Policy statement



BVA policy position on diet choices for cats and dogs

Introduction

Under the UK Animal Welfare Acts, animal owners and keepers must ensure that they meet the five welfare needs of animals, including the need for a suitable diet. They must therefore ensure that the animals in their care receive a diet which meets their nutritional needs, to be protected from any pain, suffering, injury or disease that may result from being fed an inappropriate diet. However, with a range of factors to consider, choosing the most suitable diet for a pet can be complex, and access to clear, scientifically sound information can be challenging.

This policy position provides information on key considerations when choosing a suitable diet for cats and dogs, including meeting nutritional needs, safety and sustainability of ingredients, welfare of production animals, and the role of the veterinary profession. It does not attempt to determine which diet is most suitable for particular animals, instead highlighting factors owners should consider to meet their pet's needs. It aims to provide clear, independent information and recommendations which support the veterinary profession when discussing companion animal feeding. It focuses on feeding cats and dogs, the two most popular companion animals in the UK, but takes a principles-based approach which may be applicable to other companion animal species. In this document, the term "diet" covers anything that is consumed and therefore contributes to an animal's diet, including supplements, treats, liquids, and health related products such as dental chews eaten by the pet.

This position was developed through BVA's Companion Animal Feeding Working Group, bringing together veterinary professionals with expertise in nutrition, animal health and welfare, and sustainability, with evidence received from a wide range of stakeholders. Further detail on information considered by the group is available in the <u>Companion Animal Feeding Working Group report</u>.

Food choices for cats and dogs

Meeting nutritional needs

The food we provide to pets must fulfil their nutritional requirements and failure to do so can lead to a number of health issues, including malnutrition, obesity, a range of diseases such as kidney, gastrointestinal and dental disease. Like humans, cats and dogs need a range of nutrients including essential amino acids, vitamins, and minerals, which must be carefully balanced to keep them healthy, but we must remember that they do not have the same digestive systems and needs as humans or each other, and they have evolved to have different needs to their wild counterparts^{1,2}. Trends in human nutrition can transfer into pet diets, for example an interest in human paleo diets is now reflected in some owners aiming to feed their dog a 'natural wolf' diet, which may sound logical but is not supported by scientific evidence, with studies showing dogs have evolved to eat more varied diets than their wolf ancestors^{1,3,4.} Any diet must reflect the animal's specific needs, and not our personal projections of what makes a good diet.

There are a large number of commercial foods available for dogs and cats, which may be categorised in different ways, such as by ingredients. The most commonly fed diets are meat and cereal based⁵, but owners increasingly have access to options including foods which are vegetarian or vegan, grain-free, or with limited ingredients, eg only one source of carbohydrate or protein. There is also a

¹ Axelsson, E. *et al.* (2013) The genomic signature of dog domestication reveals adaptation to a starch-rich diet. *Nature*, 495(7441), 360-364.

² Raffan, E. *et al.* (2016) A deletion in the canine POMC gene is associated with weight and appetite in obesity-prone labrador retriever dogs. *Cell metabolism*, 23(5), 893-900.

³ Ollivier, Morgane, et al. (2016) Amy2B copy number variation reveals starch diet adaptations in ancient European dogs. Royal Society Open Science 3.(11) 160449

⁴ Lyu, T. *et al.* (2018) Changes in feeding habits promoted the differentiation of the composition and function of gut microbiotas between domestic dogs (*Canis lupus familiaris*) and gray wolves (*Canis lupus*). *AMB Expr* 8, 123.

⁵ PDSA 2022 PAW report. <u>www.pdsa.org.uk/what-we-do/pdsa-animal-wellbeing-report/paw-report-2022/diet-and-obesity</u>

growing interest in food containing alternative proteins, such as insects, cultured meat, yeast, and algae. Food can be further categorised by method of processing, eg if it is wet or dry (kibble), and whether it is cooked or raw (comprising of uncooked animal tissue). The range of options available makes choosing a suitable diet for any animal complex. However, when choosing a product, the first classification to consider is whether the food is complete, meaning it has been formulated to meet the nutritional needs of the pet, or complementary, such as treats, snacks and some pet foods. Complete diets, when fed as instructed, are required to meet all nutritional requirements appropriate to the life stage of the animal for which they are marketed. Owners supporting animals with specific nutritional needs, eg living with kidney disease, can purchase foods for particular nutritional uses (PARNUTS) which provide adapted nutrition to suit their needs, but should only do so with expert veterinary or small animal nutritionist advice.

