

Report on regulation and safety of pet food in Australia to the Department of Agriculture and Water resources

Date: August 28, 2019

Amended: 12/11/2019

Prepared by:

Professor Caroline Mansfield

Dr Lina Maria Martinez Lopez,

Melbourne Veterinary School,

250 Princes Highway, Werribee, Victoria 3030

T: (03) 9731 2111

E: cmans@unimelb.edu.au

PRIVATE AND CONFIDENTIAL



Contents

Abbreviations and acronyms	4
Definitions	5
Statement	6
Executive Summary.....	7
Objective 1: Review the Senate inquiry recommendations on the regulatory approaches to ensure the safety of pet food and to protect consumer’s rights.....	9
Recommendation 1:.....	9
Recommendation 2.....	9
Recommendation 3.....	10
Recommendation 4.....	11
Recommendation 5.....	12
Recommendation 6.....	16
Recommendation 7.....	17
Objective 2: Collation of pet food safety events	18
Thiamine deficiency	18
Woolworths Ltd—Woolworths Select Wholegrain Dog Biscuits 1kg	19
Whiskas dry cat food.....	19
Ultimates cat food.....	20
Best Feline Friend.....	21
Advance Dermocare.....	23
Applaws It's All Good Duck & Venison dry food.	24
Royal Canin dry dog food.....	25
Black Hawk Grain Free Salmon Dog food.....	25
Hill’s Pet Nutrition Recall of tinned food due to Hypervitaminoses D	26
My Dog® Beef and Liver 100g 12 x pack	28
Jerky treat-associated Fanconi syndrome/renal tubular disease.....	28
Objective 3: Differentiate the pet food incidents where the product was sold as a complete diet pet food or as a pet food treat and discuss whether the incidents could have been averted by compliance with AS 5812:2017.	29
Jerky associated illnesses in dogs	29

Salmonella outbreak in US associated with pigs ears.....	30
Are diets nutritionally complete?	30
Objective 4: Collate available information on informal concerns about pet food. (e.g. forums on social media) since the AS 5812:2017 was updated in 2017.....	31
Objective 5: Review and report on the volumes of pet food sold each year in Australia, the number of manufacturers, and how much is made domestically versus how much Australia imports.	64
Pet food sales.....	65
Number of manufacturers	70
Imported products.....	71
Objective Six: Assess and report on Australia’s pet food industry’s uptake of and compliance with the requirements of AS 5812:2017	73
Objective Seven: Consider if more informative labelling on pet food and pet food treats would address issues such as compliance with standards etc.....	78
Objective Eight: Review and compare AS 5812:2017 with similar pet food standards in other countries (e.g. New Zealand, North America, Canada and Europe), including any relevant components from the Australian Standard for Hygienic Production of Pet Meat (AS 4814:2009) and the Australian Standard for Hygienic Rendering of Animal Products (AS 5008:2007)	82
Canada	82
United States.....	83
Japan	84
Europe.....	84
New Zealand	87
Objective Nine: If necessary, recommend any possible changes to AS 5812:2017or any related Australian Standards, to enable the production of safe pet food.	88

Abbreviations and acronyms

AVA: Australian Veterinary Association

PFIAA: Pet Food Industry Association of Australia

AAFCO: Association of American Feed Control Officials

PetFAST: Pet Food Adverse event System of Tracking

CDC: Centre for Disease Control

FDA: Food and Drug Authority

MPA: Mars Petcare Australia

BARF: Biologically Appropriate Raw Food

EFSA: European Food Safety Authority

FEDIAF: European Pet Food Industry Association

VCA: VetCompass Australia

NLP: Natural language processing

MO: Megaoesophagus

USDA: United States Drug Authority

PFAC: Pet Food Association of Canada

FFDCA: Federal Food Drug and Cosmetic Acts (US)

FSMA: Food Safety Modernization Act (US)

FTC: Federal Trade Commission (US)

RASFF: Rapid Alert System for Food and Feed (EU)

MPI: Ministry of Primary Industry (NZ)

ACVM: Agricultural Compound and Veterinary Act (NZ)

ONC: Oral Nutritional Compounds (NZ)

APVMA: Australian Pesticides and Veterinary Medicines Authority

Definitions

Acute event: In context of food toxicity/response, this would occur within 12-24 hours of ingestion.

Chronic event: In context of food toxicity/response, this would occur days-weeks following repeated exposure/ingestion of a dietary substance. A temporal association may be challenging for owners/veterinarians to pinpoint in these situations.

Adverse reaction to food: An adverse reaction to a food is an abnormal or exaggerated clinical response to the ingestion of a food or food additive. It may be immune mediated (called food allergy or hypersensitivity) or not immune mediated (called food intolerance). It may occur in all individuals if enough quantity of the food is eaten due to toxic, microbiological, pharmacological reactions and dietary indiscretion; or it can occur only in some susceptible individuals.

Food hypersensitivity: can be divided in non-allergic food hypersensitivity (Food intolerance and food idiosyncrasy), IgE-mediated food allergy, non IgE-mediated food allergy and aversion, avoidance and psychological intolerance.

Nutritional deficiency: When a diet has insufficient essential nutrients or vitamins to sustain health for the animal.

Nutritional excess: When a diet contains a nutrient or vitamin in excess to a point where it becomes harmful to that individual.

Toxicity: When a toxin is present in the diet. This is usually naturally occurring (such as toxins produced by shellfish or mould on corn).

Contamination: Contamination is the presence or introduction of a hazard (Regulation (EC) No 852/2004). Hazard may be posed by any contaminant (e.g. biological or chemical agent, foreign matter, or other substance) not intentionally added to food which may compromise food safety or suitability (Codex Alimentarius Commission, Recommended International Code of Practice, CAC/RCP 1-1969, Rev. 4-2003)

Multifactorial: When multiple factors contribute, or are necessary, to result in development of a disease.

Life-stage: For purposes of nutrition, there are different requirements during different life stages. Growth (puppy/kitten) requirements are different from adult and senior pet requirements, pregnancy and lactation.

Essential vitamins: These are vitamins required for life that cannot be naturally formed by the host, and therefore must be derived from the diet.

Complete vs complementary food: A complete food contains all the required nutrients for the appropriate life stage and can be fed as a sole diet. Complementary foods require additional food to become complete.

Natural food: According to the FEDIAF definition the term "natural" should be used only to describe substances in pet food (derived from plant, animal, micro-organism or minerals) to which nothing has been added and which have been subjected only to such physical processing as to make them suitable

for pet food production and maintaining the natural composition. Examples of acceptable physical processes include: freezing, extraction without chemicals, concentration, drying, pasteurisation, smoking without chemicals, grinding extrusion, pelletisation, some microbiological processes e.g. natural fermentation without the use of GMOs and some enzymatic processes as long as they maintain the natural composition of the feed material, substance or nutrient. However, according to AAFCO guidelines, natural pet food is feed or feed ingredient derived solely from plant, animal or mined sources, either in its unprocessed state or having been subject to physical processing, heat processing, rendering, purification, extraction, hydrolysis, enzymolysis or fermentation, but not having been produced by or subject to a chemically synthetic process and not containing any additives or processing aids that are chemically synthetic except in amounts as might occur in good manufacturing practices.

Complete and balanced: means the product has all the required nutrients, in proper amounts and proportions, and has been tested to make sure it meets the complex nutritional requirements of the specific life stage for a healthy dog or cat. The term is defined by AAFCO/FEDIAF.

Association of American Feed Control Officials: This is a group of American state and federal officials who regulate pet food. AAFCO establishes the ingredients that can be used in pet food, nutrition profiles for dogs and cats and sets practices for conducting feeding trials, designed to test the nutrition profiles of pet food.

Statement

The views in this document are the views of the authors, and do not represent the views of the University of Melbourne as a whole. The report has been prepared independently from the ACCC, PFIAA or the AVA, but the second draft has been amended following comments from these bodies.

Executive Summary

Detailed in this report are the complexities and regulations around pet food regulation, several current issues with the pet food industry in Australia, some alternative methodologies that are used internationally and some recommendations that could be considered for incorporation into new pet food legislation.

The previous Senate enquiry, and this working group gives Australia the opportunity to be a world leader by putting in place legislation that protect the health of pets and their owners, and fully encompasses all aspects of pet food manufacturing, labelling and marketing.

A summary of these recommendations is below:

- Mandatory adherence to AS5182
 - o New products to the market should be certified as well as companies, so that customers can be sure that every product that by adheres to a minimum standard.
- Modification of AS5182 to include:
 - o Labelling regulations expanded to explicitly include all digital and website marketing platforms.
 - o Labelling of pet foods that are branded as completely balanced with exotic or novel protein sources should state whether they have been determined to be complete by feeding trials or formulation.
 - o Annual analysis (independently run or audited) of all products that are labelled as complete to ensure they meet the nutritional requirements for that life stage and species, and to be repeated upon any major reformulation of said product if it falls outside of the annual cycle.
 - o New guidelines for the selling of raw meat products to include safety guidelines for people.
 - o All products containing preservatives that may interact with thiamine to be tested to ensure this is adequate for the shelf-life of the product and labelled as such.
- Creation of a Pet Food Standards group working within the Food Standards Australia New Zealand , with overarching responsibilities including:
 - Ability to enforce 'quarantine', so no ongoing retail sales of products that are strongly suspected of causing adverse events is possible.
 - Ability to enforce mandatory recall once a product is confirmed to have an adverse safety profile.
 - Ability to form an independent study group (epidemiological, nutritional, veterinary, toxicological) to investigate or advise a company on suspected adverse food events should such expertise be required.
 - Random audits of products and companies to ensure that annual nutritional profiling is undertaken, and to enforce this if it is not done.
 - A publicly visible web-site associated with the Pet Food Standards to be created which includes documentation of investigations and current pet food safety issues (within

Australia and worldwide), full publication of AS5182, a list of recalled products and other useful (non-branded) nutritional information for the pet-owning public.

-
- Establishment of three methods of monitoring for adverse pet food events (pet food safety), overseen and monitored by the Pet Food Standards group:
 - A real-time monitoring system utilising VetCompass Australia and natural language processing (NLP) to detect any event that is of low incidence or may not be associated with pet food by owners or veterinarians.
- A veterinary only logging system, that is either not affiliated with PFIAA or AVA, where veterinarians can directly log issues of concern with veterinary clinical records and data or continuation of PetFAST but with a clear and transparent reporting system to veterinarians and the public through Pet Food Standards. Succession planning is required if PetFAST is to be continued as the main reporting format. Investigation can be performed (through surveys or the VetCompass database) and calls for cases raised through this forum if there are a cluster of new reports that supports a possible outbreak.
 - o A public interface where suspected pet food issues can be logged directly. These should mainly relate to quality aspects such as foreign material, mouldy product or other grossly evident issues. Clinical information can be logged, but veterinarians must report through the veterinary logging system.
- The pet food regulations and standards should be expanded within the next 5 years to include other companion animals such as guinea pigs, rabbits, caged birds etc.

Objective 1: Review the Senate inquiry recommendations on the regulatory approaches to ensure the safety of pet food and to protect consumer's rights.

The following recommendations were made by the Senate Standing Committee on Rural and Regional Affairs and Transport "Regulatory Approaches to the Safety of Pet Food" published in June 2018.

Recommendation 1:

The committee recommends that the Australian Standard for the Manufacturing and Marketing of Pet Food (AS5812:2017) be made publicly available on the Department of Agriculture and Water Resources' website for download and distribution.

