purchasing from them, implying that the facility continues relationships with other pet product manufacturers.¹⁷⁹

The exact proportion of cats and dogs to cows and pigs in any given rendered production batch is difficult to determine. One rendering company estimated that it "rendered somewhere between 10,000 and 30,000 pounds of dogs and cats a day out of a total of 250,000 to 500,000 pounds of cattle, poultry, butcher scrap and other materials."¹⁸⁰ Some states have attempted to establish precautions against this quasi-cannibalism. For example, California law requires that rendered dogs and cats be labeled as "dry rendered tankage," a product which is rarely used in pet food.¹⁸¹ However, due to the uncoordinated efforts of the pet food regulation system, such precautions are practically useless when pet food manufacturers operate on a national and often global scale. Consider that it is perfectly legal for tankage shipped outside of the state of California to be labeled as meat and bone meal.¹⁸² Moreover, California does not inspect meat and bone meals imported

Tim Philips D.V.M., *Rendered Products Guide*, Petfood Industry Magazine, Volume 36 Number 1.

¹⁷⁶ John Eckhouse, *How Dogs and Cats Get Recycled into Pet Food*, San Francisco Chronicle, Feb 19, 1990 at C1.

¹⁷⁷ *Id.*

¹⁷⁸ *Id.*

¹⁷⁹ *Id.*

¹⁸⁰ *Id.*

¹⁸¹ *Id.*

¹⁸² *Id.*

from outside the state.¹⁸³

While the rendering industry and even FDA officials defend the practice of rendering deceased pets as the most effective way to dispose of the animals and just another form of recycling,¹⁸⁴ it is telling that none of the celebrated “benefits” seem to include nutrition for our pets. In fact, the exact opposite appears to be true. Despite claiming that the “pets probably constitute a very small percentage of a day’s production at a renderer and an even lower percentage of the ingredients in a package of dry food,” the practice of the rendering industry (grinding the materials as soon as the vat is full) ensure that production batches vary significantly. Furthermore, although the actual percentage in each individual bag of pet food might be low – the industry ignores the impact of its promotion of feeding pets the exact same product every day, 2-3 meals a day for its entire life. How much, then, is a “small percentage” when considered cumulatively?

Although “most scientists say the high temperatures and pressures used in rendering kill any viruses and bacteria,”¹⁸⁵ this is not a risk that should be taken lightly. In 1996, an outbreak of paralysis in cats in Sweden and the Netherlands was traced to poultry intestines used in commercial pet foods. Since poultry livestock is often fed medications (overseas as well as in the US), the intestines contained all chemicals recently fed to the chickens, including Salinomycin which often causes severe heart problems in other animals.¹⁸⁶ Despite high temperatures and other cooking processes, the Salinomycin had not been sufficiently eliminated. Most alarmingly, sodium pentobarbital, the drug used to euthanize dogs and cats, has also proven resilient to the cooking process. A study done by veterinarians at the University of Minnesota proved that the drug survived

¹⁸³*Id.*

¹⁸⁴Lea McGovern, chief of the animal feed safety branch of the FDA states “the pets serve a viable purpose by providing foodstuff for the animal feed chain.” *Id.* But McGovern fails to note that dogs and cats are not necessarily inserted into the right portion of the food chain. Including dogs and cats in the rendered material results in livestock and domestic pets ingesting the rendered dogs and cats. What food chain is McGovern referring to that has cows, herbivores, eating dogs and cats? Or dogs and cats eating their own species? Nevertheless, a veterinarian and director of scientific services for a rendering trade group proudly declares, “we are the original recyclers.” Blakeslee, *supra* note 159 quoting Dr. Don A. Franco.

¹⁸⁵Eckhouse, *supra* note 176.

¹⁸⁶Tom Lonsdale, *Raw Meaty Bones* 97 (2001).

the rendering process.¹⁸⁷ Despite their conclusion that the amount of residue would be too small to have an impact on animals eating the rendered product, the veterinarians based this deduction on the assumption that renderers mix the euthanized pets with other ingredients throughout production.¹⁸⁸ The reality is that rendering companies mix whatever ingredients they have on hand, and the unregulated industry has no incentive to follow formulas. This means that the amount of sodium pentobarbital in any given batch of meat meal will fluctuate based on the particular number of euthanized animals included within the raw materials. In 2002 the FDA acknowledged that they have found “very, very low levels’ of sodium pentobarbital. . . in some brands of dog food.”¹⁸⁹ Rest assured though, the FDA is investigating whether the low levels are of any “significance.”¹⁹⁰ Pet owners should find it troubling that experts see little health risk because “temperatures in the rendering process kill *most* agents of disease,”¹⁹¹ just not the agent directly responsible for euthanizing pets. It is difficult to see how the FDA can continue to allow AAFCO and the pet food industry to self-regulate when they encourage pet owners to buy their products because *most* of the disease causing agents are dead. Shouldn’t the standard at least be a food that contains *no* agents of disease? If they’re not going to sell the most nutritious product, it would be nice if they adhered to consistent quality control regulations that protected our pets from disease.

C. Nutrition

¹⁸⁷Eckhouse, *supra* note 176.

¹⁸⁸*Id.* But see Martin, *supra* note 69, at 31 (stating that the study cited a case in which a dog exhibited “pentobarbital toxicosis after eating the thoracic organs of a calf.” The levels of pentobarbital had not decreased in the kidney of the calf despite being boiled for 20 minutes).

¹⁸⁹Stephanie Simon, *Outcry Over Pets in Pet Food*, LA Times, Jan. 6, 2002 at A21.

¹⁹⁰*Id.*

¹⁹¹*Id.* emphasis added.

1. Overview of the Nutritional Needs of Dogs and Cats

Before analyzing the nutritional adequacy claims of commercial pet foods, a basic understanding of the nutritional needs of cats and dogs is helpful. Cats first. No need for panic at the thought of a biology lesson, this can be achieved with simple logic. We'll start with cats. A cat's mouth represents that of a quintessential carnivore. Large fangs in the front, and a mouth full of shredding little grippers. Notice the lack of flat molars for grinding vegetation, found in cows and horses. Finally, consider the digestion system of a cat. Compared to a horse or cow, the cat's digestive track is relatively short (consider the length of the body). This means that the cat's digestive system doesn't have the "time" to break down grasses and grains into the beneficial vitamins it so desperately needs. Instead, wild cats get their vitamins from the remnants found in the digestive systems of their prey. For example, a cat in the wild would eat mostly rodents. Thus, his mouth is equipped to tear into meats and virtually swallow his bites whole, while his digestive system is designed to digest those meats while absorbing the already digested grasses, grains, and nuts found in the stomach of the prey. Dogs are a little different. Unlike cats, they prefer a little more variety in their diets. Dogs' mouths contain a variety of teeth (both canines and molars), so while they are able to enjoy their meats, they also have some teeth designed to crack into bones while chewing grains and veggies.

