Is Your Pet's Food Causing Harm?

Unveiling shocking research, revealing mislabeled ingredients in pet food raises concerns about potential allergies and ethical issues.

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STORY AT-A-GLANCE

- A team of researchers in Taiwan evaluated over 100 canned cat food products and identified a variety of undeclared animal species; in fact, numerous undeclared ingredients were found in all tested products
- In a 2021 study, researchers used DNA sequencing to identify the ingredients in pet food samples and found that not a single sample was without some form of mismatch in label ingredients vs. actual ingredients
- As a consumer, you have a right to question the manufacturer of your dog's or cat's pet food about how, and how often, they verify the authenticity of their ingredients
- If you're fed up with Big Pet Food, there's no time like the present to begin providing your furry family member with a safe, nutritionally balanced, species-specific fresh diet

Reports of undeclared animal species in pet foods are unfortunately becoming commonplace and can cause both health and ethical concerns.

> *"Some pets may be allergic to undeclared species, such as cattle or chicken," writes senior reporter Tim Wall in PetfoodIndustry.com. "Pet owners themselves may be opposed to the presence of certain animals' tissues in their dogs and cats food.*
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> *For example, the presence of pig in pet food could be problematic to Jewish or Muslim pet owners, likewise beef could be an issue for Hindu pet owners. For ecologically aware pet owners, silky sharks and other endangered species in pet formulations raise ethical problems."*[1]

Numerous Undeclared Ingredients Found in All Products

Recently, a team of researchers in Taiwan evaluated over 100 canned cat food products available on the local market and identified a variety of undeclared animal species. They published their results in the journal Bioinformatics and Genomics.[2]

The researchers used DNA barcoding (an identification method that can be applied to even highly processed products) and genetic analysis to detect a specific mitochondrial RNA gene as a marker to identify species. They looked at 138 canned cat foods across 62 brands purchased from retailers in Taiwan. Most of the cat food was produced in Taiwan or Thailand.

> *"We discovered that the majority of mislabeling incidents were related to the replacement of tuna with other species," the study authors wrote.*

> *"Moreover, our metabarcoding revealed that numerous undeclared ingredients were present in all examined canned products. One product contained CITES Appendix II-listed shortfin mako shark (Isurus oxyrinchus). Overall, we uncovered a mislabeling rate of at least 28.99%."*[3]

The research team categorized 89 of the products as correctly labeled, 40 as mislabeled, and the remaining 9 as uncertain. With regard to the mislabeled products, either the genetically identified species was not included on the ingredient list, or it was not the expected animal based on the declared ingredients.

Overall, the team identified 38 species not included on their respective labels, including:

- 24 fish
- 1 reptile (softshell turtle)
- 2 poultry (chicken and turkey)
- 3 crustaceans
- 3 livestock (sheep/goat, cattle, deer)
- 5 mollusks

> *"While some of these animals were clearly not supposed to be included in the formulations," writes Wall, "others may have appeared because common names for species are not always standardized in the Taiwanese pet food market."*

As the study authors explain:

> *"Unlike in the European Union and the USA, where there are official standardized lists of vernacular names for species used in foods and their corresponding scientific names, Taiwanese authorities do not publish standard lists of vernacular names used in the food industry. Instead, many 'umbrella' terms are used in the Taiwanese market."*

2021 Study: 100% of Pet Food Labels Proved 'Inaccurate'

In a 2021 study published in the journal Science of The Total Environment,[4] University of Nevada, Reno researchers also used DNA in pet food to determine if actual ingredients matched ingredients as listed on package labels. The study authors made the point that DNA is often highly degraded in pet food products, so genetic results represent only DNA that was of high enough quality to undergo isolation, PCR amplification, sequencing, and several steps of quality control filtering.

Their exploration led the team to suggest that pet food package labels should be read with caution, as many aren't accurate.