The writers of this report believe that this is the minimum that should be achieved from this review. However, if pet food manufacturers are not compelled to make it clear whether they adhere to these standards on their web-sites and labels then this alone will not improve pet food safety.

The AS5182:2017 also covers manufacturers and does not ensure that individual diets that are produced by said manufacturers are nutritionally complete, appropriate or shown to be safe in the target species by conduction of feeding trials.

Recommendation 2

7.9 The committee recommends that, as part of its review into the safety and regulation of pet food, the working group focus on mechanisms to mandate pet food standards and labelling requirements in Australia. In particular, it should give serious consideration to amending the **Food Standards Australia New Zealand Act 1991** to expand the responsibilities of Food Standards Australia New Zealand (FSANZ) to include pet food standards and labelling requirements.

7.10 The committee further recommends that the working group draft a national pet food manufacturing and safety policy framework for the consideration and endorsement of an appropriate forum such as the Australia and New Zealand Ministerial Forum on Food Regulation.

7.11 To inform its deliberations, the committee recommends that the working group take into account the evidence provided to this inquiry.

The report writers believe that a Pet Food Standards branch should be established to provide:

- *Legislation for safe manufacturing of pet food*
- *Appropriate labelling and marketing of pet food on all platforms (including digital)*
- *A forum for reporting and investigating adverse safety events*
- *Information to the pet-owning public about pet food safety, and pet food nutrition.*

A Pet Food Standards branch could provide information on their web-site that is freely available about other ways of assessing diets, including AAFCO guidelines and feeding trials. These should be developed and produced by independent bodies.

Recommendation 3

7.16 The committee recommends that the independent review working group identify specific measures to improve the efficacy of the Australian Standard for the Manufacturing and Marketing of Pet Food (AS5812:2017). These measures should include specific requirements with regard to feeding trials and other testing prior to pet food sale as well as mandatory labelling standards that detail all ingredients including preservatives, additives, and which disclose heat, irradiation or other treatments to the product.

Labelling is also covered in Objective Seven of this report.

If a product is being marketed as being nutritionally complete for a species or life-stage, the authors believe that it should be mandatory for the product to be state on the label whether the product has been determined to be so by feeding trials or by formulation.

Feeding trials are complex and expensive to undertake. It is potentially unrealistic to expect every company to perform them for every product. However, if a new product, exotic ingredient or new 'strategy' is being used, then a feeding trial is strongly recommended. For example, if a product is using a new or unusual protein source that has not been used before in dogs or cats, even though the nutritional analysis may fall within guidelines, a feeding trial would be recommended to ensure that biologically this holds true. An example of this is the grain-free trend that is dominating much of the pet food market (and described in detail later). Although very popular and enthusiastically followed by many people, boutique and grain-free diets are now associated with dilated cardiomyopathy in some dogs. There is a question about whether feeding trials would detect every problem like this, but certainly an absence of a feeding trial guarantees that problems won't be detected.

As feeding trials are expensive, then annual assessment of diets by an independent laboratory is recommended as a minimum to ensure that nutritional requirements are met. This should also occur whenever there is any major reformulation, and the results of these analyses should be available for 'auditing' by the governing body for pet food.

If any product claims a health benefit, such as reducing allergic load, or good for skin conditions, they should be tested in feeding trials both for safety and efficacy. Many diets assessed on line for this report make these claims but stop short of claiming a therapeutic benefit that requires them to be registered by the Australian Pesticides and Veterinary Medicines Authority (APVMA). If probiotics are added to food, then testing should be done to ensure that the named bacterial strains are present in the numbers claimed. If the processing of the food inactivates those bacteria, then benefits from bacterial by-products should be proven. Studies have shown that dietary products with probiotics may not actually contain what they state on the label, and at times may contain additional products (appendix 1).

The use of the term natural precludes addition of synthetic vitamins or minerals, however without those additives most diets would not be nutritionally complete. The term natural also confers a higher level of

quality, when in fact quality is not associated with whether a product is natural or not. Labelling that discourages the use of “all natural” or “natural products” to improve clarity for owners would be welcome. The use of the term natural is confusing, and further clarification around this topic is recommended in objective seven.

We also strongly recommend that all labelling requirements should be duplicated on web-sites and pet food ordering sites. The growing trend in pet food industry is on line ordering rather than in store purchasing. This means that the same quality and content of information should be available on the on-line ordering forums and web-sites as are present on the physical labels. This needs to be explicitly referred to in the regulations, and label information needs to be clearly visible on all product retail sites.

We agree that treatment with heat, irradiation etc should ideally be printed on all labels or a commonly used icon used. However, the impact of these would be very difficult for the average consumer to understand. Even though now irradiated food is required to have a label stating not to be fed to cats, in multi-pet households this may be impossible to avoid, and so the reason for this warning should be apparent to buyers.

Another pet food label recommendation is regarding raw meat products, another area of pet food that is increasing in popularity. Raw meat, particularly poultry products, produced for human consumption are intended to be cooked to a safe temperature to inactivate bacteria such as Salmonella. Labels on raw pet food, which are intended to be served without cooking, should indicate that there is a potential human and pet health hazard associated with this. It would be welcome if all pet food (sold through butchers or other wholesalers) was captured through the same pet food standard.

Another label requirement that should be mandatory is that if thiamine has been added (due to preservation with sulphite or similar product), then the total thiamine concentration and bioavailability of the diet should be determined, and this documented on the label to be adequate for the shelf-life of the product.

Finally, annual and mandatory testing of nutritional profiles of diets not only allow consumers to know that products meet the nutritional requirements, but also that the claimed ingredients are at the quantities advertised (see Objective 9 for more detail).

Recommendation 4

7.24 The committee recommends that the Australian Competition and Consumer Commission review the process by which the Australian Standard for the Manufacturing and Marketing of Pet Food (AS5812:2017) could become a mandatory standard under Australian Consumer Law and make public its review findings and any recommendations.

The report writers support the recommendation that AS5182 should be mandatory for all pet food manufacturers.

Recommendation 5

7.29 The committee recommends that the Australian Veterinary Association, in cooperation with the Australian Competition and Consumer Commission explore measures to improve data capture in the PetFAST system.

There is no mechanism for members of the public to log suspected adverse events to pet food. There is also no publicly accessible database that documents what adverse events or toxicities have been reported. The Australian Competition and Consumer Commission (ACCC) currently does not have capacity under Australian consumer law (ACL) to log what pet foods haven recalled. Currently, under section 128 of the ACL, “suppliers are required to notify the Commonwealth Minister of a product that has been voluntarily recalled because it ‘will or may cause injury to a person’” [communication received from ACCC]. Based on this, the Product Safety Australia website does not record or capture any pet food recalls. Therefore, there is no independent site that records or updates on all pet food related events. Additionally, the ACCC also does not publish consumer complaints on their website as these are treated as confidential under the Privacy Act 1988. As such, the ACCC may not be the appropriate body to be involved, and this could potentially fall better under a newly created Pet Food Standards group.

The main mechanism in place for logging suspected pet food toxicities is the Pet Food Adverse event System of Tracking (PetFAST) system, which is run jointly by the Australian Veterinary Association (AVA) and the Pet Food Industry Association of Australia (PFIAA). Membership of the PFIAA is voluntary, and tends to be dominated by the multinational companies like Hills, Royal Canin etc. These larger companies are more likely to have the in-house expertise to investigate potential food-related toxicities and a greater capacity to absorb potential losses from a product withdrawal than smaller companies.

The following information about PetFAST was obtained from email communication with the AVA and from their web-site.

PetFAST is a vast improvement on what previously existed in the pet food space and is a credit to the driving force of the two founding veterinarians who are still involved with this system. The reporting system is monitored by these veterinarians, both experienced in small animal practice and well known in the Australian veterinary community. These two veterinarians then discuss with PFIAA the cases (owner/animal details are kept confidential). The decision to withdraw a diet from production or sale is a voluntary company decision and cannot be mandated by PetFAST or the AVA. However, the vets through the AVA can raise awareness within the veterinary community of any impending issues.

Without proof of an association, deficiency or toxicity (which can take weeks-months after suspected incident) veterinarians would be at risk legally for naming a product publicly. Therefore, PetFAST relies on voluntary reporting by veterinarians, volunteers assessing the reports, volunteer membership of PFIAA and then voluntary recall of any food products. This is an admirable exercise by the individuals, but not transparent, as the results of such reporting is not made publicly available. Likewise, due to the volunteer aspect of the current set-up, it would be recommended that the AVA look at succession planning and expanding the scope of the operation to include annual reports, follow-ups and logging of chronic events.

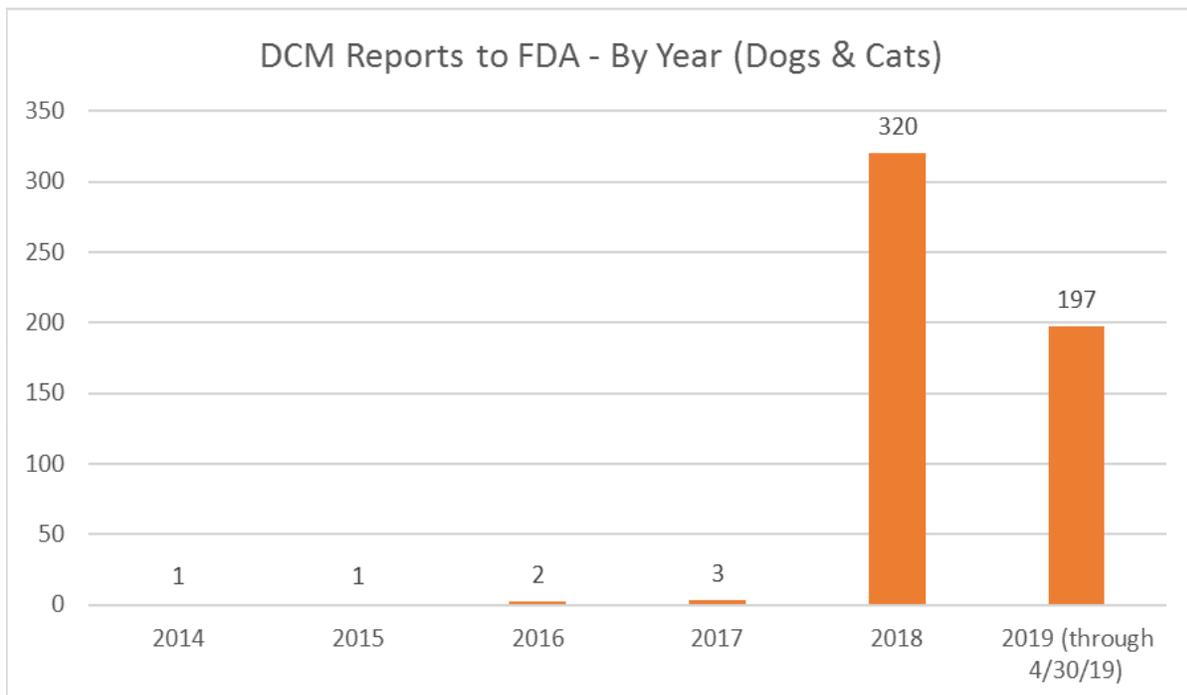
A significant failing with the reporting system of PetFAST, or with any similar system, is that it requires veterinarians to make a connection between the diet and the condition that they are seeing in the animal

