

in focus

Cat and dog
food in the US:
Meeting consumer
demand in a heavily
regulated market



The US pet food market is ripe for innovation, but the stringency and complexity of regulations present significant risks for new products and new market entrants. In this whitepaper, we share exclusive research revealing what consumers want from dog and cat food. And our regulatory scientists advise on how to align product development with legislative frameworks.



Increased pet ownership during the COVID-19 pandemic has driven a corresponding surge in US spend on pet food. It rose to around USD 44.1 billion in 2021¹, up from USD 36.9 billion in 2019².

This rapid growth creates opportunities for innovation. New market entrants and established players alike are keen to capitalize on the heightened demand, tapping into current pet food trends.

Here at TSG Consulting, we've noted an increase in companies that manufacture foods or supplements for human consumption diversifying into the pet food market. However, it's important to recognize that, from a regulatory perspective, human food is not necessarily considered acceptable for animals. In fact, pet food is among the most highly regulated food products in the US, subject to both federal and state requirements. Violation of these regulations is a serious matter. It can result in fines and product recalls, not to mention negative publicity which harms the financial performance of large firms and can be devastating for smaller companies.

The truth about cat and dog food

In this whitepaper, we look at consumer trends for dog and cat food alongside regulatory considerations. We've conducted research to provide up-to-date insights on what cat and dog parents in the US are looking for from pet food. Our regulatory scientists also highlight what manufacturers need to consider when developing and marketing products to meet these demands.

About the research

All figures, unless otherwise stated, are from YouGov Plc. Total sample size was 2,525 adults. Fieldwork was undertaken between 1-9 November 2021. The figures have been weighted and are representative of all US adults (aged 18+). The survey was conducted using an online interview.



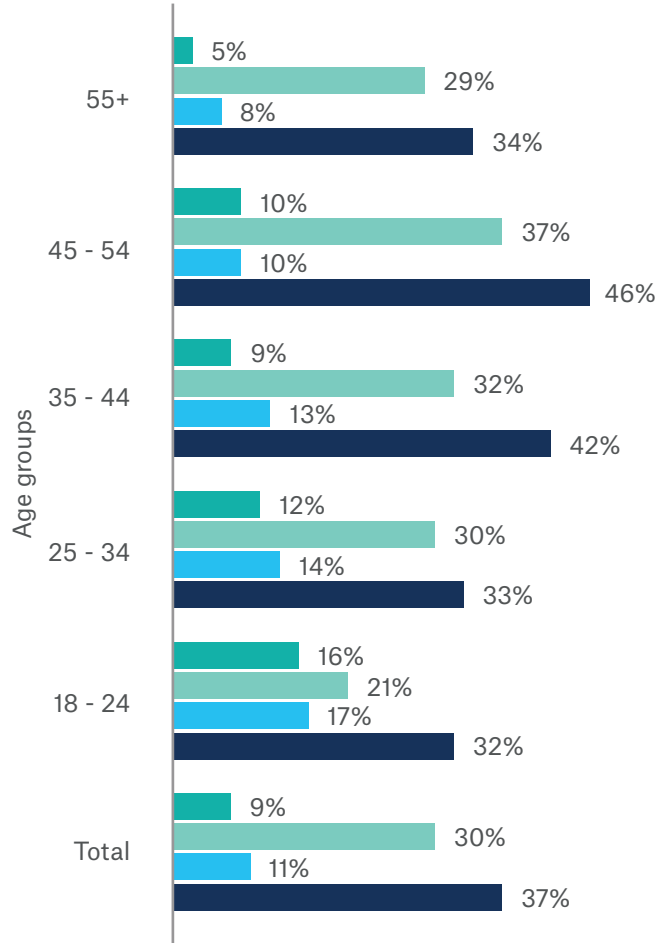
Pet owner demographics

According to our findings, younger people were more likely to become a cat or dog parent during the pandemic.