> *"Every sample we looked at had some inaccuracy, based on our results, some more egregious than others. These are highlighted in the paper," Sarrah Dunham-Cheatham, assistant research professor at the university and lead author of the paper told UNR's online publication Nevada Today. "We looked at least 50 samples of the 90 we analyzed for DNA, for this particular analysis. We weren't able to definitively answer how many had inaccurate labels due to some limitations of the DNA analysis.*

> *As for the DNA results, generically speaking, we found that many of the pet food products were comprised of low-value ingredients, such as chicken, and that products claiming to be made from high-value ingredients, such as fish and novelty proteins, typically contained more low-value ingredients than high-value ingredients."*[5]

One analysis looked at samples with unexpectedly high mercury concentrations based on package ingredient labels (i.e., the high levels of mercury suggested fish-based ingredients, but the ingredient labels said otherwise). One of these samples listed beef, wild boar, goat, and lamb as the top animal-based ingredients, but the DNA analysis showed the sample contained "mostly chicken and some turkey, with a variety of fish species as the top 5 ingredients." No beef, wild boar, goat, nor lamb were detected in the sample.

Another sample listed only tuna and salmon, while the DNA analysis showed that chicken, sheep, and turkey dominated the animal-based ingredients.

With regard to plant-based ingredients, one sample contained none of the ingredients listed on the package label, but did contain soy, despite the package label stating the product had "no soy." Another sample showed no DNA evidence of field peas or chickpeas as listed on the package label but did show the presence of DNA from the Poaceae family (e.g., corn, wheat, barley, oats, rice, sugarcane). The package label claimed the product was corn- and wheat-free. From the study:

> *"These results are consistent with those from **Palumbo et al. (2020)**, that showed 16 of the 18 tested commercial pet foods were adulterated. Both studies revealed that ingredients with higher economic value (e.g., fish) are often supplemented with or altogether replaced by ingredients of lower economic value (e.g., chicken). This raises concerns that consumers are paying unfair prices for products that purportedly contain high value ingredients, but actually contain low value ingredients.*
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> *The prevalence of adulteration in commercial pet foods is also of concern for pets with life-threatening food allergies. Such allergies are becoming more common in pets, with beef, chicken, wheat, and dairy-based ingredients reported as the most common food allergens (**Mueller et al., 2016**). If a consumer cannot trust that a pet food product is free of these allergens, despite the package label, then pet lives are at risk and trust in the pet food industry is severely eroded."*

Concerned About Misleading Pet Food Labels?

If you're concerned about the ingredients in your pet's food — perhaps you have a dog or cat with allergies or who requires a novel diet to treat **food sensitivities** or bowel disease — you can try contacting the pet food manufacturer to ask how, and how often, they verify the authenticity of their ingredients. A few questions to ask:

- Do you apply hazard analysis and critical control point (HACCP) procedures to avoid product adulteration and contamination?
- Do you require your ingredient suppliers to verify the source, type and species content of grains and meals, meats and other raw materials used to make your products?
- Do you check the quality of new suppliers by carefully examining their products, demand third party purity testing and test them yourself, as necessary?
- Do you keep records of the receipt and use of each ingredient in your products?

- What measures are in place in your production facility to prevent ingredient confusion and cross-contamination? What other foods are manufactured in the facility that makes your pet food?
- Do you participate in third party transparency testing (such as Check Your Pet Food) and can you email me the results?

If You've Lost Trust in the Ultraprocessed Pet Food Industry

Thanks to mislabeled products, low-grade ingredients, too-frequent recalls, and an exploding population of pets with chronic digestive issues, allergies and degenerative disease, it's no wonder so many pet parents are exploring **homemade diets**, fresh food diets made by smaller, transparent pet food producers, **raw diets** and other alternatives to dead, rendered, dubious, ultraprocessed feed-grade "fast food."

My advice? Search this website for more information on choosing the best diet for your pet. There are videos and articles here that can help you become more knowledgeable about pet nutrition so that you can make the best diet choices for your own dog or cat. You can also learn what real transparency in pet diets looks like by ordering the **Truth About Pet Food 2024 List**.

If you want to help change the deceptive practices occurring in the pet food industry, I recommend becoming a member of the **Association for Truth in Pet Food**, which is the only organization out there committed to holding the regulatory agencies and AAFCO accountable. You can also check this **list** for the pet food companies that have taken the ingredient transparency pledge. When in doubt and if needed, consider making your pet food yourself, so you know exactly what ingredients you're feeding your dog or cat.

Sources and References

[1] PetfoodIndustry.com, February 28, 2024

[2,3] Wang, Y. et al. PeerJ Bioinformatics and Genomics, February 21, 2024

[4] Dunham-Cheatham, S.M. et al. Science of the Total Environment Volume 778, 15 July 2021, 146102

[5] Nevada Today, Science & Technology, April 29, 2021