Nutritional imbalances can sometimes take a long time to become apparent, so products must be carefully tested and trialled to ensure they provide a suitable diet for the intended animal. Meat and cereal based diets, in both kibble and wet forms, have been available for many years and fed to a large number of dogs and cats. This provides a confidence that they are not causing nutritional deficiencies which does not yet exist for other diets. For example, there has recently been a growing interest in feeding pets vegan and vegetarian diets, with several studies⁶ supporting their use and suggesting health benefits such as improvements in skin and gastrointestinal conditions. Although these results appear to be positive, the studies are usually small-scale and usually based purely on owner-reported data, so further long-term, controlled studies are needed to demonstrate their nutritional safety. Current research suggests that it is not possible to form a complete vegan or vegetarian diet for cats, as they are obligate carnivores and there is a lack of suitable synthetic essential amino acids available. It is possible to feed dogs a plant-based diet, but owners should be aware of the difficulties in balancing these diets for nutritional needs, the lack of robust long-term data on their safety, and should monitor their dog's health for long-term impacts.

There are a number of reasons why owners may wish to consider diet options, including health, and why the pet food industry must adapt, as discussed later in this position. Innovation should be embraced, but not at the expense of animal welfare through poor nutrition, so more research is needed to improve confidence in all diet types. Regardless of the diet chosen, owners must ensure they are aware of their pet's nutritional needs and provide a diet which meets them. They must also be aware of any possible safety or nutritional concerns associated with a diet, so that they are able to monitor their pet's health and take steps to mitigate potential adverse effects. Those creating their own complete diet or whose pets have specific needs should seek advice from Board Certified Veterinary Nutritionists⁷, either directly or via their vet. Veterinary organisations can support owners making these important decisions, by creating further resources and guidance using suitable independent advice.

Recommendation 1: BVA should create an accessible resource to help pet owners make decisions on diets that are suitable for their pet, including nutrition, safety, and sustainability aspects, with clear signposts to additional information for those who wish to know more.

Feeding the correct amount

One of the most common and long-standing nutrition-related health issues for pets is being overweight or obese^{8,9,10,11,12} which can lead to a wide range of problems for cats and dogs. Whilst making suitable diet choices for pets can be complex, ensuring they are fed the right amount of food

PDSA 2023 PAW report, Dogs. <u>www.pdsa.org.uk/what-we-do/pdsa-animal-wellbeing-report/paw-report-2023/dogs</u>
German, A.J. *et al.* (2018) Dangerous trends in pet obesity. *Veterinary Record* 182, 25–25

⁶ The results of several studies are summarised in Knight, A. & Leitsberger, M. (2016). Vegetarian versus meat-based diets for companion animals. *Animals*, 6(9), 57.

⁷ Veterinary nutritionists may be certified by the <u>European College of Veterinary and Comparative Nutrition</u> (ECVN) or the <u>American College of Veterinary Internal Medicine</u> (ACVIM). Pet owners can contact nutritionists directly or via referral from their own vet.

⁸ BVA (2020) BVA companion animal obesity policy position. <u>www.bva.co.uk/take-action/our-policies/companion-animal-obesity-dogs-cats-horses-donkeys-and-rabbits/</u>

¹¹ PDSA 2023 PAW report, Cats. <u>www.pdsa.org.uk/what-we-do/pdsa-animal-wellbeing-report/paw-report-2023/cats</u>

¹² BSAVA (2014) Companion animal nutrition scientific position statement. <u>www.bsava.com/position-statement/companion-animal-nutrition/</u>

is one of the clearest ways to improve health and welfare. This will also bring financial and sustainability benefits¹³, by reducing waste products being discarded or unnecessarily eaten.