Now use this background knowledge to analyze their current commercial diets. The ideal cat food should contain mostly meats along with some pre-digested grains and vegetables. Dog food should contain meat but with a higher percentage of grains and vegetables. The key is balance. A wild animal instinctively knows when they're lacking a certain nutrient and will seek out foods containing the deficient nutrient.

Look at the label of a commercial pet food. Labeling rules require that the ingredients be listed in descending order of predominance by weight (not overall % dry matter content) so that the heaviest ingredient,

determined *before* the ingredient is cooked or processed,¹⁹² is listed first.¹⁹³ This means that even if a label lists “chicken” first and “corn” second, it is possible that the product contains far more corn than chicken. This is because chicken is very high in moisture (75% water) and therefore heavier than corn. Thus, despite all the labeling rules, the average consumer has no idea how much chicken serves as the main protein source for the product. While some AAFCO officials and even veterinarians would argue that it doesn’t matter if the protein source is true “chicken” as opposed to “meat meal” or “soy” – this issue is hotly debated and far from resolved. For now, it is sufficient to recognize that not all dogs and cats will do well on soy as their main protein source, and that, as stated above, the nutritional adequacy of “meat meal” will vary significantly from batch to batch. Never mind that “soy-fed animals are prone to diarrhea and of course the room-clearing properties of their flatus is legendary.”¹⁹⁴

The rise in the use of grain and carbohydrate products over the last decade further contributes to the nutritional imbalance in commercial pet foods.¹⁹⁵ “Once considered a filler by the pet food industry, cereal and grain products now replace a considerable proportion of the meat that was used in the first commercial pet foods.”¹⁹⁶ Why the change? Cost. Corn is a much cheaper energy source than meat.¹⁹⁷ But the change in pet food formulas has a real impact on a pet’s health. “Dogs have little evolved need for carbohydrates and cats have *no need* for this source of energy.”¹⁹⁸ Moreover, although dogs and cats can almost completely absorb the carbohydrates from some grains such as rice, the nutrient availability of wheat, beans, and oats is poor.¹⁹⁹ Other ingredients, such as peanut hulls, have absolutely no significant nutritional value and are used strictly as filler.²⁰⁰ This news is even more disturbing where two of the top three ingredients in dry

¹⁹²Jenkins, *supra* note 130.

¹⁹³Dzanis, *supra* note 121.

¹⁹⁴Lonsdale, *supra* note 186, at 93.

¹⁹⁵API, *supra* note 77.

¹⁹⁶*Id.*

¹⁹⁷*Id.*

¹⁹⁸Lonsdale, *supra* note 186, at 92 emphasis added.

¹⁹⁹*Id.*

²⁰⁰*Id.*

pet foods is almost always some form of a grain product.²⁰¹ The result of ingredients with low nutritional value is a pet that is slowly starving to death and at the same time consuming more and more food. Also, since cats are true carnivores, one must wonder how pet food manufacturers justify feeding them substantial quantities of corn as part of their “balanced” diet.

The buying habits of pet owners exacerbate the problem. Most pet owners select one pet food and feed it to their pets for a prolonged period of time, if not for the pet’s entire life.²⁰² This means the pet is eating a diet consisting primarily of carbohydrates (some of which they can’t digest) with little to no variety. “[U]ndigested food arriving in the bowel provides nutrients for a teeming population of harmful bacteria.”²⁰³ Thus, “chronic digestive problems, such as chronic diarrhea, and inflammatory bowel disease” often result from such repetitive and indigestible diets.²⁰⁴

Some pet food manufacturers would argue that since grains contain protein, they provide a valuable nutrient to pets. But “the protein [in cooked grains is] low in quality to begin with, then further degraded to a variable degree by cooking. . . .”²⁰⁵ Feeding low-quality commercial pet foods for a pet’s entire life is comparable to feeding a child McDonald’s three meals a day, every day, for the child’s entire life. No parent would believe that this is a nutritious diet, or capable of sustaining a child’s health. Yet regulatory choices made by FDA, CVM, and AAFCO, combined with efforts by the pet food industry to avoid stringent ingredient and processing regulations result in pet owners unknowingly feeding junk food to their furry friends.

²⁰¹ *Id.* The labels of several different brands of pet foods revealed that common ingredients such as corn gluten meal, corn meal, brewers rice, oat meal, ground barley, and whole grain corn represent at least two the top three ingredients. Often three of the top four ingredients consist of grains. The surveyed brands include Iams, Purina, Science Diet, Purina One, Whiskas, and Meow Mix.

²⁰² The fact that pet owners often do this at the suggestion and/or insistence of their veterinarian is significant and will be discussed in Section V(C).

²⁰³ Lonsdale, *supra* note 186, at 92.

²⁰⁴ API, *supra* note 77.

²⁰⁵ Lonsdale, *supra* note 186, at 92 quoting David Kronfeld.

2. The Fallacy of the 100% Complete Claim

AAFCO permits a pet food manufacturer to claim that its product is “100% complete” provided that the manufacturer has complied with AAFCO’s feeding trial protocols or nutrient profiles.²⁰⁶ AAFCO’s feeding trials last 6 months and are conducted, at a minimum, on a group of 8 animals. Yet, AAFCO holds this isolated and short-lived study sufficient proof that the tested product can sustain *all* similar-species for the duration of the animal’s life. In other words, a food tested on 8 poodles for 6 months is considered 100% complete for all dogs. According to AAFCO, this same dog food can sustain Beagles, Bull Mastiffs and Boxers for their entire lives. That’s quite an amorphous dog food. As Dr. Wysong points out, this “food could cause disease and destroy long term health, yet not be harmful and be 100% complete” because it managed to sustain a dog for 6 months.²⁰⁷ Shouldn’t the sustainability goal of the pet food industry be much longer than 6 months? Shouldn’t the foods be tested on various breeds taking into consideration each breed’s varied nutritional requirements?