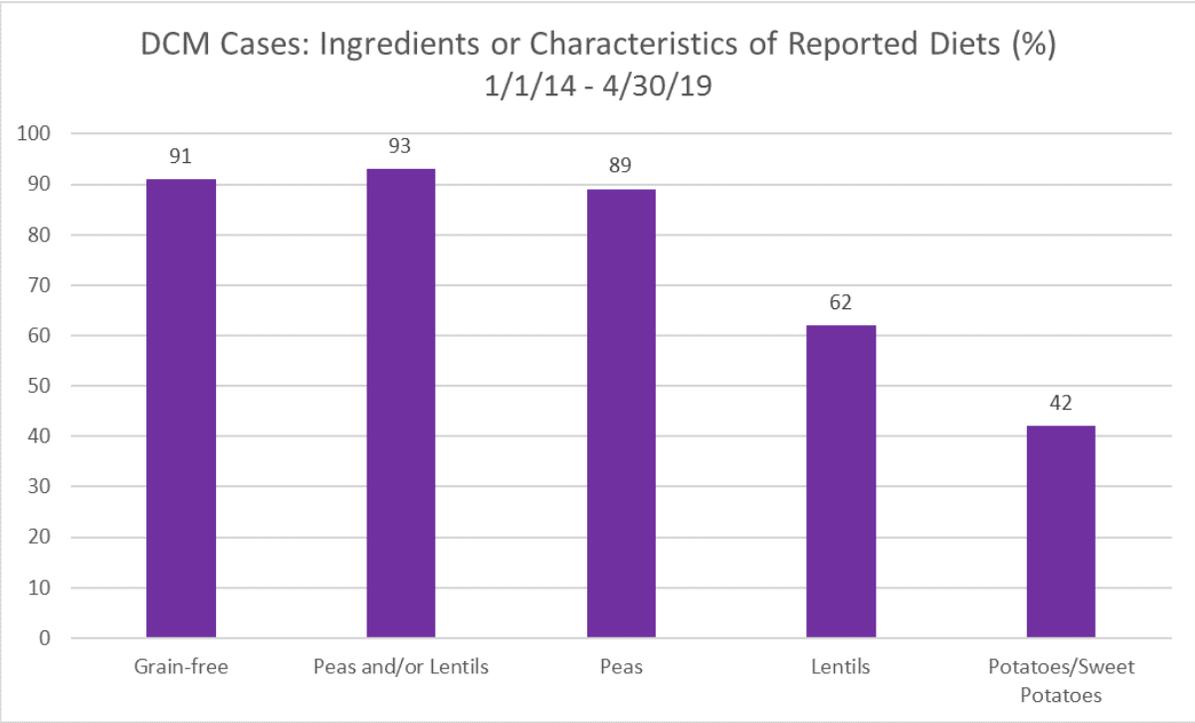
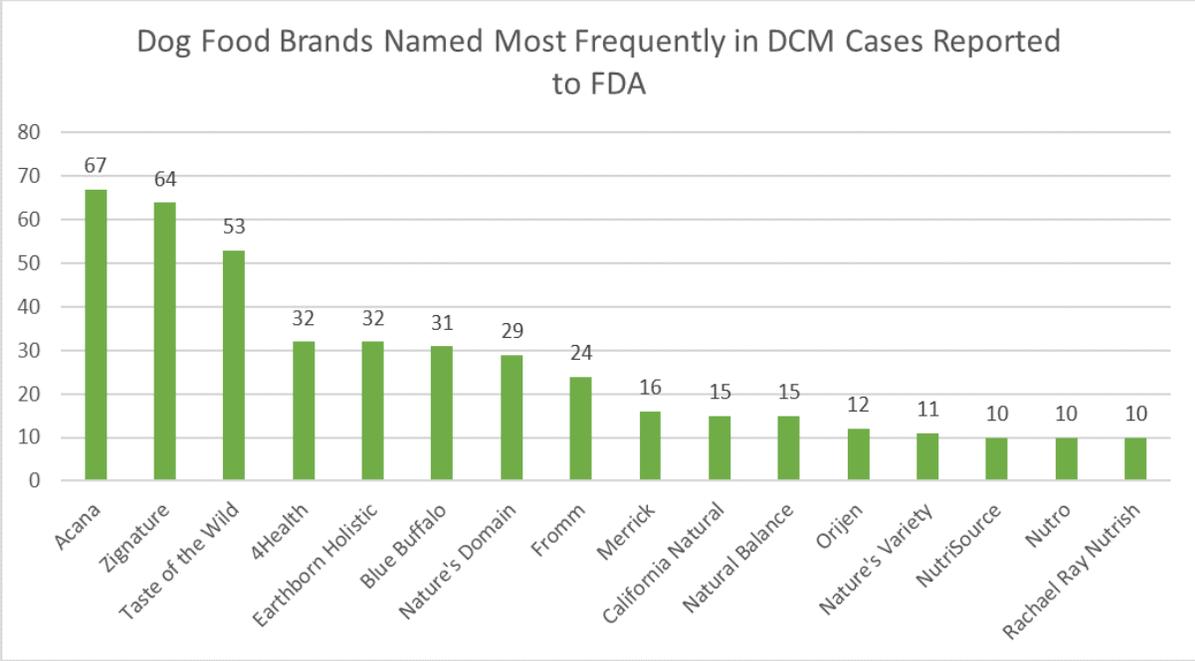
in the first place. That is difficult with more chronic conditions, such as demonstrated by two recent food events: one the megaesophagus outbreak in Victoria, and the current grain-free diet association with cardiomyopathy in the US and other parts of the world. For both examples, the disease was/is associated with diet, but does not affect every dog that eats that diet/type of diet. In other words, the disease is multifactorial and other factors such as genetics, environment, concurrent diseases etc could contribute to the number of dogs that are clinically affected.

This means that the incidence is low (~3-5% of dogs consuming the diet), and if the diet does not have a large market share (like Advance Dermocare), then individual vets may not notice any increase or association between disease and diet. It is only once vets are encouraged to report such an association that reporting systems like PetFAST became useful. In fact, surveys that collect all demographic, environmental and medical information required may be better placed to help investigate the disease. Without the working dog colony serving as a marker in Victoria, megaesophagus and its association with the diet may not have been made for months/years or may have been missed all together.

The current situation of boutique and grain-free diets associated with dilated cardiomyopathy (DCM) in the US and other countries is another example; whereby DCM causes heart failure when the heart becomes ineffective at contracting normally. A copy of the graph of DCM cases reported to the Food and Drug Administration (FDA) in the US below shows that the number of recorded cases is extremely low until the FDA notified the public about a possible association in mid-2018. Furthermore, the number of dogs per individual diet is also very low, and it is only when looked at globally that a problem becomes apparent.

All tables/graphs below obtained from: <https://www.fda.gov/animal-veterinary/news-events/fda-investigation-potential-link-between-certain-diets-and-canine-dilated-cardiomyopathy>





The number of adverse events logged through PetFAST is not possible to obtain, as this is confidential and is not made publicly available. However, the AVA shared the edited extract (over the page) of ~10 months reporting, where there were 25 incidents logged. Without further details, it is difficult to comment precisely on these reported incidents, but it would suggest that most (22/25) of the events logged are (presumably) associated with dog treat-induced renal injury (discussed later in the report).

This toxicity was one of the original driving events for setting up PetFAST, and the knowledge around this is high in the veterinary community and the consultants that run PetFAST. Hence, the reporting is likely to be more vigilant for this than for other toxicities. Conversely, not every toxicity, even if suspected, will be logged by veterinarians. This illustrates that for any reporting mechanism to be successful, the awareness in the reporters (i.e. the veterinarians) needs to be high.

Date received	Issue
31/08/2018	Fanconi Syndrome
10/09/2018	Renal tubulopathy
27/09/2018	renal tubulopathy
24/10/2018	Fanconi syndrome
2/11/2018	Acquired Fanconi syndrome
6/11/2018	Treat Induced renal tubulopathy
10/11/2018	Intermittent vomiting since December with diarrhoea
12/12/2018	Suspected renal tubular disorder, subsequently resolved
20/12/2018	Fanconi Syndrome
31/12/2018	Botulism
11/01/2019	Renal tubulopathy
14/01/2019	Fanconi Syndrome
1/02/2019	Acquired fanconi syndrome
5/02/2019	Fanconi Syndrome and possibly Copper storage disease
9/02/2019	Dietary upset
19/02/2019	Haemorrhagic gastroenteritis, allergic response
21/02/2019	DDX gastritis, pancreatitis, FB obstruction, other
27/02/2019	Fanconi like syndrome
1/03/2019	Fanconi-like syndrome
6/03/2019	Acquired Fanconi (like) syndrome
22/03/2019	Acute Renal, Tubular Toxicity due to Cicken Tenders Treats
4/04/2019	Renal tubular acidosis, proteinuria, renal failure
30/04/2019	possibility of acquired renal tubulopathy ex hypophosphataemia
30/04/2019	Suspected acquired falconi syndrome
16/05/2019	Acute kidney injury / proximal tubular injury

**Obtained by email from M Latter 25/7/2019*

Due to the confidentiality surrounding the data of PetFAST the veterinarians directly involved with this were not contacted by the study authors. Recommendations are therefore to be taken as suggestions that should be expanded upon and discussed with the AVA and the body that will govern pet food in the future. The highest priority should be given to ensuring that the reporting systems are independent, transparent, sustainable and information (that is relevant and validated) is publicly available. In addition, other opportunities to search for new or emerging diseases should be explored.

One of these potential methods to monitor possible pet food safety events that would otherwise be undetected is to utilise the VetCompass Australia (VCA) consortium. The VCA is composed of representatives from every veterinary school in Australia and funded by the Australian Research Council (Linkage Equipment Infrastructure Fund). The VCA database has access to deidentified clinical records from general practice clinics around Australia. This allows for monitoring of health and medical problems in animals presented to these clinics: <http://www.vetcompass.com.au/>.

Up until now, accessing this information has been retrospective, in other words once a problem is suspected the data is interrogated to determine the extent and veracity of that problem. With enough support, and with a relatively short time-frame (18-24 months), it is possible that a real-time surveillance system could be put in place to monitor disease diagnoses. This would utilise natural language processing (NLP), a subfield of computer science that helps process and analyse large amounts of natural language data. In this way, the way in which individual veterinarians input data into clinical records would not skew or prevent data from being identified or retrievable. By inputting search items such as 'regurgitation' or 'megaoesophagus', then whenever there is a blip or increase above baseline, this incidence can be flagged, and an investigation can be undertaken. This would be a way of monitoring for an array of potential conditions across Australia and be a world-first development that would also have translational benefits for human as well as animal health. The potential for the human and animal reporting systems to learn from each other is exemplified by the 2007 pet food recall due to melamine adulteration. A year later, contamination of Chinese baby formula and other milk-based products was detected. It is conceivable that the same source ingredients were responsible, and ultimately melamine-contaminated human food was found in almost 70 countries (Bischoff & Rumbeiha, 2018).

Reference: Bischoff, K., & Rumbeiha, W. K. (2018). Pet Food Recalls and Pet Food Contaminants in Small Animals: An Update. Vet Clin North Am Small Anim Pract, 48(6), 917-931. doi:10.1016/j.cvsm.2018.07.005

Recommendation 6

7.34 The committee recommends that the Australian Competition and Consumer Commission establish a system for consumer reporting on its Product Safety Australia website, to enable members of the public to lodge complaints and concerns associated with pet food.

