

Dog Tips

Cat Tips

It's All Fake — but Conscientious Pet Parents Still Flock to It

Portrayed as healthy, nutritious, and balanced, the truth is that your cat or dog wouldn't touch it short of starvation - because of this concoction they add to it. You wouldn't believe what's in the concoction, or its uncanny link to certain human foods. Caution is certainly in order.

Reviewed by Dr. Becker

STORY AT-A-GLANCE

- Dry pet food palatants (flavor coatings) are a billion dollar business
- Without flavor coatings, dogs and cats wouldn't eat kibble because it's biologically inappropriate nutrition for carnivores
- Palatants for dry cat food must appeal to kitties' taste receptors; dry dog food palatants are designed to appeal to the canine sense of smell
- Given the extreme processing of kibble, the manipulations required to make it nutritious and appetizing, and the explosion of degenerative disease in today's dogs and cats, one wonders if we haven't sacrificed the health of our pets for the sake of convenience
- For optimal health to occur, animals (including humans) must consume the foods they were designed to eat, and preferably in whole, fresh and unadulterated form

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There's an old but interesting article in Popular Science titled "The Chemistry of Kibble: The billion-dollar, cutting-edge science of convincing dogs and cats to eat what's in front of them." To conduct research for the article, the author, Mary Roach, paid a visit to AFB International, a company that produces flavor coatings called "palatants" for dry pet food.

What many pet parents don't realize is that cats and dogs must be enticed to eat dry food because it's not biologically appropriate nutrition, and they instinctively know it. That's why flavor coating manufacturers like AFB International exist. They're in the business of developing additives that make kibble acceptable to pets.

Roach's article gives some insight into the highly lucrative business of turning something cats and dogs wouldn't and shouldn't naturally eat into something they WILL eat.

Kibble Flavor Coatings Are Created to Persuade Pets to Eat Stuff They Would Never Eat Otherwise

Roach writes: "To meet nutritional requirements, pet food manufacturers blend animal fats and meals with soy and wheat grains and vitamins and minerals. This yields a cheap, nutritious pellet that no one wants to eat." (For the record, integrative vets don't agree with this characterization of kibble as "nutritious.")

Since cats and dogs aren't designed to eat grains, it's the job of AFB and others in their industry to find ways to get pets to eat enough of the "pellets" to meet their nutritional needs.

Interestingly, AFB's vice president, Pat Moeller, came from Frito-Lay, where he developed flavor coatings for snack foods. There are certainly some parallels between kibble and junky snack foods. Like unflavored kibble, "Cheetos without the powdered coating have almost no flavor," writes Roach.

Cat Crack

Chemicals called pyrophosphates are used to coat dry cat food, and are often referred to in the processed pet food industry as "cat crack." Roach actually sampled a bit of liquid sodium acid pyrophosphate, which she said had no smell, and almost no taste. "It tastes like water spiked with strange," she wrote. "Not bad, just other. Not food."

Nancy Rawson, Ph.D., AFB's director of research, believes the "otherness" of pyrophosphates may appeal to something specific in the unique physiology of cats. It might represent some element of the flavor of meat that is imperceptible to humans. According to Susan Thixton of **Truth About Pet Food**, another palatant manufacturer, Monell Chemical Senses Center, "... has found that mixing pyrophosphates (phosphate salts) with meat hydrolysates is the most effective enticer of cats to a food."

Susan offers a simple explanation for how this might work. Meats and their byproducts are broken down in water to form meat hydrolysates. Pyrophosphates magnify the taste of the amino acids that remain in the meat hydrolysates — at least for cats. "This magnified taste of protein — though chemically achieved — is what keeps cats addicted to a 'cheap pet food that no one wants to eat,'" according to Susan.

Dogs Follow Their Nose

Unlike kitties, dogs are attracted more to the smell of food than the taste when deciding what to eat, and how fast to gobble it down. So when creating flavor coatings for dry dog food, the goal is to develop palatants that cause a dog to "dive in with instant and obvious zeal," writes Roach. This response will cause his owner to assume the food is a hit, "When in reality it might have only smelled like a hit."

The challenge in developing dog food palatants is to find smells that are highly enticing to dogs, but that don't also make their owners want to throw up. For example, certain compounds in decomposing protein, such as cadaverine and putrescine, smell positively delicious to dogs, but to their owners, not so much.

However, it's a complete myth that dogs will eat anything. Once meat decays past a certain point, a dog won't touch it. Meat in the very early stages of decomposition is still highly nutritious, and dogs know it.