It is impossible for any pet food to be truly complete and balanced or 100% complete. To illustrate, consider the following example. ²⁰⁸ For the sake of simplicity, assume an animal needs only four ingredients to have a “complete and balanced diet.” If half of ingredient 1 is eliminated, the diet is still technically complete but is no longer balanced. If the animal is no longer getting enough of ingredient 1 in its diet, the animal’s instinct is to eat more (of whatever food is available) to make up for the perceived deficiency.²⁰⁹ Thus, the imbalance of nutrients in pet foods often results in obesity.²¹⁰

²⁰⁶ AAFCO, *supra* note 60, at 124-26.

²⁰⁷ Wysong, *supra* note 25, at 15.

²⁰⁸ See Patrick, *supra* note 136.

²⁰⁹ *Id.*

²¹⁰ *Id.*

The proof that commercial pet food is not necessarily balanced is found on the packages: consider the high level of carbohydrates (as discussed above) and the “wild card” of the rendering process. Plus, each time regulatory agencies meet, they debate all over again how much of which nutrients will constitute 100% complete.²¹¹ If this is so, then how could the previous balance of nutrients have been 100% complete? The most honest solution would be to cease the “complete and balanced” claims and start to educate the consumers about nutrition and their pets’ specific needs. But this would not sell pet food; the American public is addicted to the convenience of commercial pet foods and judging by the reluctance to eliminate fast food from our own diet, our pets will likely fare far worse.

Today, one simple word can strike fear in the heart of the pet food manufacturer claiming that its product is “100% complete”: taurine. Taurine is an essential amino acid found in most animal protein sources.²¹² Taurine regulates the amount of calcium entering the heart tissue. The calcium then triggers each heart beat.²¹³ Thus, taurine deficiency can cause heart failure.²¹⁴ Few mammals are unable to produce taurine, but cats and humans are among them.²¹⁵ While the National Research Council did not issue a guideline regarding the minimal amount of taurine to be included in cat food until 1981, taurine was considered an *essential* nutrient as early as 1976.²¹⁶ In August of 1987, researchers at the University of California at Davis, reported in *Science Magazine* that a taurine deficiency in commercial cat foods had resulted in the deaths of thousands of cats before manufacturers began supplementing their products with taurine.²¹⁷

Upon the discovery of the link between the dying cats and their taurine deficiencies, pet food companies, such as Ralston-Purina and Hill’s Pet Products, began reformulating their products to include additional

²¹¹Martin, *supra* note 69, at 61 quoting Dr. Wysong.

²¹²API, *supra* note 77.

²¹³Thomas H. Maugh, *Thousands of Cat Deaths Traced to Pet Food Deficiency*, LA Times, August 14, 1987.

²¹⁴*Id.*

²¹⁵*Id.*

²¹⁶*Id.*

²¹⁷*Id.*

taurine.²¹⁸ Ralston Purina produces Purina Cat Chow, the best-selling brand of cat food.²¹⁹ While no one will ever know exactly how many cats died as a result of eating nutritionally-inadequate pet food, there is little doubt that at least one (if not all) of the taurine-deficient brands bore the label “100% complete.”

The upsetting death of thousands of cats serves as proof of the pet food industry’s ignorance regarding what constitutes a 100% complete diet. The commercial pet food industry has been around since the early 1900s. Yet an apparently essential nutrient went undiscovered until 1976, and even then, only accidentally by an academic outside the industry.²²⁰ So why had cats not been dying of taurine deficiency in such large numbers prior to this discovery in the early 1980s? The answer lies in the industry’s shift from animal protein sources to an increased reliance on carbohydrates in their formulas. In other words, as long as the pet food industry included a significant amount of animal protein in their pet foods, the pets ingesting these products had no risk of developing a taurine deficiency.

Not all animals suffer fatal disease from malnutrition – that much is obvious from the evidence of pets surviving for years on just one pet food product. But this doesn’t mean that these other pets suffer no effects. On the contrary, such pets often suffer from allergies, obesity, or a host of other ailments, not to mention anything invisible to the owner’s eye.²²¹

²¹⁸ *Id.*

²¹⁹ *Id.*

²²⁰ The discovery of the link between taurine deficiency and heart disease in cats was discovered by Paul D. Pion while researching blood clots in cats. One cat referred to Pion by a local veterinarian had dilated cardiomyopathy (DCM), a degenerative heart disease. The cat also had eye disease and had been diagnosed as “taurine deficient” (taurine deficiency also causes degeneration of the retina). By “pure coincidence” Pion had been reading about taurine and began examining the eyes of the other cats and analyzing their taurine levels. Upon discovering that every cat with DCM also had low levels of taurine, Pion began treating them with taurine supplements. Soon the cats began making “miraculous recoveries.” *Id.*

²²¹ Patrick, *supra* note 136.

D. Diseases

1. Mad Cow Disease

The same quasi-cannibalism that results from pets eating rendered products lies behind the British outbreak of bovine spongiform encephalopathy (BSE), or mad cow disease as it is known to the general public.²²² Scientists generally believe that BSE resulted from cows eating rendered feed products made from the brains and spinal cords of sheep suffering from scrapie.²²³ Scrapie is a degenerative brain disease found in sheep.²²⁴ Scrapie causes severe itching in sheep to the point where the animal actually scrapes off its hair and wool.²²⁵ Scrapie is caused by prions, an infectious protein that has no detectable DNA or RNA.²²⁶ Alarming, prions are virtually indestructible and can survive freezing, cooking, radiation, sterilization, bleach and formaldehyde.²²⁷

Scientists believe that scrapie crossed the species barrier and infected cows.²²⁸ While some argue that it is unlikely the US will experience a mad cow epidemic because few ranchers “feed meat and bone meal to young cows,” there is some evidence that the cow epidemic in Britain may have had nothing to do with scrapie or the processing techniques used by British renderers which did not break down the scrapies-causing

²²²Blakeslee, *supra* note 159.

²²³*Id.*

²²⁴*Id.*

²²⁵Martin, *supra* note 69, at 37.

²²⁶*Id.*

²²⁷*Id.* at 37-38.