Please see comments from above (recommendation 7), whereby this may fall outside of the ACCC and better within the scope of a Pet Food Standards group.

Public reporting of issues is an admirable concept, however is difficult to fully enact in practice. Part of the issue with consumer reporting would be the potential for large amounts of frivolous data to be

generated that would then require investigation due to temporal association being made that were erroneous. The recommendation would be for there to be a public interface through a system where reports of food appearance, acute events that don't necessitate veterinary attention are reported. These would be forwarded to the manufacturer responsible, responses are monitored, and an investigation undertaken if there is an unexpectedly higher number associated with a food is apparent. For conditions that require veterinary attention, or where the association is not quite so clear-cut, then reporting should be through the veterinary reporting system.

The on-line system should ensure that relevant details are captured, and questions asked to ensure that frivolous complaints are validated prior to forwarding to the companies in question.

Recommendation 7

7.37 The committee recommends that the Australian Government work with the states and territories to establish a mechanism to investigate adverse pet food events and develop a complementary education campaign to raise awareness of the adverse pet food reporting, investigation and recall regime.

Yes, this proposal is supported and an independent process is preferred. As detailed elsewhere in this report, a mandatory quarantine and/or recall mechanism is recommended along with capacity to investigate pet food events with an 'on call' team of experts not employed by the pet food industry to complement the in-house pet food company expertise when required. Expertise that could be called on includes epidemiology, toxicology, veterinary medicine and veterinary nutrition. It is expected that this working group would work with the relevant pet food manufacturer to investigate the root cause of any issues.

Objective 2: Collation of pet food safety events

Collate information on all pet food safety events that have occurred since 2012, describe the cause and source of information as well as the number of animals affected, identify any issues; in particular whether the incident would have been averted if the pet food complied with the Australian Standard for manufacturing and marketing of pet food (AS 5812:2017) and report on the effectiveness of the response to these events.

Methodology:

Pet owners may lodge complaints directly with pet food manufacturers, distributors or through advocacy groups like Choice. To determine what types of recalls were made, the following web sites were searched for the terms ["food OR diet AND recalls" "Pet food toxicity" "Dog food toxicity" "Cat food toxicity"]: Choice, Woolworths, Coles, Petbarn, Pet Circle. Only Choice and Woolworths had easily accessible and locatable recall data on pet food available on their web site.

The number of adverse events logged through PetFAST is not possible to obtain, as this is kept confidential and is not made publicly available.

In addition to the above methods, the report writers contacted prominent veterinarians to ask of any other incidents that may not be captured through these systems. The veterinarians involved with PetFAST were not contacted but have had the opportunity to comment on the first draft of this report and consequently edits have been made.

The report writers have found the lack of a single site that records all pet food-related issues to be a source of both confusion and frustration for veterinarians and pet owners. Whilst we understand that some information should remain confidential, to maintain transparency and consumer confidence there should be public reports on the number of complaints, the outcome of investigations, corrective actions taken, and which products are recalled annually. The American Veterinary Medical Association (AVMA) has a web page publicly available of animal food recalls and alerts based on reports of the FDA (<https://www.avma.org/News/Issues/recalls-alerts/Pages/pet-food-safety-recalls-alerts-fullyear.aspx>). This is therefore a resource available to both consumers and veterinarians.

Thiamine deficiency

The use of sulphur dioxide, which destroys thiamine, in pet foods has been associated with repeated outbreaks of polyencephalomalacia in dogs and cats in Australia. In 2014 a case-report was published in the Australian Veterinary Practitioner of a cat fed exclusively a commercial, kangaroo meat pet food purchased from a supermarket. The cat presented after an acute onset of neurologic signs including muscle fasciculations, ventroflexion of the neck and inability to stand. Exposure to environmental toxins was unlikely. The cat improved clinically with thiamine supplementation. Testing of the food confirmed the presence of sulphur dioxide preservatives.

Preservatives that liberate sulphur dioxide (220 - sulphur dioxide, 221 - sodium sulphite, 222 - sodium bisulphite, 223 – sodium metabisulphite, 224 - potassium metabisulphite, 225 – potassium sulphite, 228 - potassium bisulphite) are commonly added, in varying degrees, to 'pet meat/mince' to diminish the

odour produced by bacteria that multiply in food, and delay the reduction of myoglobin, which results in the meat appearing brown rather than red. Sulphur dioxide rapidly inactivates thiamine present normally in meat and meat by-products, and indeed, there may be sufficient preservative to inactivate thiamine present in other dietary components fed concurrently, for example, brewers yeast.

According to the AVA response to this report, thiamine deficiency due to sulphite-treated pet meat is a common Australian adverse pet food event reported to PetFAST.

References:

Fawcett A, Y. Y. a. M. R. (2014). Probable dietary-induced thiamine deficiency in a cat fed pet meat containing sulfur dioxide preservative. *Australian Veterinary Practitioner*, 44(1), 554-559.

Malik, R., & Sibraa, D. (2005). Thiamine deficiency due to sulphur dioxide preservative in 'pet meat'--a case of *deja vu*. *Aust Vet J*, 83(7), 408-411. doi:10.1111/j.1751-0813.2005.tb13076.x

Woolworths Ltd—Woolworths Select Wholegrain Dog Biscuits 1kg July, 2014

The product was recalled because it may contain pieces of string or twine. That if consumed, it may pose a food safety risk, with the potential to cause harm to animals including intestinal irritation or intestinal obstruction. Affected Batch: BEST BEFORE 26/11/15. Product Code: 368168 (Not on consumer packaging). The product was available for sale between 13 June 2014 - 18 July 2014.

Date of the publication: 22 July 2014. Woolworths offered consumers to return the product to their nearest Woolworths or Safeway store for a full refund.

<https://www.productsafety.gov.au/recall/woolworths-ltd-woolworths-select-wholegrain-dog-biscuits-1kg>

Woolworths is a marketer member of PFIAA, but it is not clear whether the production plant of the products is listed as a certified member adhering to AS5812:2017 or not. According to the letter of submission to the senate regarding pet food safety. Woolworths stated that their own-brand suppliers are required to adhere to the Australian standard for pet food and we monitor compliance.

Whiskas dry cat food

Date: September, 2013

This was a product recall originally listed on the ACCC web-site (and the original link no longer is valid) and as such there is little to no information available about how the recall was initiated, but it appears to have been generated through Whiskas, and no compensation other than refund to be offered. Details of the recall were that the “The Australian Competition & Consumer Commission (“ACCC”) reports the following Dry Cat Foods are subject to this recall: Whiskas Chicken & Rabbit Flavour Dry Cat Food, sold in a 1-kilogram box; specially formulated for adult cats aged 1-7 years and with a Best Before date code of

“010215”. According to the ACCC, a small number of boxes may contain foreign objects between 5 to 25mm in size. If these foreign objects are consumed, they may pose a food safety risk, with the potential to cause harm to animals including choking and/or lacerations.”

This type of plastic contamination would not be considered to cause long-standing or chronic illness. The current web-link that references this is: <https://livingsafelyrecalls.wordpress.com/2013/09/24/whiskas-adult-dry-cat-food-recall-australia/> (correct as of 8/11/2019)

Ultimates cat food

Date: mid-late 2015

Two young (two-year-old) Sphinx cats (housemates and litter mates) presented to same referral practice in Queensland with history of decreased appetite, increased thirst and urination. They did not present at the same time, but within 2 weeks of each other. Both cats had a documented hypercalcaemia (high blood concentration of calcium). Due to both cats being affected, the second cat was tested for underlying Vitamin D toxicity and had increased vitamin D (25-Hydroxyvitamin D 671 nmol/L; reference 65-170).

Causes of Vitamin D toxicity include consumption of psoriasis medication (no access), some plants (no access), granulomatous disease (no signs) and potentially dietary excesses.

A full dietary history was obtained, including treats and the dental care that was used on both cats. At the veterinary clinic's own expense, 10 dietary substances were tested at the National Measure Institute, and Ultimate Indulge Whitemeat Tuna with Chicken Liver™ tinned food (manufactured by Safcol) was found to have excessively high Vitamin D concentrations. Full case details as provided by attending veterinarian (but deidentified) are attached in Appendix 2.

The attending veterinarian reported this through PetFAST and was contacted by Safcol's veterinarian. However, the follow-up from Safcol was poor. Although they reportedly ran their own testing in Thailand it differed from the original results by a factor of 10. Follow-up by the initial veterinarian with Safcol's new veterinary liaison a few months later was not productive, but the \$5000 spent by the veterinary clinic on product testing was refunded.

This appears to be a world-wide problem, and reports have been published in the international veterinary literature about Vitamin D toxicity caused by diets (link: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5731632/> and full paper is included in appendix 3).

This was not dealt with satisfactorily or in a timely manner, nor was it made public. The cats fell ill in mid-2015, the testing was undertaken February 2016, and the final conversations with the Safcol veterinarians were not until late 2016. It is not known whether other cats may have been affected although there are anecdotal reports of this occurring, and some reports prior to 2012 in Australian cats. Additionally, there is no ongoing testing of products such as this to determine the Vitamin D concentrations. Although Vitamin D may not have been added specifically to these diets, if fish with naturally occurring high concentrations of Vitamin D or high concentrations of fish liver are used in batches, then the 'endogenous' Vitamin D levels will be higher than reported. Safcol Thailand is listed as

a PFIAA certified manufacturer that adheres to AS 5182:2017, and the Ultimates range is a complete cat food.

Mandatory testing by a verified and independent laboratory, and publishing of the results may have helped establish whether there is a potential causation for this pet food brand and idiopathic hypercalcaemia in cats. There is potentially an interesting breed predisposition as well, although too few cases to date have been investigated to comment conclusively.

Best Feline Friend

Date: Early to mid-2017

In 2017, a spate of illness in cats fed Best Feline Friend (BFF), manufactured by Weruva (a US company) for the Australian market was reported. The products were premium and grain-free. Complaints were made via social media forums. This product was sold exclusively through City Farmer and Petbarn retailers, and the recall made through them. It is not clear whether this was initiated by the retailer or the company, nor is there an official record of how many cats were affected or died because of this outbreak.

According to information received from the AVA and PetFAST “The first reports were from March 2017 (airing on Lateline and being reported to PetFAST in March 2017) and the products had ongoing effects well into the year with necropsies still being performed late in 2017”. Greencross Limited CEO Martin Nicholas, which operates Petbarn, said the product had been recalled on May 5, 2017 (<https://www.heraldsun.com.au/news/victoria/cats-fall-ill-and-die-after-eating-best-feline-friend-cat-food/news-story/aebb554ca26d6b0a5e4b53e44dc9363a>).

A veterinary on-line discussion group and forum (veterinary information network (www.VIN.com)) published a report of the condition on June 9, 2017 and the following was reported, following an interview with one of the veterinarians involved in first identifying the association:

“The first case was identified in approximately April 2017. A potential association between the feeding of BFF cat food and development of clinical illness was initially discovered when three cases of neurological disease (predominantly cerebellar/central vestibular signs) were seen in close succession at a referral institution. In all cases, BFF was the predominant food fed, and the sole wet food. The cases were reported through the PetFAST reporting scheme. The cases sparked an emergency meeting between AVA representatives and the Pet Food Industry Association of Australia (PFIAA) to discuss the possible relationship between these cases. An electronic alert was sent to members of the AVA, and subsequent to the alert, veterinarians submitted reports on the PetFAST reporting scheme, which identified that non-neurological, clinical signs may be involved, too. The exact number of cases is difficult to ascertain; however, approximately 300 cases are suspected. Almost certainly, not all of these cases will be associated with the feeding of BFF, and likely some will have unrelated illness. “

Associated clinical signs are...