Owners must ensure their pets receive a balanced diet with a suitable number of calories, accurately weighing food and taking into account any treats or scraps consumed. Nutrients provided by complementary products must be sufficiently balanced with other foods to avoid deficiencies or excesses, including health related products such as dental chews and plaque prevention powders which are often not regarded as food but are consumed and contribute to the pet's daily energy consumption. As a general rule for healthy animals, it is acceptable for 10% of an animal's calories to come from treats and other complementary products¹⁴, with the remaining 90% coming from a complete diet, remembering that requirements can change with life-stage and medical conditions. Owners should be encouraged to weigh the portion they are providing to ensure it suits their pet's needs. Pet food manufacturers should support this by ensuring guidance on packaging and supporting resources is clear and does not lead owners to overfeed, eg by making it clear guidelines do not constitute a minimum amount to feed and should be adjusted up or down to suit the individual.

Recommendation 2: BVA should develop a communications campaign which supports pet owners to understand the importance of feeding animals to maintain a healthy weight, acknowledging the one health impacts of overfeeding.

Pet food labelling

Access to clear information is essential for owners wishing to make informed decisions for their pets, and for any professionals wishing to assess food on nutrition, sustainability, or other qualities. Pet food product labels must legally¹⁵ include certain details, including the species of animal it is intended for, whether it is complete or complementary, instructions for use, and details of the ingredients.

Although legally compliant, some terminology on products can also be confusing. For example, the term 'natural' is not defined in animal feed legislation and can be used on any pet food product, though The European Pet Food Industry Federation (FEDIAF) Code of Good labelling Practice for Pet Food contains guidance on this and claims would need to be substantiated to avoid being deemed misleading by authorities. Further resources from FEDIAF are useful for explaining definitions. Another example is that PARNUTS are sometimes labelled as 'prescription' or 'therapeutic' diets, but no prescription is required to obtain them, and they cannot legally claim to treat or prevent disease. These terms are misleading and should not be used on packaging or in marketing, except where a genuine veterinary prescription is needed. In the interests of transparency, veterinary professionals selling specialist products should also take care to ensure owners are aware they can be purchased elsewhere, and that veterinary advice is recommended but prescriptions are not required.

Even where terminology is standardised or regulated, details provided on packaging and labels are generally not well understood by animal owners. Labelling needs to be clearer and more consistent with those on food for human consumption to be useful sources of information. Including more detail of the ingredients, eq specific details rather than broad categories and country of origin, would improve access to information on their sustainability and the welfare standards of any production animals. Individuals can request additional information from pet food companies, but they are not obligated to provide this. As packaging size can be restrictive, some companies do provide additional information on their websites, which gives them an opportunity to display information in more accessible formats and include extra detail for those who wish to access it. Pet food companies should be encouraged to include QR codes or web links to further information included on products to support owners in making suitable choices for their pets.

Recommendation 3: Lobby pet food companies to provide additional information on UK pet food labels, eg via a QR code or web link.

¹³ Swanson, K.S. et al. (2013) Nutritional sustainability of pet foods. Advances in nutrition 4.2: 141-150.

¹⁴ Linder, D. E., & Parker, V. J. (2016). Dietary aspects of weight management in cats and dogs. Veterinary Clinics: Small Animal Practice, 46(5), 869-882

¹⁵ Assimilated Regulation (EC) 767/2009 lays down rules on the placing on the market and use of feed for both food-producing and non-food producing animals within Great Britain, including requirements for labelling, packaging, and presentation. Available at https://www.legislation.gov.uk/eur/2009/767/contents.

Safety, sustainability, and production animal welfare

Safety of ingredients

As well as ensuring a diet is nutritious for animals to eat, it is essential that safety, for both the animal consuming it and wider public health, is also safeguarded. Regulations and monitoring are in place to ensure this, with anything orally fed to pets being covered by feed regulations, including dental chews and other products which may be ingested. The <u>Food Standards Agency (FSA)</u> is the competent authority responsible for this legislation, working to ensure feed is safe, is what it says it is, and helping to make food healthier and more sustainable for everyone¹⁶. Any businesses that "make, market or use animal feed" must <u>register via a local authority</u>, who are responsible for monitoring the feed activities carried out on the premises.