We found that 37% of all US adults owned a dog before the pandemic, although the figure was higher in the 45-54 age group at 46%. Overall, 11% of respondents had become a dog parent during the pandemic; this figure rose to 17% for people aged 18-24 and 14% for 25-34s (Figure 1).

Cat ownership was a little lower at 30% before the pandemic, with 9% of respondents becoming a cat parent during the pandemic. Again, pre-pandemic ownership was highest amongst 45-54s (37%), and during-pandemic ownership was highest amongst 18-24s (16%) and 25-34s (12%) (Figure 1).

So, what do these dog and cat owners feed their pets? And what factors are important to them when choosing pet food? Based on the pet food regulatory landscape, we've considered this in terms of 'health claims' and 'quality claims'. We've also looked at how pet parents value sustainability, in terms of pet food itself and its packaging.



- Became cat parent during the COVID-19 pandemic (i.e. since March 2020)
- Cat parent before the COVID-19 pandemic (i.e. prior to March 2020)
- Became dog parent during the COVID-19 pandemic (i.e. since March 2020)
- Dog parent before the COVID-19 pandemic (i.e. prior to March 2020)

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Figure 1: Findings related to the question "Which, if any, of the following currently best describes you? (Please select all that apply)"



Online sales of pet food: regulatory considerations

Overall, our findings indicate that grocery stores are the number one place to purchase dog and cat food (49%) followed by chain pet stores (28%), online grocery stores (26%) and Amazon (24%) (Figure 2). This pattern is broadly consistent for all age groups except the 18-24s, where the top four are Amazon (37%), grocery store (31%), online grocery store (30%), chain pet store (27%).

For a pet food product to be sold online in the US, it must be registered in all US states. It's also important to ensure online product information published by manufacturers or distributors is consistent with label claims. All online content needs to be considered with this in mind – including customer testimonials which may imply product qualities which have not been authorized and cannot be substantiated.