- “a) pyrexia, or fever, of unknown origin
- b) gastrointestinal signs with temporal batch association
- c) neurologic signs, particularly vestibular and cerebellar
- d) odd effusions that despite extensive investigation fail to reveal FIP [feline infectious peritonitis] or other causes”

The report stated that a batch of BFF was associated with the problem, and the gastrointestinal signs were mainly vomiting, diarrhoea and reduced appetite. The report went on to comment that “Note that only about 40 or so cases were reported on PetFAST. An owner website was set up that took owners’ reports [and received most case reports]. One of the website managers shared cases with the PetFAST team if owner permission [was] given. Cases were also reported on other social media sites....

Approximately 20 of the cases reported have died or required euthanasia. However, these may not all have been associated with the feeding of BFF...

The sole distributor of BFF in Australia was quick to act in recalling all of these foods immediately after the index neurological cases were identified. However, the reporting of cases has continued.”

Reference: (<https://news.vin.com/vinnews.aspx?articleId=45159>).

US company Weruva, which manufactures the tuna-based cat food, released a statement that the canned food “may have been produced outside of intended formulation guidelines” (<https://www.heraldsun.com.au/news/victoria/cats-fall-ill-and-die-after-eating-best-feline-friend-cat-food/news-story/aebb554ca26d6b0a5e4b53e44dc9363a>) (May 7, 2017 6:53pm).

Temporal batch association was found, and although Weruva posted a table of affected batch codes, this is not available any more in the web site; the company stated that the problem affects only an Australian-exclusive line of BFF foods produced in a facility separate from other Weruva foods (page not available any more). The company asked customers to return BFF cans with ‘best by’ dates ranging from September 2018 through to October 2019 for a refund:

<https://www.heraldsun.com.au/news/victoria/cats-fall-ill-and-die-after-eating-best-feline-friend-cat-food/news-story/aebb554ca26d6b0a5e4b53e44dc9363a>.

However, another website stated: “Certain batches of our Australian BFF canned foods with ‘Best By’ dates ranging from December 2017 through December 2019 contain insufficient Vitamin B1 to be labelled as complete and balanced per AAFCO,” according to an announcement by Weruva (<https://www.petfoodindustry.com/articles/6481-low-thiamine-cat-food-maybe-caused-australian-cat-deaths>). Another site suggests that Weruva has not revealed how many batches were affected or for how long they were on sale (<https://www.choice.com.au/outdoor/pets/products/articles/test-results-of-recalled-bff-cat-food-250517>).

From the report published on VIN (<https://news.vin.com/vinnews.aspx?articleId=45159>), it appears that the parent company did not cooperate with the investigators or veterinarians involved with treating affected cats. As there was not a proactive and collaborative approach, cats were affected after the distributors withdrew the product from sale, likely due to owners continuing to have product available at home.

There also remain unanswered questions regarding the cause of the toxicity, and as with many of the chronic events it is likely multifactorial. The product was reported to be low in thiamine, and some suggestions were made around the possibility of mercury, arsenic or other heavy metal involvement (<https://news.vin.com/vinnews.aspx?articleId=45159>). Weruva, the American pet food maker of BFF, said in a statement tests found the canned food had low levels of thiamine on May 25: “Certain batches of our Australian BFF canned foods...contain insufficient vitamin B1 (thiamine) to be labelled as complete and balanced,” the company confirmed in a website posting (no direct link available)

<https://www.choice.com.au/outdoor/pets/products/articles/test-results-of-recalled-bff-cat-food-250517>.

Reports on two web-sites quote Weruva as saying that lab testing found only normal, trace amounts of heavy metals like mercury and cadmium. All foods tested have shown levels well below industry required standards for human and pet consumption.

<https://consciouscat.net/2017/05/07/weruva-recalls-bff-best-feline-friends-products-made-australian-market/>

<https://www.petfoodindustry.com/articles/6481-low-thiamine-cat-food-maybe-caused-australian-cat-deaths>

Weruva set up a website, <http://www.weruvaupdates.com> to post updates as they became available. The following statement appears for less than one second before redirecting the consumer to its products webpage: "To Australian pet parents concerned by 2017 social media reports: After thorough veterinary investigation of all reported cases, we are confident that Weruva products caused no harm to cats in Australia. To pet parents in USA, Canada and all others: The products reported in Australia while safe to feed are in no way related to the product distributed in the US, Canada and all other markets". This is in contrast to the statement released by Weruva on June 5th, 2017 (<http://www.cityfarmers.com.au/wp-content/uploads/2017/05/Weruva-BFF-Statement.pdf>) that states "...some of our Australian BFF canned foods contained low levels of thiamine".

The authors of this report believe a summary report that is independent and publicly available would clear up much of the confusion surrounding this particularly event.

References:

<https://www.choice.com.au/outdoor/pets/products/articles/test-results-of-recalled-bff-cat-food-250517>

<https://www.smh.com.au/business/consumer-affairs/best-feline-friend-recall-cat-food-tins-tested-after-widespread-illness-fears-20170507-gvzw23.html>

<https://www.petfoodindustry.com/articles/6464-australian-cat-food-pulled-after-illness-and-deaths>

Advance Dermocare

Date: March 2018

Megaoesophagus (MO) is a diffuse dilation of the oesophagus (which carries food from the mouth to the stomach), that results in an inability to swallow effectively, regurgitation and increased aspiration. This in turns leads to starvation (due to decreased consumption of calories) and development of pneumonia. In late December 2017 an unusual cluster of MO was identified in several working dogs. This was investigated during January 2018 at the University of Melbourne. A conference call with representatives from PFIAA, AVA and PetFAST was held in March to discuss the cluster. At the time, a further two correctional dogs in South Australia that had been fed the diet had developed MO. Discussion amongst the group felt that it was still possible that the working nature of the affected dogs may have contributed to the development of MO. As such, a call through the AVA for veterinarians who had identified any unusual clusters of MO or laryngeal paralysis to contact the University of Melbourne was

made. No calls or emails that were thought at the time to be connected to the problem were received, until the evening of March 23rd when a Victorian veterinary practitioner contacted the University investigators with 5 cases that had all consumed Advance Dermocare, 2 within the same household. It is suspected as well that there was some social media discussion about the outbreak of the MO in the Victorian Police dogs and potential diet association that precipitated this call due to client awareness. Mars Petfood Australia (MPA) was informed of this association the same day, and the diet (Advance Dermocare) was withdrawn from market the following day. The diet was a completely balanced product produced according to AS5182:2017 guidelines, with MPA a PFIAA member.

There was an extremely rapid response once it was confirmed that pet dogs were affected, and MPA embarked on their own extensive food and product testing. In hindsight, it may have been preferable to quarantine the product earlier (early February 2018) and then conduct a recall once known that there was a problem. PetFAST notification did not assist in identification of this disease but was useful in gathering a second set of notification data to ensure that cases were logged. The University set up their own data-base and survey to establish a set of information and MPA also established a hot-line and logged cases.

Following the recall and sponsored by the working dog facility, an epidemiological investigation was undertaken by the University of Melbourne. The increased incidence in diagnosis of MO occurred late in 2017, confirming an outbreak. The study identified that ~4% of dogs that ate Advance Dermocare were diagnosed with MO, however dogs in the same household eating the diet had a ~30% chance of being diagnosed. This low incidence (and increased incidence within a household) suggests the following:

- There may have been more dogs silently or sub-clinically affected than able to determine, and so a greater number affected may have become apparent if the diet had been fed for longer.
- There was a change in incidence of MO mid-2018, and as the product had been on the market for over 5 years without such an incidence, it is likely associated with a batch issue in the last 6 months of production during 2018.
- The disease did not affect all/most dogs, and so other factors like genetics, environment or concurrent disease may impact disease development.
- There are two unique ingredients for Advance Dermocare that are not present in other brands within the MPA product line, increased maize gluten (corn) and tuna/pilchard autolysate. Focus on these two ingredients formed much of the focus of toxicological investigation.

Investigations by MPA and the University of Melbourne failed to identify any nutritional deficiency, nutritional excess or toxin in doses known to cause disease. A copy of the publicly available report is attached in appendix 4. Further investigation is ongoing to try and determine the underlying cause(s), but chronic exposure to a low level of a previously unconsidered toxin is a possibility, especially if this toxin is processed differently by individual dogs.

[Applaws It's All Good Duck & Venison dry food.](#)

Date: May, 2018

In May 2018 there were complaints in the media and social media about Applaws It's All Good Duck & Venison dry food. These were consumer driven and directed at the company itself. In one media report, the company (MPM Products) was reported to have conceded to a fault at one of its manufacturing plants. In the same media report, the company stated they had received reports of 2 dogs being unwell

and 20 complaints of mould, but it was not clear if this was reported directly or through PetFAST. No recall or compensation was reported, and the company did not accept responsibility for the animals becoming unwell. Previously, the company had plastic contamination in a batch of product due to plastic ID tags, but no recall was undertaken.

In the same media report, a Woolworth's dog biscuit product (Baxter's) was stated to be associated with vomiting and diarrhoea. Again, it is unclear how this association was reported or investigated. The manufacturers claimed that they could not identify an association, but it was reported that gift cards were given to customers after complaints.

A mandatory call for cases again would have determined the extent of the problem(s) in these, along with publication of the testing results to allay public concerns.

Reference: <https://www.abc.net.au/news/2018-05-16/plastic-mould-in-dog-food-prompts-call-for-industry-regulation/9764318>

Royal Canin dry dog food

Date: September 2018

The report on Choice Australia web-site details an individual customer who had their dog become unwell and show clinical signs of liver toxicity. This coincided with a switch to a Royal Canin product and finding mould in the bag before the expiration date. The report suggests that the owner directly contacted Royal Canin, and that \$1000 compensation was offered, but the product was not recalled as the company did not believe there was a batch issue, or a proven causation.

The Royal Canin dry biscuit range is a complete dog food, manufactured outside Australia. Although Royal Canin does not hold PFIAA certification for AS5182:2017, the international standards to which Royal Canin is accredited would generally meet or exceed the Australian standards. The media report suggests that the response by the company was not timely. A public (independent) web-site where the rationale for not recalling the product could be justified would be useful for allaying fears of the consumer.

Reference: <https://www.choice.com.au/outdoor/pets/products/articles/royal-canin-mouldy-dog-food>

Black Hawk Grain Free Salmon Dog food

Date: November 2018

The product Black Hawk Grain Free Salmon dog food was voluntarily quarantined (so sales prevented at retail outlets), after several dogs developed gastrointestinal signs (vomiting and diarrhoea) associated with consumption. Following this quarantine, the products were recalled.

According to the Black Hawk web-site the reason for the product recall was "Essentially, we had a couple of bad batches of salmon enter our manufacturing process that led to some dogs having an upset stomach. Not being something that we would want any dog or pet parent to deal with, we stopped sale of the product until we could guarantee its quality."