Despite careful regulation and monitoring, issues can arise which impact animal health and welfare and/or public health, most notably through the spread of bacteria such as salmonella and *E.coli*. Awareness and understanding of risk factors are essential to keep pets, people, and the planet safe. An issue which particularly concerns vets¹⁷ is that an increase in raw feeding could pose a risk to animal and public health, due to the potential presence of pathogens and bacteria which would normally be killed during the cooking process. Many studies have highlighted potential risk factors of raw feeding, including:

- Raw meat diets harbouring pathogenic and zoonotic bacteria, eg *E. coli, Salmonella* spp., *Listeria* spp., *Campylobacter* spp., and *Clostridium perfringens*^{18,19,20,21,22,23}.
- A link with a UK outbreak of Shiga toxin producing E. coli 0157 in humans²⁴
- More frequent contamination with E. coli than cooked/conventional kibble diets^{22,23}
- Presence of antimicrobial resistant bacteria in raw meat diets^{23,25}

In addition to the wealth of good quality evidence highlighting the potential health risks associated with raw feeding, there are a number of small-scale studies available which conclude animals developed illnesses as a result^{26,27,28,29}. There are significant challenges in researching the link to human health, including a lack of awareness potentially meaning incidents of illness are not linked with raw pet foods as their likely cause. The one health risks associated with the build-up of antimicrobial resistance are almost impossible to quantify but should be taken seriously. There are some small-scale studies suggesting raw diets may have some potential health benefits for the

 ¹⁶ Food Standards Agency Strategy 2022 to 2027, Available At: <u>https://www.food.gov.uk/about-us/foreword-a-changing-food-system</u> Accessed May 2024
¹⁷ BVA Voice survey Autumn 2022: Some vets considered raw food was dangerous for both owners and pets due to the risk of

¹⁷ BVA Voice survey Autumn 2022: Some vets considered raw food was dangerous for both owners and pets due to the risk of infection (eg TB from raw venison, from raw chicken, tapeworm) or gastric issues.

¹⁸ Treier, A. *et al.* (2021) High occurrence of Shiga toxin-producing Escherichia coli in raw meat-based diets for companion animals—A public health issue. *Microorganisms*, 9(8), 1556.

¹⁹ Weese, J.S. *et al.* (2005) Bacteriological evaluation of commercial canine and feline raw diets. *The Canadian Veterinary Journal*, 46(6), 513.

²⁰ Strohmeyer, R.A. *et al.* (2006) Evaluation of bacterial and protozoal contamination of commercially available raw meat diets for dogs. *Journal of the American Veterinary Medical Association*, 228(4), 537-542.

²¹ Hellgren, J. *et al.* (2019) Occurrence of Salmonella, Campylobacter, Clostridium and Enterobacteriaceae in raw meat-based diets for dogs. *Veterinary Record*, 184(14), 442-442.

²² Nemser, S.M. *et al.* (2014) Investigation of Listeria, Salmonella, and toxigenic Escherichia coli in various pet foods. *Foodborne pathogens and disease*, 11(9), 706-709.

²³ Morgan, G. *et al.* (2024) An investigation of the presence and antimicrobial susceptibility of Enterobacteriaceae in raw and cooked kibble diets for dogs in the United Kingdom. *Frontiers in Microbiology*, 14, 1301841.

²⁴ Kaindama, L. et al. (2021) A cluster of Shiga Toxin-producing Escherichia coli O157: H7 highlights raw pet food as an emerging potential source of infection in humans. *Epidemiology & Infection*, 149, e124.

²⁵ Nüesch-Inderbinen, M. *et al.* (2019) Raw meat-based diets for companion animals: a potential source of transmission of pathogenic and antimicrobial-resistant Enterobacteriaceae. *Royal Society open science*, 6(10), 191170.

²⁶ Jones, J.L. *et al.* (2019) Whole genome sequencing confirms source of pathogens associated with bacterial foodborne illness in pets fed raw pet food. *Journal of veterinary diagnostic investigation*, 31(2), 235-240.