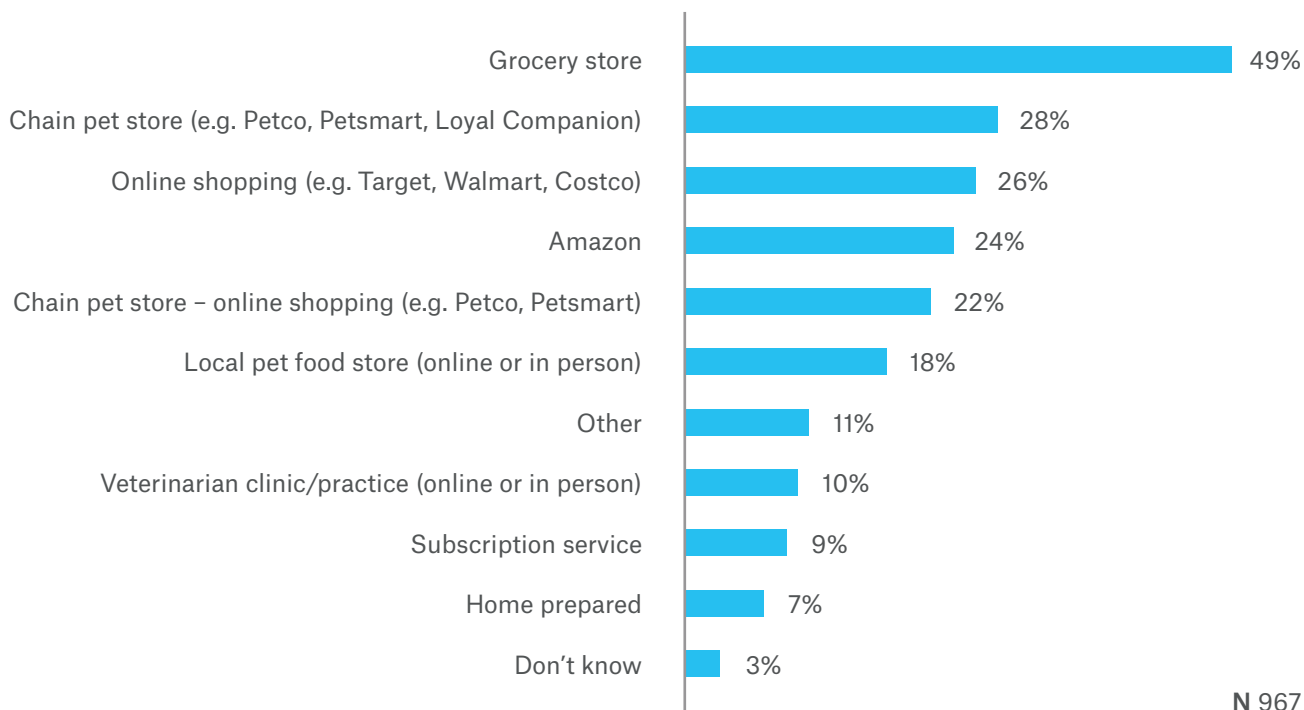


Figure 2: Findings related to the question "In which if any of the following places do you ever buy dog/cat food? (Please select all that apply)"

Navigating pet food regulation in the US

Pet food is categorized as a subset of animal feed under US regulation. Since its lawful distribution is subject to both federal and state rules, identifying the most appropriate strategy to bring products to market can be a challenge. It's also easy to fall foul of the rules, which can lead to serious consequences.

Federal requirements

The primary federal agency responsible for regulating pet food is the US Food & Drug Administration (FDA). The agency focuses on ingredients rather than finished products, via its Center for Veterinary Medicine (CVM).

CVM assesses ingredients in terms of their use for specific animals since an ingredient providing a key nutritional element for one species could be harmful to another. For this reason, human food ingredients are not automatically acceptable for use in dog and cat food.

Ingredients already approved for use in pet food are listed in Title 21 of the Code of Federal Regulations Part 573 (21 CFR 573). A partial listing of substances that are Generally Recognized as Safe (GRAS) for an intended use are found in 21 CFR 582 and 584. And ingredient definitions approved by the Association of American Feed Control Officials (AAFCO) are included in the AAFCO Official Publication.

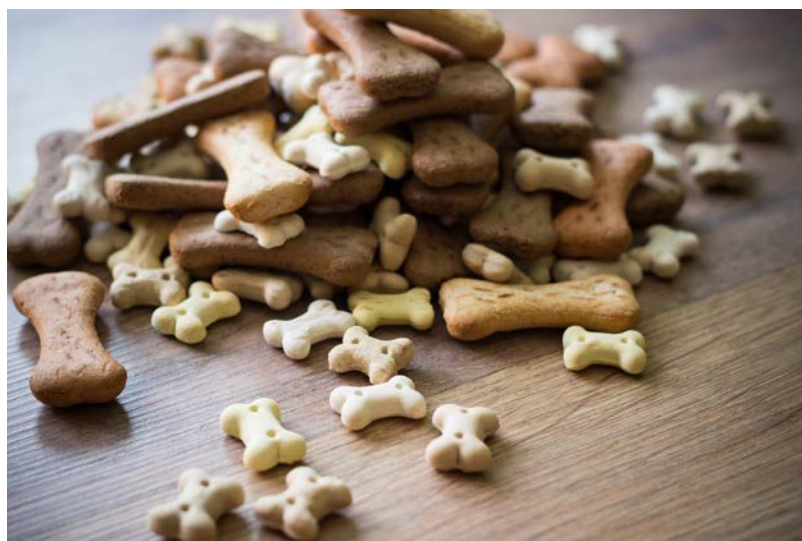
When it comes to the development of a new pet food ingredient, it can follow one of three regulatory paths. The most appropriate route depends on whether it is considered a food additive or GRAS, or already approved for a different species. We cover these three scenarios in detail in a separate whitepaper, *Animal feed and pet food: understanding the US federal and state regulatory framework*³.

If a pet food product uses ingredients that have already received CVM approval for their intended use, it can proceed to state registration.