The problems were reported directly to the company by consumers +/- veterinarians treating the affected pets. No cause for the illness has been identified, although the company does identify that there was a problem with supply integrity. The company web-site did not disclose if there was any compensation paid to owners. The time frame is unknown but there appears to have been an acute onset of illness, and the company response was within a few weeks.

It appears as if the response was effective, but there is scant information available to make that assessment. Full and independent toxicological or microbiological testing has not been published, nor the number of dogs affected and their outcome. The Black Hawk parent company (Masterpet) is a member of PFIAA but is not listed as a certified manufacturer member adhering to AS5812:2017, and there is no listing on the web-site of this certification. There is no clear labelling that this is a complete dog food, but the marketing would suggest that this is the case. Again, a mandated set of independent testing that was made publicly available along with results of the clinical cases would be highly desirable for owner confidence.

Hill's Pet Nutrition Recall of tinned food due to Hypervitaminoses D

Date: February 2019

Hill's Pet Nutrition voluntarily recalled a list of canned dog food products February 1st, 2019 and then expanded the recall list March 12th, 2019 due to excess Vitamin D concentrations. Following the recall, Hill's issued a statement confirming that the issue was isolated to a vitamin premix used in canned dog foods and limited to specific production lots. Excessive Vitamin D leads to increased calcium absorption from the intestine, and subsequently if unchecked, leads to tissue mineralisation and kidney failure. The number of dogs affected is unknown, but the Hill's website reports that if the diet is discontinued then recovery is likely to occur quickly.

The following list of products and batches were withdrawn

(<https://www.hillspet.com.au/productlist#list>)

Product Name	SKU Number	Date Code/Lot Code
Hill's™ Prescription Diet™ i/d™ Canine Chicken & Vegetable Stew 156g	3390	102020T11
		112020T23
		122020T07
Hill's™ Prescription Diet™ i/d™ Canine 370g	7008	092020T30
		102020T07
		102020T11
		112020T22
		112020T23
Hill's™ Prescription Diet™ j/d™ Canine 370g	7009	112020T20
Hill's™ Prescription Diet™ k/d™ Canine 370g	7010	102020T10
		102020T11
Hill's™ Prescription Diet™ w/d™ Canine 370g	7017	092020T30
		102020T24

		102020T25
		112020T09
		112020T10
		102020T11
		102020T12
Hill's™ Prescription Diet™ z/d™ Canine 370g	7018	102020T04
		112020T22
Hill's™ Prescription Diet™ Metabolic + Mobility Canine Vegetable & Tuna Stew 354g	10086	102020T05
		102020T26
Hill's™ Prescription Diet™ Derm Defense™ Canine Chicken & Vegetable Stew 354g	10509	102020T05
Hill's™ Science Diet™ Puppy Chicken & Barley Entrée 370g	7036	102020T12
Hill's™ Science Diet™ Adult Chicken & Barley Entrée Dog Food 370g	7037	102020T13
		092020T22
		102020T14
		112020T23
		112020T24
Hill's™ Science Diet™ Adult Light with Liver Dog Food 370g	7048	112020T19
Hill's™ Science Diet™ Adult 7+ Chicken & Barley Entrée Dog Food 370g	7055	092020T31
		102020T13
Hill's™ Science Diet™ Adult 7+ Youthful Vitality Chicken & Vegetable Stew dog food 354g	10763	102020T04
		102020T05
		112020T11
Hill's™ Science Diet™ Adult Perfect Weight Chicken & Vegetable Entree Dog Food 363g	2975	092020T28
Hill's™ Prescription Diet™ c/d™ Multicare Canine Chicken & Vegetable Stew 156g	3388	102020T18
Hill's™ Prescription Diet™ i/d™ Low Fat Canine Rice, Vegetable & Chicken Stew 156g	3391	092020T27
Hill's™ Prescription Diet™ w/d™ Canine 370g	7017	102020T24
		102020T25
		112020T09
		112020T10
Hill's™ Science Diet™ Adult Chicken & Barley Entrée Dog Food 370g	7037	092020T22
Hill's™ Science Diet™ Adult Beef & Barley Entrée Dog Food 370g	7039	092020T31
		102020T21
Hill's™ Science Diet™ Adult 7+ Healthy Cuisine Roasted Chicken, Carrots & Spinach Stew Dog Food 354g	10449	092020T28

Hill's™ Science Diet™ Adult Healthy Cuisine Braised Beef, Carrots & Peas Stew Dog Food 354g	10451	102020T28
---	-------	-----------

This issue was firstly identified because of a dog with hypercalcaemia being diagnosed in the US, and the Hills diet the dog was being fed was considered the cause. The Food and Drug Administration was notified on January 31st, 2019 and the product recalled. The diet batches were then recalled in Australia on February 1st, 2019.

The recall is currently considered closed (see letter from Hills Pet Nutrition attached appendix 5), and apparently only a few dogs were affected in the US. The PetFAST system was not involved. Hills Pet Nutrition is an overall member of PFIAA and adheres to AAFCO guidelines. It appears as if this is a batch contamination issue rather than a formulation issue, and so the guidelines would not have prevented it.

My Dog® Beef and Liver 100g 12 x pack

Date: May 2019

This product was recalled by Mars Petcare Australia (MPA) due to potential plastic contamination, affecting only one batch: batch code 84901WOD51, or best before date: 06 DEC 2020.

The process was managed by MPA, and there are no reports to suggest that any dogs were affected adversely. There is no information available through PFIAA or other web-site about the process.

Reference: <http://mydog.com.au/recall-notice.pdf>

This product is completely balanced and produced according to AS5812:2017 guidelines. It is unlikely that it could have been avoided.

Jerky treat-associated Fanconi syndrome/renal tubular disease.

Date: Ongoing from 2007 (sporadic)

In 2007, a world-wide association between a specific brand of dog treat (Kramar™ chicken jerky) and renal tubulopathy was identified. Renal tubulopathy (also referred to as Fanconi syndrome) occurs when there are changes in the function of the absorbing tubules in the kidney, resulting in loss of glucose and other electrolytes in the urine. If this continues, renal failure and/or death can result. This product was voluntarily recalled by the manufacturer in 2007 in Australia following large public outcry, and campaigning by the veterinary profession (and leading to the beginning of PetFAST). This outbreak was published as a report in a veterinary journal in 2013 (attached in appendix 7). Since 2007 there have been continued reports of tubular disease, as identified in the PetFAST sample reporting earlier in the report. The associated treats are generally imported, and no recall has been initiated again since 2007. Many of the companies that produce these treats are not members of PFIAA.

The AVA has recently released a statement alerting veterinarians that this is a continuing problem, and to be alert for this issue. As of 12/11/2019 this alert cannot be found on the AVA web-site.

According to the US FDA web-site <https://www.fda.gov/animal-veterinary/news-events/fda-investigates-animal-illnesses-linked-jerky-pet-treats> there are continuing reports of this, still with no obvious explanation for the cause. Over 6000 dogs have been affected (with 1200 deaths) and 3 people have also been reported to be affected. Most reports involve chicken treats, with the country of origin usually China.

Extensive testing of both the jerky treats and affected dogs has been undertaken in the US, with cooperation from the CDC and Chinese authorities. One area that was evaluated was residual antimicrobials in the products. An analysis of >800 samples indicated that antibiotics were consistently present in chicken jerky treats imported from China. In addition, the levels found were above the tolerance of most countries including the United States, Canada, and the European union. This however is not thought to be the sole causative factor (reference: Sheridan, R., Mirabile, J., & Hafler, K. (2014). Determination of six illegal antibiotics in chicken jerky dog treats. *J Agric Food Chem*, 62(17), 3690-3696. doi:10.1021/jf405458m).

Objective 3: Differentiate the pet food incidents where the product was sold as a complete diet pet food or as a pet food treat and discuss whether the incidents could have been averted by compliance with AS 5812:2017.

Jerky associated illnesses in dogs

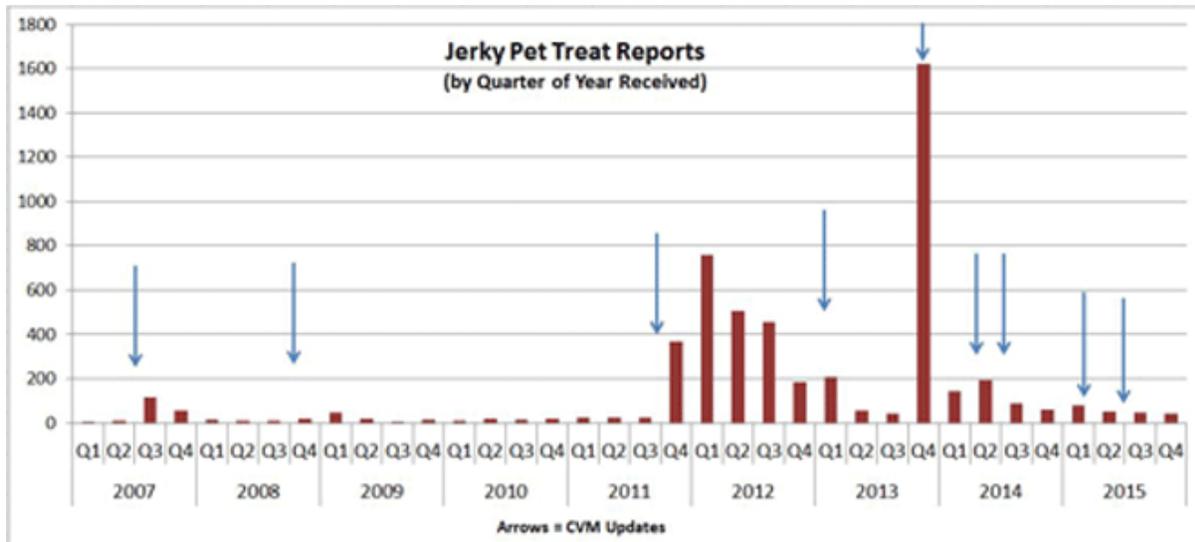
To date, only the imported treat-associated Fanconi syndrome has been reported in Australia. This outbreak occurred world-wide in 2007, associated with products imported from China. As detailed elsewhere, there was a delayed and ineffective response to this issue in Australia.

There appears to be continuing and sporadic reports of jerky treat associated disease. Little information is available about how big a problem this is in Australia, although the information released from the AVA and PetFAST suggests this is still occurring. The FDA continues to investigate and report on this issue in the US.

The FDA web-site (<https://www.fda.gov/animal-veterinary/news-events/fda-investigates-animal-illnesses-linked-jerky-pet-treats>) reports that as “of December 31, 2015, FDA has received approximately 5,200 complaints of illnesses associated with consumption of chicken, duck, or sweet potato jerky treats, many of which involve products imported from China, which produces much of the jerky pet treats on the market. The reports involve more than 6,200 dogs, 26 cats, three people, and include more than 1,140 canine deaths.”

Although most products are derived from chicken or duck, there are some reports of vegetable only (sweet potato etc) products being responsible.

The graph over the page (obtained from the FDA website) shows the number of reported incidents annually in the US. The blue arrows correspond to calls for cases, with the 2013 call for cases directed towards veterinarians as well as pet owners. This demonstrated the effectiveness of engaging the veterinary profession in reporting pet food-associated illness.



Despite extensive investigations, including at the source of production of the treats, no underlying cause has been identified. As these treats are not essential nutritional requirements for dogs, the current recommendation is to use them sparingly.