But once that same protein is significantly broken down by bacteria and has lost much of its nutritional value, a dog won't eat it unless he's literally starving. With that said, no dog parent would buy kibble that smells like a rotting carcass, no matter how yummy the dog may find it.

How the Processed Pet Food Industry Came To Be

So how did we get to this place? How is it that a pet food side business like flavor coatings — products designed to entice pets to accept food they were never intended to eat — has become a billion dollar industry? During the Great Depression of the 1930s and into the early 1940s, canned pet food accounted for over 90% of the commercial pet food market, and most pets were still fed primarily raw meat and table scraps, plus whatever food they hunted for themselves.

During World War II (1939 to 1945), metal was rationed and pet food was categorized as "non-essential" by the U.S. government. The combination spelled death for the canned pet food industry. Food rationing led to fewer table scraps, and so pet owners who could afford it, bought dry pet food or dog biscuits — the only commercially available products at the time.

Unfortunately for America's pets, their owners quickly fell in love with dry pet food. The war also sparked the processed food revolution in the U.S. All the factors that made processed food attractive to humans ultimately had a significant impact on the pet food industry as well.

After the end of WWII, consumer demand for processed and convenience foods skyrocketed. In meeting that demand, the human food industry created vast quantities of agricultural scraps from slaughterhouses, grain mills and processing plants. Pet food manufacturers immediately saw a way to take advantage of the unlimited opportunity of human food waste to their industry.

By 1960, Pet Food Companies Were Mass-Marketing Kibble

It's a sad fact that our pet population provides a vehicle to recycle waste from the human food industry. Grains that fail inspection, uninspected pieces and parts of waste from the seafood industry, leftover restaurant grease, deceased livestock and even roadkill is collected and disposed of through rendering — a process that converts all sorts of human food industry waste into raw materials for the pet food industry.

In the late 1950s, a pet food company developed a way to create kibble from boiling cauldrons of meat, fat and grain scraps — it's called extrusion.

The raw materials are purchased by pet food manufacturers who then blend the rendered fat and meat with starch fillers. They add bulk vitamin and mineral supplements, and the mix is extruded at high temperatures, creating all sorts of toxic reactions including advanced glycation end products and heterocyclic amines.

This is what passes for pet food and it's sold to consumers at a tremendous profit. This "advancement" in manufacturing, coupled with additives like flavor coatings to bribe pets to eat the stuff, allowed pet food companies to capitalize on the popularity of kibble. Today, there are hundreds of kibbles on the market. This is remarkable given that 60 years ago, commercial pet food was almost unheard of.

Have We Chosen Convenience Over the Health of Our Pets?

For optimal health to occur, animals (including humans) must consume the foods they were designed to eat, and preferably in whole, fresh and unadulterated form. This is known as species-appropriate nutrition, and given the choice (and a transition period for pets accustomed to processed diets), your dog or cat will naturally select food his body thrives on.

Carnivorous pets have not evolved to digest and assimilate foods like corn, wheat, rice or potatoes, yet these are the very foods the vast majority of pet food manufacturers use as primary ingredients in their formulas. Fortunately, dogs and cats are extremely resilient creatures.

Not only do they not die immediately upon eating biologically inappropriate foods, but it often takes years before the significant physical degeneration that occurs from a lifetime of eating the wrong foods becomes noticeable.

One of the reasons we're able to deceive ourselves into believing convenience pet foods are good for dogs and cats is because the changes to a pet's health and vitality brought on by a dead, processed diet are usually not immediate or acute. For over a half-century, our pets have been fed inappropriate diets that have kept them alive, but not thriving. In fact, we've created dozens of generations of animals that suffer from degenerative diseases linked to nutritional deficiencies.

Optimal Nutrition for Your Dog or Cat

Dogs and cats need quality protein, fats and a small amount of vegetables and fruits, which provide **antioxidants** and fiber to animals that no longer hunt whole prey.

Natural sources of trace minerals, vitamins and fatty acids must be added, since the soils in which foods are grown are depleted of many of the nutrients pets need. Also, food storage, whether it's in a freezer or a pantry, decreases critical essential fatty acid levels in foods.

Pets need unadulterated, fresh, whole foods that are moisture dense. They don't need grains, fillers, artificial preservatives, colors, additives (including palatants), chemicals, byproducts or processed foods. Although animals can eat some processed foods, they aren't designed to consume a lifetime of it.

Sources and References

¹ Popular Science, May 20, 2021