State requirements

State-level pet food product registration is generally overseen by the State Departments of Agriculture. It covers the labeling and distribution of finished products, ensuring they are high quality, safe and nutritionally appropriate for the intended species.

Providing there is no conflict with federal law, each state can regulate in its own interest. For instance, some states regulate all pet food in the same way as animal feed, whereas others operate separate laws for commercial feed and pet food. This can make it difficult to achieve nationwide compliance for an individual product.



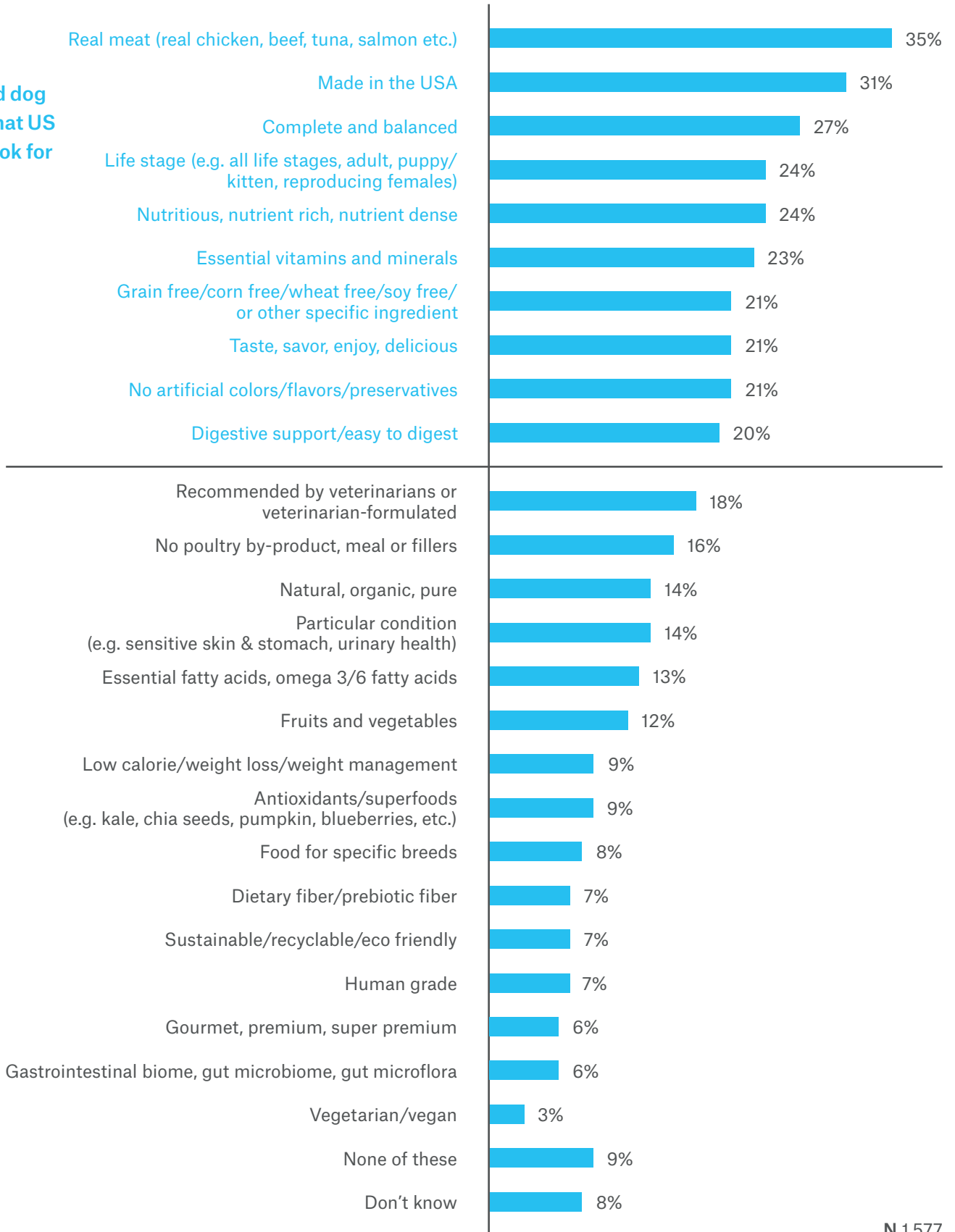
Meeting regulatory requirements and consumer demand