²²⁸Blakeslee, *supra* note 159.

prions.²²⁹ Take for example the outbreak of mink encephalopathy, a malady similar to mad cow disease, in Stetsonville, Washington. A mink farmer fed his mink meat from a fallen cow that could not get up, also known as a downer cow.²³⁰ Dr. Richard F. Marsh, a veterinarian at the University of Wisconsin in Madison notes that it is possible that the downer cow had a spontaneous case of mad cow disease that was passed to the mink.²³¹

Why should pet owners worry about diseased mink and a single downer cow? Because Dr. Joseph Gibbs, a leading expert at the National Institute of Neurological Disorders and Stroke (NINDS) in Bethesda Maryland, points out that spontaneous cases of mad cow may occur as frequently as one cow out of every million cows each year.²³² While the odds might seem favorable, there are 150 million cows in the US alone, which means that according to the NINDS calculations, 150 cows can develop spontaneous mad cow disease without even eating tainted feed.²³³ For pet owners, this means that 150 downer cows can find their way into rendering plants every year.²³⁴ While the Agriculture Department attempts to test downer cows for mad cow disease, only a sample of downer cows are actually tested.²³⁵ As if cows weren't enough to worry about, deer and elk are also prone to a spontaneous mad-cow-like disease.²³⁶ Such animals can be killed on roads and sent to rendering plants. Although there is no evidence of mad-cow-like disease in domestic pets, it is disturbing to remember that there is evidence that the disease twice before crossed the species barrier: once from sheep to cows, and again from cows to mink. If renderers continue to accept downer cows without testing each for mad cow disease, the risk of introducing the disease through its indestructible agent, the prion, into the animal feed and pet product industry remains significant.

²²⁹ *Id.*

²³⁰ *Id.*

²³¹ *Id.*

²³² *Id.*

²³³ *Id.*

²³⁴ The USDA prohibits the use of disabled (*downer*) cows in products intended for human consumption. See *BSA/Mad Cow Disease FAQ*, Rutgers Cooperative Research and Extension available at <http://www.rcrc.rutgers.edu/bse/mcd-faq.asp>. Such animals, rejected by slaughterhouses and manufacturing facilities, are sent to rendering plants as 4D animals.

²³⁵ Blakeslee, *supra* note 159.

²³⁶ *Id.*

2. Obesity and Other Diseases

While not as emotionally charged as the debate over mad cow disease, obesity is currently the most common nutritional problem among domestic pets.²³⁷ Over half of dogs are overweight, though significant disagreement exists over what constitutes canine obesity.²³⁸ The currently accepted cure, is placing the pudgy pooches on the “diet” version of whatever pet food the owner’s veterinarian recommends.²³⁹ This approach seems somewhat more logical considering that the “cure” used to be putting the dog in a hospital and starving it.²⁴⁰ Shockingly, this practice is “rarely done” today because “it’s now known to be extremely dangerous.”²⁴¹

Obesity often results from animals overeating to compensate for a nutritionally deficient diet. Recall from above that an animal that is not getting enough of a nutrient in its diet will overeat to compensate for the deficiency. Thus, all it takes for a dog or cat to overeat is the exclusive feeding of a commercial pet food that lacks one essential nutrient. Given the variation of production batches, the risk of a deficiency is significantly higher than many pet owners might think. Moreover, placing the animal on a nutritionally inadequate diet food will not rectify the animal’s problem, if anything it may exacerbate the underlying problem of incomplete nutrition. If the regular version of the pet food is nutritionally deficient, why would the “diet” version containing fewer calories be any different?

²³⁷Dzanis, *supra* note 53.

²³⁸Stephen J. Ackerman & Judith Levine Willis, *Gallopings Gourmet*, FDA Consumer Magazine, March 1991 at 32.

²³⁹*Id.*

²⁴⁰*Id.*

²⁴¹*Id.*

Countless other diseases can result from commercial pet foods that have excess levels of sodium²⁴² (used to increase palatability), or deficient levels of essential nutrients such as taurine.²⁴³ Feline urological syndrome (FUS) is caused by excessive amounts of ash, phosphorus and magnesium in pet foods.²⁴⁴ FUS is extremely common and can be fatal if left untreated for even a short period of time.²⁴⁵ Other diseases linked to commercial pet foods include gum disease, arthritis, eye and ear problems, dry and dull coats, heart disease, diabetes and cancer to name a few.

E. Toxins in Pet Foods

The danger of the rising use of grains goes beyond simple malnutrition. Contaminated grain ingredients have resulted in at least three dog food recalls in the last ten years. In 1995, Nature's Recipe pulled thousands of tons of dog food after discovering the presence of a fungus that produced the toxic substance vomitoxin.²⁴⁶ In 1999, Doane Pet Care recalled dry dog food made at one of its plants, including the Walmart Brand, Ol' Roy, after discovering another fungal toxin that ultimately killed 25 dogs.²⁴⁷ Most recently, Diamond Pet Food recalled several brands of its dog food in 23 different states after at least 76 dogs were killed and dozens severely ill after ingesting aflatoxins caused by contaminated corn ingredients.²⁴⁸

²⁴²Some dog foods contain 20 times the amount of sodium a dog requires. Martin, *supra* note 69, at 60.

²⁴³*See infra*, the discussion in Section IV.(C)(2) regarding taurine.

²⁴⁴Martin, *supra* note 69, at 61.

²⁴⁵*Id.*

²⁴⁶Vomitoxin causes vomiting, diarrhea and feed refusal in dogs. API, *supra* note 77.

²⁴⁷*Id.*

²⁴⁸Aflatoxin causes vomiting, diarrhea, and acute liver disease in dogs. The severity of the illness will depend on the dose of aflatoxin ingested. *Toxic Pet Food Limited To Eastern States*, *supra* note 40.

Poisoned and diseased animals are not the product of an effective regulation system. Pet foods containing excessive amounts of grains, inadequate protein and euthanized animals serve only to starve our pets, not sustain their health. Minimal testing methods provide unwarranted assurance that commercial pet foods are nutritious, while convoluted pet food labels confuse owners unfamiliar with the truths hidden behind common or usual ingredient names.

V. Failing the Pets: Who is at Fault

The current system of pet food regulation proves ineffective at informing consumers and protecting pets. The question is, how did it go wrong? Some consumers point to the FDA for its lack of oversight regarding the manufacturing process and setting nutritional standards. While the FDA rightly bears some of the blame, by no means are they the sole contributors to current regulation's disappointing state. The industry's influence on AAFCO, the billions of dollars involved, the structure of the veterinary industry, and the lack of consumer involvement are at least as blameworthy as the FDA's lack of concern.

A. FDA Missteps

The FDA regulates 25% of every dollar spent in the American economy. In addition to food regulation, the

FDA also oversees cosmetics and pharmaceuticals. And in contrast to food and cosmetics, drugs require pre-market approval.²⁴⁹ The average time it takes to formulate, test and obtain FDA approval for a new drug is 7 to 13 years.²⁵⁰ This spreads the FDA's limited resources and 8000 employees thin before food and cosmetics become a concern. Imagine then, how far down pet food falls on the list of priorities.