²⁷ O'Halloran, C. *et al.* (2019) Tuberculosis due to Mycobacterium bovis in pet cats associated with feeding a commercial raw food diet. *Journal of Feline Medicine and Surgery*, 21(8), 667-681.

²⁸ Martinez-Anton, L. *et al.* (2018) Investigation of the role of Campylobacter infection in suspected acute polyradiculoneuritis in dogs. *Journal of veterinary internal medicine*, 32(1), 352-360.

²⁹ Giacometti, F. *et al.* (2017) Highly suspected cases of Salmonellosis in two cats fed with a commercial raw meat- based diet: health risks to animals and zoonotic implications. *BMC Veterinary Research*, 13, 1-5.

dog^{30,31,32,33}, but further research is needed and any benefits should be assessed against potential risks. Until further clarity can be provided, potential health risks must be highlighted, and owners considering a raw diet must be aware of hygiene measures, safe storage and handling advice, as increased awareness can only help to reduce any possible adverse effects. This is especially important for immunocompromised people, young children, the elderly and pregnant women who are likely to be at increased risk. Useful advice on handling and preventing infection is available from the FSA and Government websites.

The scale of potential health risks associated with any diet is unclear, meaning those risks may currently be either over or under-reported. One major barrier to understanding risks is the lack of adverse reaction reporting for issues associated with pet food in the UK. Although some processes are in place, eg via manufacturers, and FSA monitors open data sources across the globe to help detect, respond to, and prevent food and feed safety incidents occurring in the UK, there is currently no system to collect information from veterinary professionals or animal owners concerned about contaminated or unbalanced products. An independent, centralised surveillance system would enable accurate monitoring of animal or public health issues associated with specific diets, and provide an early warning system for adverse events suspected to be caused by pet foods. UK systems such as <u>SAVSNET</u> and <u>VetCompass</u> already provide useful monitoring information for disease and health issues, and in Australia the <u>PetFast system</u> collects details of suspected adverse events associated with pet foods. UK stakeholders should discuss how best to implement a system. In the meantime, vets and pet owners can sign up for FSA food and feed alerts to be notified of known issues.

Recommendation 4: Convene a roundtable on how to create an adverse reaction reporting system for pet diets in the UK.

Environmental sustainability of ingredients

There is growing awareness of the environmental impacts associated with food production and consumption and animal owner interest in the sustainability of pet food³⁴. Food systems (for humans and animals) account for approximately a third of all global greenhouse gas emissions³⁵. It is unclear how much of this total can be attributed to pet food, but calculations for dry pet food alone estimate emissions of 106Mt Co2, which would make it the 60th highest emitter if it were a country, and land use of more than 49Mha, over twice the size of the UK³⁶. Food has also been identified as the most significant contributor to a dog's environmental impacts³⁷, and the emissions associated with feeding a medium sized dog thought to be roughly equivalent to driving the average car between 2000 and 4000 miles per year³⁸. The volume of pet food sales is increasing globally, more than doubling since 2010³⁹, but the associated emissions must fall to achieve decarbonisation targets and help minimise global warming, and other environmental factors such land use should also be considered.

Analysis⁴⁰ of emissions across the UK food and drink value chain shows that production and import of ingredients accounts for 66% of the emissions related to food and drink consumed in the UK. The remaining impacts can be attributed to consumer and retail handling (eg cooking and storage, 20%), manufacturing (6%), transport (5%), packaging (3%) and post-consumer (eg waste management, 0.5%). This breakdown is not currently available specifically for pet food in the UK but does highlights

³⁰ Hiney, K. *et al.* (2024) Fecal microbiota composition, serum metabolomics, and markers of inflammation in dogs fed a raw meat-based diet compared to those on a kibble diet. *Frontiers in Veterinary Science*, 11, 1328513.

³¹ Hiney, K. *et al.* (2021) Clinical health markers in dogs fed raw meat-based or commercial extruded kibble diets. *Journal of Animal Science*, 99(6), skab133.