Our research indicates that most US adults who own a cat and/or dog feed their pets kibble (70%). Almost half feed moist food from cans or pouches (45%). We presented respondents with 25 characteristics or label claims that might appear on pet food products, asking which they specifically look for when making a purchase (Figure 3).

From a regulatory perspective, all pet food claims need to be handled with care. It must be possible to substantiate any claim made, and while some claims are allowable there are grey areas. Many pet food regulatory violations are linked to what is said – or not said – about the product. To avoid this risk, it's important to obtain expert advice on the wording of claims, then ensure that wording is used consistently across all labels and product descriptions.



Top 10 cat and dog food claims that US consumers look for



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Figure 3: Findings related to the question "Thinking about claims that products make on their labels...Which, if any, of the following characteristics/label claims do you specifically look for when purchasing dog and/or cat food? (Please select all that apply)"

Health claims

Based on our findings (Figure 3), many dog and cat owners consider claims or characteristics related to health when purchasing pet food products. For instance, 24% look for food that is appropriate to a pet's life stage (e.g. adult, puppy/kitten, reproducing female). A fifth of respondents look for food that claims to offer digestive support and 14% are interested in claims related to a particular condition (e.g. sensitive skin & stomach, urinary health). We also found that 9% look for pet foods that contain antioxidant or superfood ingredients, and similarly, 9% look for pet foods that support weight loss or weight management.

Health claims are a particularly challenging area of pet food regulation, potentially resulting in violation of federal and/or state law if they are misleading, impermissible or unsubstantiated.

Additives used to impart additional nutrients to cat or dog food must be CVM-approved for the target species. What's more, claiming a food product supports a specific aspect of cat or dog health can inadvertently stray into animal drug territory. To be classified as pet food, a product must support the normal function of the body, not alter or enhance it. The wording used in marketing and on labels must be crafted with this in mind, then carefully scrutinized to ensure it cannot be interpreted as a drug claim. For instance, a pet food can claim to 'help maintain normal (or healthy) digestive function' or 'support a healthy immune system'. However, 'reduces inflammation of the digestive tract', 'improves digestion' or 'boosts the immune system' would be classified as drug claims.

Naturally, for any pet food product aligned with health benefits, it must be possible to substantiate claims made about it. What's more, all ingredients must be CVM-approved or GRAS for dogs or cats, and manufacturing processes must yield safe products that are consistent between batches. It's also important to monitor regulations and stay alert to any changes that may impact individual products or the ingredients they contain.



“Back label” information (e.g. ingredients, nutrition facts)



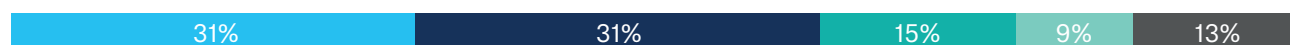
That the pet food company shares its quality control and food safety measures



That the product meets the AAFCO standards of quality and labelling



That the company has a veterinary nutritionist or someone of equivalent qualification working in the company



■ Very important ■ Fairly important ■ Not very important ■ Not important at all ■ Don't know

N 1,577

Figure 4: Findings related to the question “How important, if at all, are the following when shopping for dog/cat food?”

Quality claims

The quality of pet food products is a high priority for cat and dog owners, in terms of ingredients, nutrition and manufacturing standards. We found that 74% place importance on ‘back label’ information such as ingredients and nutrition facts while 72% think it’s important that pet food companies share quality control and safety measures (Figure 4).