Salmonella outbreak in US associated with pigs ears

A very recent and concerning association has been reported in the US this year, with people and dogs being infected with a multi-drug resistant strain of *Salmonella* after handling pigs ears. The Centre for Disease Control (CDC) and FDA have conducted a joint operation, and a total of 127 people have been infected with *Salmonella*. Dogs that consume the treats may not be clinically unwell but could potentially be carriers, and many of the affected people are under the age of 5. More concerning from a public health perspective is that most of the bacterial isolates are resistant to multiple antibiotics.

No single product has been incriminated, but multiple product lines have been withdrawn, and currently the CDC and FDA are recommending that pigs ears not be fed to dogs.

Reference: <https://www.cdc.gov/salmonella/pet-treats-07-19/index.html>

Are diets nutritionally complete?

One of the recommendations the authors of this report have made is for annual analysis of nutritional completeness to be made of all diets that are branded to be nutritionally complete. Although additional independent annual analysis can carry an additional cost, this would increase consumers' confidence in the long term and ensure pet food manufacturers that sell into the Australian market are compliant with the standards.

There is an expectation that pet food is adequately inspected and tested prior to it being released to consumers. A study made by Gosper et al. in Australia in 2016, to investigate if the label information and nutrient composition of commercial cat foods were accurate and compliant with the Australian Standard

(AS 5812–2011) and if they met the nutritional requirements of an adult cat, found that when compared with the Australian Standard, 9 of the 20 cat foods did not adhere to their ‘guaranteed analysis’ and 8 did not adhere to the standards for nutrient composition. Also, various deficiencies and excesses of crude protein, crude fat, fatty acid and amino acid were observed in most of the cat foods. In this paper, the brand names were not published so it is not possible to know whether these foods claim to be compliant with the standard or not; but it does reduce the confidence of the products present in the market (Gosper et al., 2016).

In 2016, consumer advocate CHOICE tested 35 wet cat foods that claimed to be "nutritionally complete" and found that four fell below the voluntary industry Australian standards on pet food as defined by the American Association of Feed Control Officials. A further five failed to meet an ideal mineral balance not defined by the voluntary standard but which most veterinary scientists believe is important for feline health (<https://www.choice.com.au/catfood>) (<https://www.smh.com.au/business/consumer-affairs/one-in-four-cat-foods-fails-to-meet-choice-standards-20160802-gqj670.html>).

An important way of increasing consumer confidence would be to ensure that annual assessment was undertaken. This could then be audited by Pet Food Standards Australia, or spot check analysis could be undertaken of brands to determine compliance.

Reference: Gosper, E. C., Raubenheimer, D., Machovsky-Capuska, G. E., & Chaves, A. V. (2016). Discrepancy between the composition of some commercial cat foods and their package labelling and suitability for meeting nutritional requirements. *Aust Vet J*, 94(1-2), 12-17. doi:10.1111/avj.12397

Objective 4: Collate available information on informal concerns about pet food. (e.g. forums on social media) since the AS 5812:2017 was updated in 2017.

A systematic search in multiple databases including Facebook, Google, Yahoo and Bing (these web browsers were chosen for their coverage of a broad range of disciplines) was conducted. Keyword searches were executed and included “Pet food complaints”, “Pet food concerns”, “Pet food reviews”, “Pet food safety”, “Meat safety”, “Pet food recalls”, “Pet food contamination”, “Pet food forums”, “Pet food Groups”, “Dog food complaints”, “Cat food complaints”, and “Pet food regulation”. The search was focused on Australia and for the period 2017-2109. A total of 44 reports were found. These include news, pet food reviews, consumer/owner groups, petitions/campaigns and one documentary. The main concerns/complaints about pet food were mainly focused on legislation, safety, nutrition and conflict of interest.

The specific issues most commonly cited were:

- Lack of mandatory quality control
- Poor labelling
- Lack of raw meat quality assurance
- Lack of transparency of industry in investigations into issues (conflicts of self-regulation)
- Lack of direct reporting mechanisms for the public

Following the MO outbreak and Advance Dermocare recall, some private Facebook groups were created for owners of affected dogs. The authors were not granted access to these groups, but many of the members presented evidence to the Senate hearing, and their opinions have been captured in other social media postings.

Title	Concern	Date	Webpage	Relevant points
How is the pet food industry regulated in Australia?	Legislation	Updated on August 12, 2019	https://kb.rspca.org.au/knowledge-base/how-is-the-pet-food-industry-regulated-in-australia/	RSPCA Australia still has concerns about 'pet meat' products and any other product that does not voluntarily comply with the Australian Pet Food Standard AS5812 in relation to the use of sulphite preservatives. Regulations for 'pet meat' products are currently inadequate. Pet meat manufacturers must ensure they take steps to safeguard pets from thiamine deficiency by ensuring that any product containing sulphur dioxide, sulphite or potassium sulphites contains sufficient thiamine according to AAFCO guidelines, for the entire shelf-life of the product. This is the requirement for any pet food product that complies with the Australian Pet Food Standard and should be the requirement for any 'raw pet meat' products or any other food intended for cats and dogs.
Heart failure in dogs linked to fad in grain-free health pet food: US study	Safety Legislation	Thursday, 4 July 2019 3:35 pm	https://7news.com.au/lifestyle/pets/heart-failure-in-dogs-linked-to-fad-in-grain-free-health-pet-food-us-study-c-194363	The US food regulator has linked a serious form of canine heart disease to a range of premium dog foods being promoted as healthy 'grain free' alternatives. Dr Crawford said the AVA would continue to push for pet food to be regulated under Food Standards Australia New Zealand (FSANZ), so that it would meet the same standards as those set by the US's FDA. But like the code of practice, reporting to PetFAST is not mandatory. Among the issues being examined are "whether the current regulatory framework pet food is produced and marketed under is adequate, and what legal protections are available to consumers when pet food causes illness or death in pets".
Australian owners still waiting for pet food safety laws	Legislation Labelling	July 2, 2019 3:11pm	https://thewest.com.au/news/nsw/australian-owners-still-waiting-for-pet-food-safety-laws-ng-878181e92e90dca88e9ef98937178a5b	As there are no specific laws in Australia that force a pet food manufacturer to recall a product if it makes pets ill, it took Advanced Dermocare, owned by food giant Mars, three months to pull the product from shelves. In 2009, a government working group was set up to investigate, however, no legislated safety standards were established. In Australia, not only is there no enforceable safety standards, there is no single regulator where consumers can lodge a concern or check if a

			<p>product has been recalled. Instead they rely on a trickle down of information via the media and vets.</p> <p>Australian pet food labels are among the most confusing in the world with no consistent guidelines leaving owners at the mercy of marketing claims. Pet owners told the 2018 senate inquiry that labelling was ‘virtually impossible to decipher’, and often ‘creatively’ implied foods were something they weren’t. Understanding what percentage of food is meat, which meat, not to mention whether cheap carbohydrates have been substituted as fillers was near impossible and descriptions of ingredients, by-products, and heat treatments were not comprehensive enough, especially for animals with special dietary needs.</p> <p>The rise of premium pet foods marketed as paleo, all natural, gourmet and fresh with no official definitions has further muddied the waters. On top of that, regulations for ‘pet meat’ products remain inadequate due to the use of sulphite preservatives that can cause thiamine deficiency, which can be fatal.</p> <p>There is currently an Australian Standard for Manufactured Pet Food, AS 5812, which most pet food manufacturers adhere to, but it is voluntary, unenforceable and doesn’t appear on all labels.</p> <p>When the Daily Telegraph bought ten common tins of cat and dog food from a supermarket, none carried AS5812 on the label. To check which manufacturers were compliant required several Google searches. One cat food product labelled as “salmon” flavour contained more chicken and pork than fish.</p> <p>“That said, the pet food industry has a long way to go. Meeting AAFCO standards is the bare minimum any pet food should meet. If a food doesn’t even have an AAFCO statement, who knows what your pet is eating?”</p> <p>Feeding tests meant the food had been tested on dogs or cats, “not just run through the lab to check off a list”.</p> <p>“We rely a lot on the quality of various supply chains, the transparency of manufacturers, and the ability to be honest and recall products when safety is questionable.”</p>
--	--	--	--

Australian Pet Owners Group (APOG)	Safety Legislation Nutrition	Australian Pet Owners Group @AustralianPetOwnerGroup	https://www.facebook.com/AustralianPetOwnersGroup/	<p> <u>Australian Pet Owners Group</u> 8th May 2019 </p> <p> My Dog have issued a recall of a specific batch of Beef & Liver 100g 12 packs due to a possible plastic issue. Please check the batch number in the following post if you feed this product. Thank you My Dog for informing us of the recall. </p> <p> <u>Australian Pet Owners Group</u> 30th April 2019 </p> <p> Mould found in Woolworths Baxters “Meaty Rings” Dry Food. Use by date Sept 2020. Please use caution. Mould can cause sickness. We receive continuous reports of sickness on Baxters products and strongly advise against feeding any Baxters products to your pets. Baxters is a budget Woolworths home brand designed to look like a commercial brand. </p> <p> <u>Australian Pet Owners Group</u> 21st March 2019 </p> <p>  RECALL - Hill’s Science / Prescription Diet  Hill’s have extended the recall regarding excessive Vitamin D which can lead to severe health issues and kidney dysfunction. Symptoms include vomiting, loss of appetite, drooling, increased thirst, increased urination, and weight loss. See image for updated recall list as of 20th March 2019. Australian canine wet products affected. Please check. Recall info - https://www.hillspet.com.au/productlist </p> <p> <u>Australian Pet Owners Group</u> </p>
---	------------------------------	--	---	--

29th November 2018

⚠ Hard plastic in ZiwiPeak - please use caution and check before feeding.

BB 05 2020 BATCH 22046.

ZiwiPeak have addressed what seems to be a very isolated issue. They have stated the plastic is from a damaged plastic tray scraper (used to remove air dried meat from the tray). These scrapers have now been replaced with metal scrapers to prevent further incident.

Recommend action: Use caution and check food before feeding. Plastic is green and easy to see. If you find plastic please contact us and Ziwi Pets.

Australian Pet Owners Group

4th September 2018

Prime100 Plastic Contaminants. Multiple ongoing issues.

One owner states her Staffy developed an ulcer due to a foreign body in her dog's stomach which turned out to be two pieces of blue plastic. She contacted Prime100 and was offered an apology and a replacement order from the same batch. The dog was fed Prime100 Kangaroo & Sweet Potato Roll.

Others have reported plastic both soft and hard in nature, often blue in colour.

The Senate are investigating a recall and alert mechanism which would restrict pet food manufacturers from continuing to sell contaminated products.

Please use precautions if feeding this product.

Australian Pet Owners Group

3rd September 2018

University of Sydney's Dr Richard Malik expressed a concern at the Senate hearing last week about cat food brand Ultimates fish-based recipes

containing a high level of Vitamin D which can lead to hypercalcemia if fed exclusively. To keep this in context, Malik's concern wasn't specific to Ultimates per se, but to the risks of exclusive feeding of any limited, unvaried diet, commercial product, or otherwise.

Australian Pet Owners Group

2nd August 2018

Sulphite preservatives in pet meats causing "potentially fatal thiamine deficiency" in dogs and cats has been an ongoing concern, with a number of pet mince products showing dangerously high levels of sulphite preservatives.