Statements by CVM reveal the low priority allocated to pet food regulation. CVM states that although some ingredients and food additives used in pet foods “may not meet the criteria needed to be recognized as GRAS” the FDA “has not objected to the listing of [these] ingredients in the AAFCO Official Publication. . . provided there were no apparent safety concerns about the use or composition of the ingredient.”²⁵¹ In other words, until the threat of such non-GRAS ingredients is revealed, probably through dead or dying pets, the FDA will not devote the time necessary to enforce its own rule that all foods contain only food additives recognized as GRAS.²⁵²

While some pet owners might find this unacceptable, this passionate group would be well served to take a step back to acknowledge the concerns of the “non-pet owners” of the world, lest they become no better than their adversary. Although over 50% of American households have at least one pet,²⁵³ this means that almost 50% of American households do not own any pets. However, the FDA seems to forget that pet owners pay taxes too. By making a choice that the non-pet owners deserve their time and money more than the pet-owners, the FDA has effectively told pet owners (over 50% of the country) through their inaction that they're on their own.

Most pet owners believe that the FDA regulates all commercial pet foods. While most consumers have never

²⁴⁹Any product that falls within the definition of “new drug” under §321(p) requires pre-market approval. Hutt & Merrill, *supra* note 34, at 475.

²⁵⁰*Id.* at 514.

²⁵¹Center for Veterinary Medicine, *supra* note 29.

²⁵²The FFDCFA requires pre-market approval for food additives whose safety is not generally recognized (i.e. non-GRAS food additives). See *infra*, III(B) for a discussion of the new food additive petition process. Foods containing unapproved food additives are deemed unsafe and adulterated. See 21 U.S.C. §342 (a)(2)(C) (2006).

²⁵³Deutsch, *supra* note 2.

even heard of AAFCO (the only regulatory body mentioned on the labels of pet food) those who have heard of AAFCO assume that it is part of the federal government. Although the FDA didn't exactly drop the ball by forming a partnership and entrusting pet food regulation and standards to AAFCO,²⁵⁴ they certainly didn't keep AAFCO on a short leash.

B. AAFCO, Again

AAFCO's deficiencies regarding label regulations, feeding trials, and ingredient definitions have already been discussed at length in this paper.²⁵⁵ AAFCO's decision to recognize the existence of the rendering industry while not requesting FDA enforcement of permissible raw materials cannot continue. Moreover, AAFCO's willingness to permit 100% nutritionally complete claims on pet foods while annually debating what constitutes 100% nutrition misleads owners and endangers pets' health. Not only do they not understand nutrition, they lack the incentives to close the gaps in regulatory practices. As long as the FDA lacks the necessary resources to govern its supposed watchdog, AAFCO will continue to make decisions based on the profit margins of the pet industry's participants.

While the AAFCO standards and profiles are better than none at all, they provide consumers with a false sense of security. There are virtually no long term studies showing the adequacies and inadequacies of the nutrient profiles.²⁵⁶ One of AAFCO's own panel experts admits that some of the foods which pass the

²⁵⁴It is worth noting that anyone trying to discover the source of pet food regulation faces an uphill battle of solving inconsistencies. The FDA website currently lists CVM as the source of pet food regulation. Interestingly, the CVM website states that CVM is only responsible for foods containing drugs and additives. Who then, is responsible for Purina Dog Chow?

²⁵⁵See *infra*, sections II(C)(3-4) & IV(A)(1-2).

²⁵⁶Susan Wynn, *Alternative Feeding Practices*, World Small Animal Veterinary Association World Congress, Vancouver 2001 available at <http://www.vin.com/VINDBPub/SearchPB/Proceedings/PR05000/PR00001.htm>.

feeding trials are “inadequate for long term nutrition.”²⁵⁷ Current regulations provide no way of knowing which foods can potentially harm pets in the long run.

C. Blind Faith in the Veterinary Industry

The amount of trust given to veterinarians compared to the amount given to the family doctor is truly amazing. It is virtually unheard of not to seek a second opinion when given a worrisome diagnosis by the family doctor. A healthy dose of skepticism is precisely what launched such successful websites as WebMD and online referral services for doctors. Yet, when it comes to the family pet, second opinions are seldom, if ever, sought. Considering the state of the veterinary industry, this lack of skepticism is dangerous both for the pet and the consumer’s wallet.

A basic understanding of the structure of the veterinary industry is helpful to recognize the dangers it poses. First, in order to run a veterinary hospital or clinic, a license to practice veterinary medicine is required. In the U.S., licenses are issued by the Veterinarians Association; in other words, by the profession’s trade union. This means that if a veterinarian angers the Veterinarians Association, they run the risk of having their license revoked and thereby losing their livelihood. Trade unions do not have an obligation to act in the public interest, rather, the Veterinarians Association’s only obligation is to protect the financial interests of their members. This results in a veterinary industry controlled by peers. Minority viewpoints that risk harm to the financial interests of the profession are silenced through the threat of a revoked license.

Veterinarians, unlike their “human doctor” counterparts, don’t make six figure salaries. Proof of this is

²⁵⁷*Id.* quoting Quinton Rogers, DVM., Ph.D.

found in trade publications like *Veterinary Forum* and *The Journal of the American Veterinary Medical Association*, which are filled with articles discussing low income-related anxiety.²⁵⁸ Although small animal veterinarians and some general practitioners earn close to the US median household income, considering that these professionals have gone through training as rigorous and costly as that of physicians the median income is often inadequate.²⁵⁹ On the plus side, veterinarians don't pay the huge malpractice premiums facing physicians, but they also don't get their start in multi-million dollar hospitals with vast resources. Instead, most veterinarians either set up shop themselves with expensive start-up costs or join a small practice. Consider the following: vets only make money if a pet is sick. Troubling though it may be, there is a substantial amount of truth to that statement. Veterinarians treating healthy patients have few products to "sell" other than vaccines and heartworm medications, which when compared to the substantial costs of running a clinic, don't constitute nearly sufficient income.²⁶⁰ So if veterinarians aren't earning the big incomes of physicians yet have big education and business expenses – where is the cash coming from? Unfortunately, many veterinarians rely on the trust of their patients' owners and money from commercial interests for their "extra" income.²⁶¹

Ever noticed that the veterinarians office is often, if not always, filled with commercial pet food? The more the veterinarians sell their food to "clients", the higher their commissions on the sales through incentive programs.²⁶² Some manufacturers even offer cash bonuses to the vets. In essence, the veterinarian is "on the take."²⁶³ Even the Veterinarians Association itself is a major shareholder in Hills Science Diet, which perhaps explains its ubiquitous presence in veterinarians offices. Indeed, one pet owner said she "felt pres-

²⁵⁸ *Veterinarians are Animal People Too*, Animal People, December 1992 Volume I, #3 available at <http://www.animalpeoplenews.org/92/3/editorial2.html>.