 ³² Marx, F.R. *et al.* (2016) Raw beef bones as chewing items to reduce dental calculus in Beagle dogs. *Australian veterinary journal*, 94(1-2), 18-23.
³³ Hemida, M.B. *et al.* (2021) Puppyhood diet as a factor in the development of owner-reported allergy/atopy skin signs in adult

³³ Hemida, M.B. *et al.* (2021) Puppyhood diet as a factor in the development of owner-reported allergy/atopy skin signs in adult dogs in Finland. *Journal of Veterinary Internal Medicine*, 35(5), 2374-2383.

³⁴ Google searches showed a record high for "pet food and sustainability" in 2022.

³⁵ Crippa, M. *et al.* (2021) Food systems are responsible for a third of global anthropogenic GHG emissions. *Nat Food* 2, 198–209.

³⁶ Alexander, P. et al. (2020) The global environmental paw print of pet food. Global Environmental Change, 65, 102153.

³⁷ Yavor, K.M. et al. (2020) 'Environmental Impacts of a Pet Dog: An LCA Case Study', Sustainability, 12(8), p. 3394.

 ³⁸ Alexander, P. *et al.* (2020) The global environmental paw print of pet food. *Global Environmental Change*, 65, 102153.
³⁹ Statista (2023) Pet Food: market data & analysis. Available at: <u>https://www.statista.com/study/48838/pet-food-market-data-and-analysis</u>

⁴⁰ WRAP (2020) Data analysis from <u>The Waste and Resources Action Programme</u>, provided by UK Pet Food.

the importance of ingredient choice when considering the sustainability of food. Various studies^{41,42,43,44} have compared the impacts of the production of ingredients for different types of pet food. These consistently show that the ingredients used in wet food have at least twice the emissions of those in dry food products, with some showing the difference to be significantly higher, even before taking into account any impacts associated with production and transport. Where ingredients are sourced from has a significant impact, eg food produced in areas linked to deforestation will have higher emissions, and choice of animal ingredients used is a critical factor, both in terms of the species of animal it comes from and whether muscle meat or by-products are used.

Pet food will often use organ meat and other by-products which are less appealing to humans but are safe and very nutritious, including 'category 3' animal by-products (ABPs) which are fit for human consumption but downgraded due to commercial decisions⁴⁵. Using by-products rather than cuts of meat more frequently eaten by humans significantly reduces a product's associated emissions⁴⁶, and it can be argued that pet food helps to make the food industry more sustainable as it prevents these products being wasted. Any large scale changes in the composition of pet foods, eg towards higher value meats or entirely plant-based products, would need to be carefully assessed as this would change the entire food system and potentially result in additional waste which must be otherwise disposed of. It is important to note that many studies use the economic model to allocate animalproduct emissions, assigning higher value meat a greater proportion of the total emissions associated with producing an animal, with by-products therefore having a lower emission factor per kg. This recognises that all cuts contribute to the value of farming and therefore have some associated emissions, but that higher value products tend to drive the industry. It has been suggested that greater efforts should be made for ABPs to enter the human food chain to improve sustainability. If this were to happen, it would increase the economic value of ABPs and their associated emissions, also increasing the emissions associated with current pet foods. Therefore, there is a need to research alternative sources of protein and assess their environmental impact.

Alternative protein ingredients, including from insects, yeast, cultured meat, and algae have been suggested to improve sustainability of pet food, but more research is needed to assess their safety, nutritional qualities and whether they can truly be considered sustainable. There has also been a growing interest in plant-based ingredients, including fully vegetarian and vegan diets. Animal ingredients usually have higher environmental impacts overall than plant products, especially in terms of GHG emissions⁴⁷, so increased used of plant-based ingredients could help to improve sustainability, provided further research shows these diets meet nutritional needs over time.

There has been a recent trend towards pet owners seeking higher value meat content (ie not ABPs), including in premium brands and raw meat diets. This is concerning from a sustainability aspect, as avoidance of the use of by-products and 'meat meals' (ie ground up meat products) will result in greater competition with food meant for human consumption, higher transportation and storage costs, more waste during production, and higher environmental impacts. 'Premium' brands may also seek to use less grains and cereals, unsustainably increasing the total meat content with no evidence that this benefits animal health and welfare. Premiumisation should always be based on science to create a better product, and experience for the pet through palatability trials, not simply the use of more meat or that from the human food chain.