Many of the ‘top ten’ pet food product claims that dog and cat owners look for relate to quality (Figure 3). People are keen to ensure they meet their pets’ nutritional needs with food that they will enjoy, and that is produced safely.

A quality-related pet food claim that has received a lot of attention, and caused some controversy, in recent years is ‘human-grade’. According to AAFCO,

the term has no official definition in any animal feed regulations. It says while ‘edible’ is a standard, ‘human-grade’ is not:

“For a product to be deemed edible for humans, all ingredients must be human edible and the product must be manufactured, packed and held in accordance with federal regulations in 21 CFR 110, Current Good Manufacturing Practice in Manufacturing, Packing, or Holding Human Food. If these conditions are met for a pet food, human-grade claims may be made. If these conditions are not met, then it is an unqualified claim and misbrands the product.”⁴

Making human-grade claims on pet food products that are not assured as safe for human consumption is likely to be construed as misbranding. This is a prohibited act, putting manufacturers and distributors of the pet food at risk of legal and reputational damage. Despite the interest in this term within the pet food industry, according to our consumer research it is not a 'top ten' claim. We found that 8% of cat and dog owners look for this claim when purchasing food for their pets (Figure 3).

On the other hand, 61% of the people we surveyed said it was important that products meet AAFCO standards of quality and labeling (Figure 4). Similarly, 62% said it was important to them that the pet food company employs a veterinary nutritionist or equivalent (Figure 4). Companies that employ staff in this capacity would be well-advised to highlight that they do so.

The formulation and label of a finished cat or dog food product is reviewed by individual states to provide quality assurance. Officials ensure that nothing on the label is false or misleading, as well as checking that ingredients are appropriate for the intended species. They also check that ingredients are balanced in an appropriate ratio and that feeding instructions are clear.

A lack of harmony between states makes this process highly complex. A claim that is acceptable in some states may be deemed 'false and misleading' in others, preventing product registration. Designing a single product label that can be used at a national level requires a thorough understanding of the different rules and requirements. To achieve seamless distribution, labels must be aligned with the most restrictive requirements.

A question of trust

Most of our research respondents agreed with the statement "I trust the claims pet food companies make on their products" (54%). However, a third said they disagreed and 13% said they didn't know. It may be that pet food companies need to go beyond what is required from a regulatory perspective to earn greater consumer trust.



Sustainability claims

Consumers are increasingly aware of sustainability issues related to food, and this is reflected in what they wish to feed their pets. When we asked dog and cat owners about sustainability factors, 61% said it was important to them that pet food was made from sustainable ingredients (Figure 5).

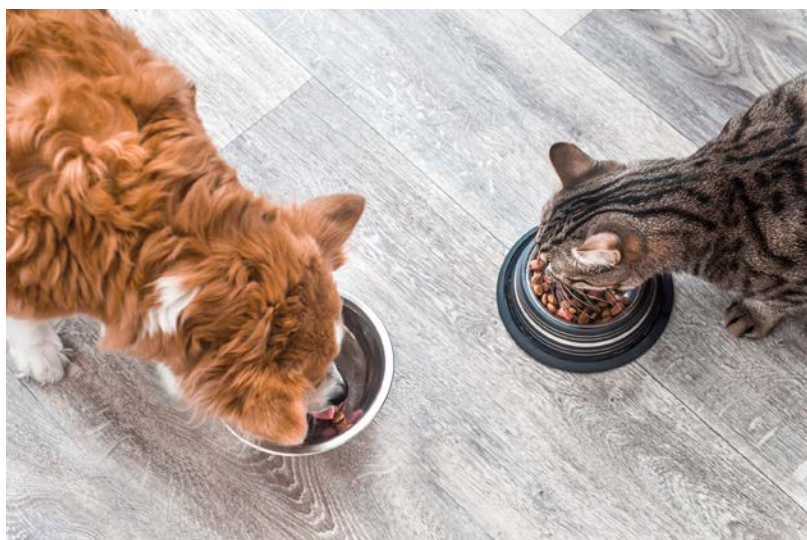
We found that 48% agree that pet food made with by-products can help reduce food waste, and 28% agree that pet food made with insect protein is more sustainable than normal pet food (Figure 6). In terms of using insect protein as a pet food ingredient, the regulatory landscape is starting to shift. January 2021 saw AAFCO's approval of black soldier fly larvae for use in adult maintenance dog food and treats. Full approval for use in dog and cat food in the US is expected in the near future⁵.