²⁵⁹ *Id.*

²⁶⁰ Mogens Eliason, *Why Your Veterinarian Cannot Afford to Always Tell You the Truth*, Feb. 15, 2004 available at <http://www.glaciersamoyeds.com/RRSC/RRSC%20samoyed%20health%20main.htm>.

²⁶¹ This paper is not intended to show all veterinarians as money-grubbing narrow minded people. Rather, it is simply meant to enlighten certain consumers to the fact that not all vets necessarily have your pets' best interests in mind.

²⁶² Eliason, *supra* note 260.

²⁶³ Wysong, *supra* note 25, at 57.

sured” by the veterinarian’s suggestion that she buy Hills Prescription Diet Feline because the vet told her “overweight cats can get diabetes.”²⁶⁴ While this might be true, the client was disturbed by both the price tag, \$15 per bag, and the fact that the food was available for purchase through her veterinarian’s clinic.²⁶⁵ All that really matters in a pet food is whether it meets your pet’s nutritional needs. This can be achieved through a \$15 bag, or a \$8 bag so long as both bags contain the necessary nutrients in a digestible form.²⁶⁶ But clinics push particular foods because the mark up on premium pet foods can account for as much as 20% of a veterinarian’s income.²⁶⁷ Plus, pet owners buying food through the clinic visit the clinic more frequently, increasing the opportunities for sales of other goods and services. If this doesn’t seem like a conflict of interest, imagine visiting your doctor’s office once a month to purchase Lean Cuisine meals from their waiting room.²⁶⁸

A veterinarian pushing a particular pet food isn’t necessarily detrimental so long as they are informed both about the needs of your pet and about the food they are selling. Sadly, this is generally not the case. Veterinarians are first introduced to commercial pet foods as students in veterinary school.²⁶⁹ Many manufacturers provide free products to the students, which come complete with glossy marketing materials.²⁷⁰ While such a cheerful introduction is not bad in and of itself, it can skew judgment regarding the quality of the product.²⁷¹

The typical veterinary program offers only one course in animal nutrition during four years of study. This course must cover all animals the student will eventually treat in practice, not just the companion dog or

²⁶⁴ *Premium Pet Food: Is it worth it?* CBC Marketplace, October 31, 2000 available at <http://www.cbc.ca/consumers/market/files/health/petfood/index.html>.

²⁶⁵ *Id.*

²⁶⁶ *Id.*

²⁶⁷ *Id.*

²⁶⁸ *Id.*

²⁶⁹ Wysong, *supra* note 25, at 57.

²⁷⁰ *Id.*

²⁷¹ *Id.*

cat. A typical small animal veterinary practice will treat hamsters, gerbils, guinea pigs, birds, ferrets, rats and reptiles. Considering that the class must also cover livestock and other large animals, this doesn't leave a lot of class time for cats and dogs. With substantial education debt and hundreds of patients to see, veterinarians have very little time and funds to educate themselves.

Compounding the problem, different breeds of domestic animals often require different diets. A 1994 study showed that different breeds of dogs "exhibit different abilities to digest the same diet."²⁷² Function also plays a role in the dietary requirements of animals. Working animals, like the Anatolian Shepherd, have different dietary requirements than a dog that developed over hundreds of years of lap-sitting (like a Chihuahua).²⁷³ Moreover, much is still being discovered about the nutritional needs of humans. The National Cancer Institute now promotes a "five-a-day" program to encourage people to eat more servings of fruits and vegetables, despite the overwhelming availability of vitamin supplements. This is because studies have shown that individual nutrients like Vitamin A and E have not prevented cancer as well as real fruits and vegetables.²⁷⁴ If research is still uncovering new findings about human diets and nutrition, how can anyone possibly know everything there is to know about animal nutrition? Any claim that veterinarians, let alone AAFCO, know everything about canine or feline nutrition appears disingenuous.²⁷⁵

Veterinarians, perhaps the most qualified party to conduct research on nutrition lack any incentive to do so.

Many veterinarians work for the pet food industry, or are affiliated with universities and institutes that are

²⁷²Wynn, *supra* note 256.

²⁷³*Id.*

²⁷⁴*Id.*

²⁷⁵A personal anecdote illustrates this point. When my cat was a kitten he developed a severe urinary tract infection caused by urinary crystals. The vet suggested different types of dry food combined with an overwhelming dose of anti-biotics sure to almost kill any 5 pound kitten. After months of agonizing treatments, not to mention expensive drugs, and dozens of sleepless nights listening to my poor cat cry out in pain as he attempted to relieve himself, I was ready to throw in the towel. The vet's final suggestions included ultrasounds and exploratory surgery to determine if he had cancer. Not once did the vet suggest I switch to only canned foods. Luckily, a very educated friend suggested I put the cat on a regimen of probiotics (to repair his severely damaged digestive system) and canned foods. Within one week my kitten was healthy as a horse. I have recently seen an increase in the number of articles discussing the tendency for male cats to develop chronic crystalluria from a grain-based dry food diet. But 6 years ago, three different vets in at least a dozen visits never mentioned a word about changing his diet to canned foods.

funded by the industry.²⁷⁶ Consider the chairman of Colgate-Palmolive, who decided to have veterinarians endorse Science Diet after noting the huge success of Colgate's use of a dentist endorsing its toothpaste. Science Diet obtained these lucrative endorsements by promising hundreds of thousands of dollars to fund research at each of the 27 U.S. veterinary colleges.²⁷⁷ But the money trail doesn't stop at funding research. Practicing veterinarians selling Science Diet pocket as much as 40% of the profits.²⁷⁸ The minority of veterinarians who conduct their own private research are forced, for financial reasons, to work primarily with commercially-fed pets. Thus, any topics reflecting negatively on commercial diets will not be researched at universities, and financial restraints preclude such investigations by private veterinarians.²⁷⁹ Additionally, commercial pet food labels are nothing if not cryptic. One FDA veterinary nutritionist says it takes him three hours to explain pet food labels to veterinary students.²⁸⁰ These are veterinary students who have gone through years of science classes and education. Imagine how long it would take to explain a label to the average pet owner to the point that they would be capable of comparing products and making a sound decision concerning their pet's health.