Balancing sustainability and nutritional needs for a pet's diet is complex. Public awareness of sustainability issues and the potential impacts of their decisions must improve, and owners must make decisions based on science rather than trends to protect both the planet and the health and welfare of their animal. Further guidance and research are needed in many areas to identify best

- ⁴³ Martens, P. et al. (2019) 'The Ecological Paw Print of Companion Dogs and Cats', BioScience, 69(6), pp. 467–474.
- ⁴⁴ Pedrinelli, V. et al. (2022) 'Environmental impact of diets for dogs and cats', Scientific Reports, 12(1), p. 18510.

 ⁴¹ Alexander, P. *et al.* (2020) The global environmental paw print of pet food. *Global Environmental Change*, 65, 102153.
⁴² FEDIAF (2018) Product Environmental Footprint Category Rules (PEFCRs) Prepared Pet Food for Cats and Dogs. The European Pet Food Industry Federation (FEDIAF).

⁴⁵ Further details on ABPs can be found on the FSA and Government websites

 ⁴⁶ Alexander, P. *et al.* (2020) The global environmental paw print of pet food. *Global Environmental Change*, 65, 102153.
⁴⁷ Acuff, H. L *et al.* (2021). Sustainability and pet food: is there a role for veterinarians? *Veterinary Clinics: Small Animal Practice*, 51(3), 563-581.

practice and support animal owners in their decision making. The <u>UK Pet food sustainability</u> <u>handbook</u> contains helpful advice for manufacturers.

Recommendation 5: BVA to raise awareness of the complexities around diet choice in a one health context.

Recommendation 6: BVA to provide clear explanations on what animal by-products are, including their role in sustainable food systems.

Welfare of food producing animals

Decisions on diet choices for cats and dogs should not only take into account the health and welfare of the animal being fed, but also of the production animals used to produce the food. Animal health and welfare should not be unnecessarily compromised to address human want or need, as explained in the <u>BVA sustainable UK agriculture policy position</u>. Ideally, pet food products with animal-derived ingredients would include clear labelling on the welfare of the animals used to produce the food, including the country they are sourced from, to support owners in choosing higher-welfare products. However, this is not currently possible for the majority of products due to a lack of segregation for 'category 3' animal by-products in abattoirs, and the complex production lines currently make it too complicated to be certain of the specific source meat content, eg from non-stun slaughter, or an organic or assured farm. This lack of traceability is a barrier to improving standards and should be improved. In the meantime, all pet food companies should be considering animal welfare in relation to their product ingredients, wherever this is possible. Companies already considering animal welfare within their supply chain should review how to best communicate this with owners.

The food system will need to adapt, to improve welfare of production animals and to meet sustainability targets, but it is clear many factors need to be balanced and manufacturers cannot simply choose one ingredient over all others. Products must continue to be based on science and nutrition, with any changes carefully considered. The huge number of animals to be fed means manufacturers cannot suddenly switch all product ingredients without causing major supply issues, and there could be welfare concerns if better welfare and sustainability increases the cost of pet food and some owners then struggle to feed their pets. To be considered sustainable, the welfare of any animals involved in the process, including insects, must also be safeguarded.

Recommendation 7: Pet food companies should work with suppliers to ensure they can trace welfare standards for animal-based ingredients in their products and communicate this to pet owners.

Recommendation 8: Lobby APHA/Government agencies for improved labelling and traceability of animal by-products.

The role of veterinary professionals

A trusted source of information for animal owners

Owners should have access to scientifically sound and unbiased sources of information and advice, to allow them to make appropriate diet choices for their pets. Owners receive a large amount of nutritional information from breeders, social media, the internet, pet food companies and other sources, but few tend to seek advice from veterinary professionals^{48,49}. Veterinary team members could be an important source of independent information on nutrition, especially in relation to preventing a range of health issues, but BVA survey data⁵⁰ indicates that nutritional choices are not routinely discussed with pet owners, and in most cases are not systematically recorded. This is likely due to veterinary surgeons not having time in consultations, or feeling they have insufficient

⁴⁸ Wainwright, J. *et al.* (2022) Owners' views of canine nutrition, weight status and wellbeing and their implications for the veterinary consultation. *Journal of Small Animal Practice*, 63(5), 381-388.