On a similar note, Pet Food Industry magazine recently published an article considering the environmental and economic benefits of upcycled pet food ingredients⁶. It reported that use of ingredients that would otherwise be discarded, such as misshapen fruit or vegetables, can result in certification from the Upcycled Food Association, subject to certain documentation. Aligning pet food products with initiatives like this could help substantiate sustainability claims, proving that they are not false or misleading.

In terms of product packaging, more than half of respondents say they place importance on environmentally friendly/sustainable characteristics (51%). Research by packaging and paper supplier Mondi⁷ takes this one step further. It found that 41% of people who became pet owners during the

pandemic are likely to switch pet food brands based on the sustainability of packaging.

This is another area where claims need to adhere to regulatory requirements. The Federal Trade Commission (FTC) Fair Packaging and Labeling Act is applicable to pet food, and its Green Guides should be consulted in relation to claims about recycled, recyclable, compostable or degradable packaging characteristics⁸.



Made from sustainable ingredients



Environmentally friendly/sustainable packaging



■ Very important ■ Fairly important ■ Not very important ■ Not important at all ■ Don't know

N 1,577

Figure 5: Findings related to the question "How important, if at all, are the following when shopping for dog/cat food?"

It is easy to find all the information I want to know about a product/company's sustainability credentials from their packaging/online



Pet food made with by-products (i.e. heart, liver, kidney, intestines, lung, blood, gizzards, etc.) can help reduce food waste



Pet food made with insect protein is more sustainable than normal pet food



■ Strongly agree ■ Tend to agree ■ Tend to disagree ■ Strongly disagree ■ Don't know

N 1,577

Figure 6: Findings related to the question "Still thinking about purchasing dog/cat food products...To what extent do you agree or disagree with the following statements?"

Younger pet owners: shifting demands

Future pet food trends may be dictated by characteristics that are important to the 18-24 and 25-34 age groups.

Based on our findings, there may be increased market readiness for cat and dog foods containing novel ingredients considered more ethical and sustainable. We found that 20% of 18-24s and 23% of 25-34s described themselves as 'flexitarian' and only eating meat occasionally (compared to an all-age average of 16%). This is reflected in their dog and cat food choices, as the below table illustrates.

What type of food do you ever feed your dog/cat?			
	All-age average	18-24	25-34
Vegetarian food for dogs (kibble/moist food)	5%	9%	7%
Vegan food for dogs (kibble/moist food)	4%	11%	8%
Vegetarian food with added taurine for cats (kibble/moist food)	6%	9%	12%
Vegan food with added taurine for cats (kibble/moist food)	3%	7%	6%

Any innovation in this field needs to be firmly rooted in regulatory awareness. The approval of new ingredients for use in cat and dog food can take several years, so it is important to anticipate future trends and embark on the regulatory journey sooner rather than later.

An innovation-regulation strategy

With pet ownership forecast to continue growing⁹, the US is likely to see a sustained increase in demand for cat and dog food products. This is an attractive market, with much scope for innovation, across pet food ingredients, formulations and packaging. New and existing players that meet consumer expectations for cat and dog food with superior health, quality and sustainability characteristics have much to gain. However, the stringency and complexity of the regulatory environment presents a significant hurdle.

Pet food manufacturers need to ensure innovation strategy is tightly interwoven with regulatory strategy. In the short term, this will accelerate time to market and aid a seamless product registration process. More importantly, it reduces the risk of regulatory violation that can be deeply harmful to a company's reputation and commercial position.