D. Manufacturer's Misconduct

Large, multinational companies are key players in the pet food industry. After acquiring Ralston in 2001, Nestle controlled 45% of the pet food market share.²⁸¹ Mars Inc., Nestle's closest competitor, retains 15%

²⁷⁶Lonsdale, *supra* note 186, at 232.

²⁷⁷*Id.* at 266.

²⁷⁸*Id.*

²⁷⁹*Id.* at 232.

²⁸⁰Eckhouse, *supra* note 83.

²⁸¹Greg Winter, *Merger of Giant Pet Food Makers Unites an Unusual Mix of Foes*, N.Y. Times, April 14, 2001 at C1.

of the market share.²⁸² Other powerful participants include Colgate-Palmolive (Hills Pet Nutrition), Heinz (9 Lives, Kibbles-n-Bits), and Proctor & Gamble (Iams). With billions of dollars in sales and seemingly bottomless advertising budgets it is little wonder that the industry has maintained control over its self-regulating regime with little inquiry or confrontation by the government and consumers.

Most consumers are unaware that the pet food industry serves as an extension of the human food and agriculture industries.²⁸³ Why is it desirable for large multinational corporations to have a stake in the highly competitive pet food industry? The answer is that large conglomerates owning pet food manufacturers represents the “ideal” relationship because corporations producing both human food products and pet food products have a built-in captive market for the human line’s waste products, and a convenient in-house source of ingredients for the pet foods.²⁸⁴ Grains and “slaughterhouse offal” not deemed fit for human consumption can be turned into instant profits by the very same manufacturing company that rejects such ingredients for their human lines.²⁸⁵ The FDA even endorses such practices. According to the CVM, “animal feeds provide a practical outlet for plant and animal byproducts not suitable for human consumption.”²⁸⁶

The exploitation of pet food product lines as a means by which to recycle and discard waste will only worsen as the industry continues to transform into an array of powerful conglomerates. Proctor and Gamble purchased Iams for \$2.05 billion in 1999.²⁸⁷ In 2000 Mars Inc., which already owned Kal Kan, Pedigree and Whiskas, acquired Royal Canin, a French premium pet food company for \$730 million.²⁸⁸ Nestle acquired Ralston-Purina in 2001 for \$10.3 billion, to become the “dominant force” in the pet food industry with 45%

²⁸² *Id.*

²⁸³ API, *supra* note 77.

²⁸⁴ *Id.*

²⁸⁵ *Id.*

²⁸⁶ Center for Veterinary Medicine, *supra* note 29.

²⁸⁷ Greg Johnson, *Clawing to Become Top Dog of Pet Food*, L.A. Times, Oct. 22, 2001 at Business 1.

²⁸⁸ *Id.*

of the market share.²⁸⁹

The immense size of the combined manufacturing entity increases purchasing power for both product lines. After the Nestle-Ralston transaction, groups representing farming and ranching interests in pet food ingredients expressed concern that the combined entity would dictate the price of agricultural products since there would be fewer buyers offering better prices.²⁹⁰ In addition to purchasing power and markets for their waste products, large manufacturing conglomerates exploit economies of scales even in the area of advertising. If Proctor and Gamble signs a large advertising contract, they have the ability to utilize that contract to advertise their pasta sauce, cleaning supplies, and pet food all at the same time and thereby lower their per spot cost.

Although pet food manufacturers stop short of breaching advertising regulations they continue to mislead consumers with unsubstantiated claims. A 1993 Whiskas commercial stated that while cats like fish, fish on its own is not a complete meal. “Therefore, [fish] on its own is not completely healthy for your cat.”²⁹¹ But a can of Whiskas, the ad proclaimed, now that’s a complete meal. One has to wonder how cats survived all those years in the wild on fish, rodents, bugs and other prey.

Claims such as “new” and “improved” are found on numerous pet food labels, but whether the product is truly different from the old formula is arguable. AAFCO requires only that “new” and “improved” be “substantiated and limited to six months production.”²⁹² Since AAFCO has no enforcement authority, it is doubtful that such claims are ever substantiated. Who would bring the challenge? AAFCO regulations

²⁸⁹Winter, *supra* note 281.

²⁹⁰Winter, *supra* note 281.

²⁹¹Lonsdale, *supra* note 186, at 245-46 quoting Ian Griggs.

²⁹²AAFCO, *supra* note 60, at 119-20.

also require that labels not contain graphics or pictorial representations that misrepresent the package's contents.²⁹³ Yet manufacturers violate this regulation every time they place a plump chicken on their box or bag of food. The pet food industry's continued use of rendered products ensures that no plump chickens make their way into the commercial pet foods. Until such violations are identified and the manufacturers sanctioned, the pet food industry remains one of the most misleading.

Perhaps the most exasperating scheme currently used by manufacturers is their terse advice against feeding pets table scraps. Their trade group PFI, the "voice" of the U.S. pet food industry, warns against feeding table scraps to pets because they add "extra calories" to an already balanced diet.²⁹⁴ This paper has already established that a strictly commercial diet is unlikely to be balanced. The claim that the calories are extra and therefore detrimental might have merit should PFI or the manufacturer specifically refer to such items as the leftover fatty bits of meat. But if the owner is eating a well balanced meal consisting of quality meats, whole grain rice and fresh vegetables, the very same things the manufacturers would lead consumers to believe is found in their convenient yet low cost bags of food, then why would such items be detrimental to the pet's health? Certainly the owner serves his own dinner without the preservatives and additives found in the bag of dog food. If it is good enough for a human, the argument that they harm pets only continues to misdirect already lost owners.²⁹⁵

E. Consumer Folly

²⁹³AAFCO, *supra* note 60, at 119-20.

²⁹⁴PFI, *supra* note 26.

²⁹⁵While some foods are dangerous to pets, these items are few and far between and easy to discover with some cursory research. Chocolate and onions are both dangerous to pets, while milk and certain types of nuts should be avoided. A plethora of books and recipes discussing feeding animals a non-commercial diet are available. Since some owners barely have time to prepare their own meals let alone their pets, it should be noted that not all commercial diets are bad. A pet owner simply needs to do some research on brands and manufacturing websites in order to make an informed decision about which food to feed their pet.