⁴⁹ Morgan, G. *et al.* (2022) A Dog's Dinner: Factors affecting food choice and feeding practices for UK dog owners feeding raw meat-based or conventional cooked diets. *Preventive veterinary medicine*, 208, 105741.

⁵⁰ BVA Voice of the veterinary profession survey Autumn 2022 and Spring 2024: Results highlighted that most respondents were unsure what percentage of the cats and dogs they see in practice were being fed non-traditional diets, suggesting that this is not routinely discussed or recorded.

knowledge to engage in such conversations^{51,52}. There may be a tendency to direct interested clients to other team members or shut down the discussion to avoid long, potentially difficult conversations, which does not help to build trust or understanding and may have contributed to owners generally seeking nutritional advice from other sources. To support their role as a trusted independent source of information, veterinary professionals should also be wary of perceived or actual conflicts of interest if promoting a specific pet food, eg through branded items in the practice, and should ensure their actions are in line with BVA Transparency and client choice guidance and the <u>RCVS code of conduct</u>.

Education on nutrition for healthy cats and dogs is limited and variable in initial training for both veterinary surgeons and nurses, with the emphasis more likely to be on clinical nutrition, ie for sick animals. Only one UK veterinary school currently has Board certified veterinary nutritionists in their team, and although schools do invite guest experts to lecture on nutrition, these are often optional sessions. This has resulted in an information provision gap which has largely been filled by the pet food industry, including through sponsored sessions and student representatives. The information and training provided by companies plays an important role in informing the profession and expanding knowledge of this topic, but must be complemented by independent teaching to ensure professionals are able to critically appraise information and make recommendations that are not restricted to products from a single company. Without a strong foundational understanding of its importance, veterinary professionals may be less likely seek optional training on nutrition for healthy cats and dogs, and may feel it is more important to focus their post-graduation training time and budget on clinical skills, or on clinical or exotic animal nutrition, rather than the basic needs of cats and dogs. The importance of understanding nutrition and considerately communicating this with owners must therefore be emphasised in initial veterinary education and recognised in day one competencies.

Recommendation 9: Work with RCVS to emphasise the importance of nutrition in day one competencies for veterinary surgeons and veterinary nurses, and improve awareness of the need for considerate communication on this topic with animal owners.

Data collection for research

Veterinary professionals could also play an important role in improving research. As repeatedly mentioned above, more evidence is needed to better understand how existing and emerging diets affect the health and welfare of cats and dogs, public health, and sustainability. However, a major barrier to conducting necessary studies is the lack of objective data available. Studies often rely on owner reported information, which raises a number of issues around the evidence collection process and robustness of assessment. Such studies may lead to bias through selective choice of participants, method of data collection, and potentially incorrect information being reported, or may be limited in the number of animals involved and length of time taken, resulting in potentially misleading results. Randomised, controlled trials are needed, using measures such as clinical examinations and blood tests to provide objective data, alongside large-scale longitudinal studies of pets in their home environment, so veterinary professionals routinely discussing and recording diet histories during consultations would create a valuable data source for future analysis. To be useful, this data will need to be stored systematically on the Practice Management system. Accurate classification can be challenging since most pet owners will feed a combination of foods, so we recommend using the WSAVA Diet History Form for guidance.

Recommendation 10: Veterinary professionals should routinely and systematically record nutritional histories on their Practice Management Systems, ideally in line with the <u>WSAVA</u> <u>Diet History Form</u>.

⁵¹ Alvarez, E. E. *et al.* (2022). Small animal general practitioners discuss nutrition infrequently despite assertion of indication, citing barriers. *Journal of the American Veterinary Medical Association,* 260(13), 1704-1710.

⁵² Lumbis, R. H., & De Scally, M. (2020) Knowledge, attitudes and application of nutrition assessments by the veterinary health care team in small animal practice. *Journal of Small Animal Practice*, 61(8), 494-503.