How can TSG help?

TSG's scientific and regulatory professionals have over 40 years in combined experience in pet food and animal feed. In addition to assisting with the federal and state registration of these products, we also provide regulatory support and guidance for animal drugs, animal supplements and pesticides intended for use on animals.

Our food/feed services include assistance with:

- Food Additive Petitions
- GRAS Notifications and Independent Conclusions
- AAFCO New Ingredient Definitions
- Label development and review to ensure compliance with state regulations
- Preparation and submission of new product registrations
- State renewals maintenance and tonnage reporting
- Guidance on regulatory changes that may impact product registration

TSG's clients also benefit from TSG Connect, a platform which provides 24/7 access to the real-time status of all of their registrations in each of the states.

Get in touch for support in
bringing your animal feed or
pet food product to market.

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References

1. Bedford E (2021, April 8) U.S. pet market sales by category 2011-2021. Statista. <https://www.statista.com/statistics/253983/pet-market-sales-in-the-us-by-category/>
 2. Tyler J (2020, March 3) US pet spending nears \$100 billion in 2019. Pet Food Processing. <https://www.petfoodprocessing.net/articles/13660-us-pet-spending-nears-100-billion-in-2019>
 3. Bryant-Spas S (2020, July 22) Understanding the US federal and state regulatory framework. TSG Consulting. <https://www.tsgconsulting.com/advisory/animal-feed-pet-food-regulations-usa/>
 4. AAFCO, "Human-Grade" . AAFCO Talks Petfood. <https://talkspetfood.aaftco.org/humangrade>
 5. Phillips-Donaldson P (2021, April 26) Insect protein for pet food buzzing into mainstream. Petfood Industry <https://www.petfoodindustry.com/blogs/7-adventures-in-pet-food/post/10218-insect-protein-for-pet-food-buzzing-into-mainstream>
 6. Wall T (2021, October 19) Upcycled pet food ingredient certification requirements. Petfood Industry. <https://www.petfoodindustry.com/articles/10735-upcycled-pet-food-ingredient-certification-requirements?v=preview>
 7. Mondl (2021) Premium pet food purchaser survey results. <https://mondi.app.box.com/s/t5l0cikkkh75t196e4r7vuyjtf2zlwb>
 8. Federal Trade Commission, Green Guides <https://www.ftc.gov/news-events/media-resources/truth-advertising/green-guides>
 9. L.E.K. Consulting (2021, July 20) Pet ownership to keep growing after pandemic bump. Consulting.us <https://www.consulting.us/news/6322/pet-ownership-to-keep-growing-after-pandemic-bump>
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About TSG Consulting ↗

TSG Consulting provides companies with high-quality regulatory and scientific consulting services. We help clients worldwide address the technical and regulatory issues in taking their products to market in multiple jurisdictions. Our scientific expertise, regulatory knowledge and understanding of local nuances enable our clients to navigate the complex and ever-changing regulatory landscape across the globe.

We serve a number of key markets and industry sectors including agricultural, industrial, consumer, food and beverage, animal health, and medical. Our teams comprise scientists and regulatory experts – many of whom have previously held positions at regulatory agencies, departments, and in industry. This combination of science, regulatory expertise and knowledge of how institutions and industry operate provides our clients with superior and well-rounded guidance.

TSG Consulting has offices in France, Germany, Spain, UK, USA and Canada. TSG is a Science Group (AIM:SAG) company.

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About Science Group plc ↗

Science Group plc (AIM:SAG) is a science-led advisory and product development organisation. The Group has three divisions:

- R&D Consultancy: providing advisory, applied science and product development services cross-sector helping clients derive maximum return on their R&D investments.
- Regulatory & Compliance: helping clients in highly regulated markets to launch, market and defend products internationally, navigating the frequently complex and fragmented regulatory ecosystems.
- Frontier Smart Technologies: designing and manufacturing chips and modules for the DAB/DAB+ radio markets with 80% market share (excluding the automotive market).

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