As a general rule, consumers do not apply adequate skepticism when it comes to selecting a pet food. Consumers often attempt to compare products based solely on price. But as long as pet food manufacturers present their products in different sized bags with ingredients of varying quality and no reason to clearly label their products, the consumer must engage in a healthy dose of analysis before selecting a brand. It would be impossible for a company to use quality protein and grain ingredients while selling a 40 pound bag of dog food for \$14.95. Compare this to the price of a single pound of chicken at a grocery store. While the quality of the chicken purchased at the grocery store is probably higher than that of the protein used in the dog food, that 40 pound bag of dog food should still contain a much larger amount of protein than the single pound of chicken if the dog food intends to nourish your pet for 30 days. The cost of enough cereal to feed yourself breakfast every day for a month is around \$12-\$15. That cost alone would be much higher than the cost of most generic dog foods, and not only offers little to no protein but feeds one meal per day rather than three. Furthermore, commercial pet foods are convenience foods. They require no effort or preparation on the part of the pet owner. The true cost comparison, therefore, should be to a human food that is ready to eat or something served in a restaurant. Yet many consumers feed their pets the “convenient” commercial dry food every day, 2-3 times a day, for its entire life. The pricing logic alone should persuade that the animal receives less than adequate nutrition.

Most consumers believe that feeding their pets shouldn't break the bank, and they have a point. With Americans owning around 60 million dogs and 70 million cats,²⁹⁶ buying expensive so-called “premium” brands is not financially feasible for many pet owners. But owners need to learn how to correctly analyze pet foods before they can compare prices. Foods with more protein and better quality and more digestible ingredients will satiate the animal using less food than will a lower quality food with less digestible ingredients. Thus, a \$15 bag of food with better quality and digestible ingredients could feed an animal for a longer period

²⁹⁶Deutsch, *supra* note 2.

of time than a similarly sized \$10 bag with inferior ingredients. If the \$15 bag feeds the animal for a full month, while it takes two \$10 bags to feed the animal for a month, then the owner will end up saving money by purchasing the more expensive pet food—never mind the potential savings from fewer visits to the veterinarian to treat diet-related illnesses.²⁹⁷

One critic of commercial pet food compared the perception of pet food to the perception of smoking in the 40s and 50s.²⁹⁸ Sir Richard Doll, the scientist credited with discovering the adverse effects of smoking, publicized his findings by 1949. During the 1950s the medical profession generally agreed with Doll’s findings, but it was not until the 1970s that the public began changing their smoking habits. Doll cited the media’s reporting of the dangers of smoking as proven, rather than “controversial,” as the turning point in changing the public’s perception.²⁹⁹ Despite the presence of 43 known carcinogens in tobacco smoke and over 57,000 reports on the detrimental effects of smoking, tobacco companies denied the danger of their products for years.³⁰⁰

Few reports detail the hazards of long term feeding of commercial pet foods and money to fund such research is scarce. Unlike physicians, veterinarians continue to endorse commercial pet food even as they witness, first hand, the diseases caused by malnutrition and obesity.

Thus, changing consumer perception of pet foods is an uphill battle. Faced with veterinarian endorsements for commercial pet foods and slogans touting foods used by “top breeders” consumers must navigate a fog of misinformation to seek the truth about pet nutrition. Meanwhile, virtually every article or website dedicated to discussing commercial pet foods concludes with the standard blanket statement telling the consumer to consult their veterinarian. While it may be true that the veterinarian is more educated than the consumer,

²⁹⁷Obesity and taurine deficiencies represent two diseases generally accepted as diet-related. Unfortunately, whether diabetes, chronic allergies, and cancer are diet-related remains in dispute – a dispute with no end in sight so long as the veterinary and manufacturing industries continue to perform inadequate research using only commercially fed animals as subjects.

²⁹⁸Lonsdale, *supra* note 186, at 272.

²⁹⁹*Id.*

³⁰⁰*Id.* at 272-73.

the section above details why trusting a vet with 100% of your pet's care is as fallible as trusting complete and balanced labels on pet foods. The better conclusion to these articles is a call to action for consumers to educate themselves and persuade their vets to work with them in creating a diet suitable for their pet's nutritional needs.³⁰¹

No pet owner likes hearing that their actions might be harming their pet. The defensive reactions pet owners mount to insinuations that they buy a sub-standard pet food compares only to that of a parent confronted with advice on how to raise their child. Unsolicited scrutiny by outsiders only causes further resistance despite the fact that, more often than not, the pet in question exhibits visible signs of malnutrition such as a shaggy, dull coat, sluggishness, and obesity. "Saving pet owners money and sparing pets the agony of diet-induced disease are a socially responsible activity" and should provide enough persuasion to dictate a call to action by those few, but educated consumers.³⁰²

VI. Conclusion

Like it or not, the United States is a country of pet-owners. Collectively, Americans own more than 130 million cats and dogs.³⁰³ Since the FDA regulates 25% of the American economy it has understandably

³⁰¹The proliferation of books and articles discussing owner's who cook meals for their pets proves that some consumers have rejected the empty assurances of AAFCO and the FDA, and have instead chosen to put in the time and effort necessary to educate themselves and prepare nutritious meals for their pets. *See e.g.* Lonsdale, *supra* note 186, at 326-32(Appendix C, Diet Guide for Domestic Dogs and Cats, provides tips and directions for feeding dogs and cats raw meats); Martin, *supra* note 69, at 104-13, where Martin lists recipes for cooking balanced meals for dogs and cats; Kartharine Mieszkowski, *The Beef over Pet Food*, January 19, 2006, available at http://www.salon.com/news/feature/2006/01/19/raw/index_np.html, discussing the positive experiences of members of San Francisco Raw Feeders, a buyers group that feeds their animals raw antibiotic and steroid-free meat and bones.

³⁰²*Id.* at 277.

³⁰³Johnson, *supra* note 288.

chosen to allocate its scarce resources to the regulation of drugs, cosmetics and human foods rather than pet foods. But America's pet owners deserve better than the blind eye the federal government continues to turn on the smoke and mirrors of pet food regulation. More importantly, Americans should demand more for the \$12 billion they spend on commercial pet food.

Solving the industry's shortcomings through strict enforcement of the advertising, misbranding, and food adulteration laws seems unlikely until the FDA's budget substantially increases. Although a stubborn group, consumers have the most to gain from increased education efforts and studies revealing the long terms effects of nutritionally inadequate commercial foods. Perhaps the federal government could borrow from lessons learned from the Enron scandal and require mandatory funding by the *industry* of *independent* studies and consumer education programs. Since the government doesn't have enough time and money to watch the industry closely, providing active consumers with the opportunity to learn the truth about the food they feed their pets might spark reform within the industry and perhaps even legitimate regulation.