The RSPCA speak of these issues in their submission to the senate for the Safety of Pet Food:

"Sulphite preservatives are often used in fresh pet meat products including 'pet mince', 'pet rolls' or 'pet meat'. Sulphite preservatives include sulphur dioxide and potassium sulphite and are used to extend the shelf-life of pet meat products. However, sulphite preservatives have been shown scientifically to cause potentially fatal thiamine (Vitamin B1) deficiency in dogs and cats for over 20 years. Thiamine is an essential vitamin in both dog and cat diets, as these animals are unable to make thiamine naturally. It is well established that sulphite preservatives in pet meat degrade thiamine levels over time, therefore under the 2017 standards it became a mandatory requirement that any product containing sulphite preservatives must have sufficient thiamine levels across the entire shelf-life of the product. Unfortunately these standards are voluntary, and there is no mandatory requirement to test products to ensure thiamine levels are sufficient.

The issue of sulphite preservatives extends beyond pet meat products, as the preservatives can cause thiamine deficiency even if fed in conjunction with other foods that don't contain sulphites. For example, if an owner mixes commercial dry food with pet meat, the sulphites in the pet meat will interact with the thiamine in the commercial dry food. For this

			<p>reason, manufacturers must be required to demonstrate compliance with the standards by having end of shelf-life products tested for adequate thiamine levels."</p> <p><u>Australian Pet Owners Group</u> 2nd August 2018</p> <p>Does this worry you? The RSPCA submission into the Safety of Pet Food highlights how our standards of pet food manufacturing, AS 5812:2017, are not only voluntary, but for those manufacturers who claim to adhere to the standards do so without any transparency or proof: "Currently, we expect that the only organisation who may know the level of uptake of the standards would be the PFIAA. In this sense, we cannot comment on the uptake of the standards. Determining compliance with the standards is also difficult, as only a small number of pet food manufacturer facilities in Australia are audited against the standards. The rest of the manufacturers who are members of the PFIAA claim to be compliant with the standards as it is a requirement of PIFAA membership, but no evidence is provided." The RSPCA also question the efficacy of the standards: "The efficacy of the standards is similarly unknown. There remain ongoing issues with vitamin deficiencies, nutritional completeness and safety across the pet food markets – manufactured pet food, pet meat and pet treats. These ongoing issues raise concerns regarding the current measures in place to ensure the safety and nutrition of pet food in Australia."</p> <p><u>Australian Pet Owners Group</u> 26th July 2018 <u>Woolworths</u> are unable to confirm there is no risk of euthanised and/or baited animals (from 1080) in their Baxters pet food products.</p>
--	--	--	---

				<p>The products have been linked to hundreds of cases of sick and dead dogs compiled in a report by Pet Food Reviews - Australia.</p> <p>Many cases are symptomatic of euthanasia drug or bait poisoning - seizures, convulsions, vomiting, diarrhoea, and death within a short timeframe.</p> <p>Pet Food Reviews posted the query on the Woolworths Facebook page 24 hours ago with no response from the retail chain.</p>
Product Review	Safety	Different dates	<p>https://www.productreview.com.au/listings/meals-for-mutts?fbclid=IwAR10RpSgMJtIICZyGPvE3-jKsyGU6HZRs5b2wKwTsf6ubH550A1E2vvtE68</p> <p>https://www.productreview.com.au/listings/v-i-p-dog-rolls</p> <p>https://www.productreview.com.au/listings/supercoat-adult-chicken-beef</p> <p>https://www.productreview.com.au/listings/julius-aldi-dry-dog-food</p>	<p>Meals For Mutts review (39 reviews): It causes diarrhea and vomiting. Metal object found in kibble. They changed the formula without any notice or warning via the pet store or packaging change. Rashes and excessive itching.</p> <p>V.I.P. Petfood Dog rolls (79 reviews): Sloopy, watery and makes dog sick (scratching and vomiting).</p> <p>Supercoat Adult dog food (32 reviews): (diarrhea, vomiting and allergies).</p> <p>Julius (Aldi) pet dog food (11 reviews): Bad quality, dogs not eat it, vomiting.</p> <p>V.I.P. Petfoods Gourmet Fresh Mince (34 reviews): Misleading label. Not fresh. White stuff. Inconsistent quality.</p>
'My Dog' pet food		MAY 8, 2019 4:46PM	https://www.news.com.au/lifestyle/home/pets/my-dog-pet-food-	Mars Petcare is recalling a number of its pet food packets after plastic was found in its popular My Dog brand.

urgently recalled			urgently-recalled/news-story/0e95715bfc8682d18dda32c65f7a2eeb	<p>Mars Petcare Australia has issued an urgent recall for a limited number of My Dog packets due to plastic potentially being inside them. The company issued the recall for the My Dog Beef and Liver 100g, 12 packs after plastic entered the food during the production process. The only product affected is batch code “84901WOD51 BEST BEFORE: 06 DEC 2020”.</p> <p>“The health and wellbeing of Australian pets is our number one priority, and while we have not received any reports of injury or illness associated with the affected product, we believe it is the right thing to do to recall it,” Mars Petcare said in a statement.</p>
Are preservatives in pet food products a concern?	Labelling Safety Legislation	Updated on May 1, 2019	https://kb.rspca.org.au/knowledge-base/are-preservatives-in-pet-food-products-a-concern/	<p>There may be no legal requirement to label pet food products as containing preservatives.</p> <p>There are safety issues relating to sulphur dioxide and sodium and potassium sulphite preservatives – these can cause thiamine (Vitamin B1) deficiency, which can be fatal.</p> <p>Products specifically marketed for pets such as commercial fresh ‘pet meat’; ‘pet mince’ or processed/manufactured ‘pet food rolls’ may contain sulphite or potassium sulphite preservatives (sulphur dioxide 220, sodium sulphite 221, sodium bisulphite 222, sodium metabisulphite 223, potassium metabisulphite 224, potassium sulphite 225 and potassium bisulphite 228) that liberate sulphur dioxide.</p> <p>Thiamine deficiency can also occur when sulphur dioxide containing foods are fed in conjunction with foods not containing sulphur dioxide. This is because the sulphur dioxide in one food can destroy any thiamine present in the other food being fed at the same time.</p> <p>The Australian Standard for Manufacturing and Marketing of Pet Food (AS5812-2017) contains clauses that address the sulphite issue by including a mandatory requirement that any product containing sulphur dioxide, sulphite or potassium sulphites must contain sufficient thiamine according to AAFCO guidelines, for the entire shelf-life of the product. This will help to prevent thiamine deficiency in relation to manufactured pet food.</p>

				<p>Sodium benzoate (E211) is another preservative used in a range of pet food products and products for human consumption. Cats appear to have a significantly lower tolerance for benzoic acid compared to rats and mice. At certain doses this preservative may be toxic to cats</p>
<p>Hill's Pet Nutrition issues second voluntary pet food recall in Australia and around the world</p>		<p>MARCH 22, 2019 10:13AM</p>	<p>https://www.news.com.au/lifestyle/home/pets/hills-pet-nutrition-issues-second-voluntary-pet-food-recall-in-australia-and-around-the-world/news-story/d160aab6372979e9417e60eab0c4791a</p>	<p>Australian dog owners have been warned again today to check their canned pet food after a company expanded its voluntary recall on products that could cause serious health issues. Hill's has confirmed on its Australian website that the extended global recall affects those who may have bought the canned dog food that carries potentially toxic levels of vitamin D. A statement on the company's website confirmed it relates to the same vitamin premix that led to the first voluntary recall on February 1. Hill's Pet Nutrition has been facing backlash from dog owners across the world on social media who claim their pets became ill or died after eating the canned food before it was recalled. In the US, a number of class actions have been launched against the company after the canned food recall was first issued. In a letter to veterinarians, the company's US Vice President and General Manager, Jesper Nordengaard, said it was with "sincere regret" that he was writing to announce the recall expansion. "Following the recall, we conducted a detailed review of our canned dog foods. As we had expected, that review confirmed that the issue is isolated to the same vitamin premix used in canned dog foods and limited to specific production lots," he wrote. "However, our review did determine that there were additional products affected by that vitamin premix, and it is for that reason that we are expanding the recall," the letter read. Many of Hill's popular Science Diet and Prescription Diet canned foods have been included in the second recall.</p>
<p>How to Feed a dog? Dispelling decades of</p>	<p>Labelling Nutrition</p>	<p>Different dates</p>	<p>http://www.howtofeedadog.com/category/news/</p>	<p>Posted on <u>March 11, 2019</u> What does "Complete & Balanced" really mean? Every kilo of pet food must contain ALL THE NUTRITION your pet requires BASED ON WHAT THE PET FOOD INDUSTRY CURRENTLY BELIEVES IS</p>

marketing
and
consumeris
m

<http://www.howtofeedadog.com/category/blog/>

REQUIRED. That's a very significant challenge with several inherent issues. It's not the only challenge either, as the bigger challenge for manufacturers is to meet all those requirements AND MAKE A PROFIT (the real reason most pet foods are full of grains, potato skins, ear tags, or whatever).

You'll see a list of vitamins and minerals included in your pet food near the bottom of the ingredients list. Most of those would otherwise be sourced from animal meats and fats – real ingredients – but because pet food manufacturers keep that stuff to a minimum it means the vitamins and minerals must be added as supplements, probably synthetic, from the cheapest source (quite often China).

Posted on February 21, 2019

Why Whiskas might be bad for your cat

The main ingredient is "Wholegrain Cereals". For a CARNIVORE? How can that be good? It's even more worrying when you consider it's the majority of the product. They don't even say what grains (we can assume wheat as the cheapest option), and that's going to take a serious toll on the health of your cat.

Food colours. Given they're not listed as "natural" we can assume they're "artificial".

We can assume the antioxidants aren't natural either. If the likes of BHA and BHT mean anything to you then this would be something you'd find worrying

There's a nice graphic of a carrot, peas, and wheat on the front of the bag, along with the words "Protein Rich". Despite this being marketing, the proteins from carrots, peas, and grains aren't ideal proteins for a carnivore.

Posted on February 21, 2019

Why do vets recommend Hill's and Royal Canin?

Why do pet review websites rate Hill's and Royal Canin products poorly, but vets recommend them highly?

				<p>Take a look at the ingredients on any bag of Hills Prescription or Science Diet dry food. You'll see they're mostly grains – wheat, sorghum, corn, rice. You'll find much more grain in these products than meat. Dogs are essentially carnivores, cats are obligate carnivores.</p> <p>Posted on <u>October 19, 2017</u></p> <p><u>I'm a cat, will my food prevent me from going blind? What do you mean, "No"?</u></p> <p>You may be shocked to know <i>many tins of cat food available in the supermarkets don't meet these basic nutritional requirements</i>. Simple – All a manufacturer has to do is add small print somewhere obscure on the packaging to say the food is for supplemental or occasional feeding only.</p> <p>Posted on <u>October 18, 2017</u></p> <p>Australian supermarket chain Coles exposed for "Complete Cuisine" cat food not being "Complete".</p> <p>The product was additionally referred to the Australian Competition and Consumer Commission for allegedly breaching consumer law. Choice first raised the issue with Coles a year ago, and it took the supermarket chain A WHOLE YEAR to undergo a re-labelling process to remove the word "Complete" from big letters on the front of the can.</p> <p>It's legal to sell pet food which doesn't meet basic nutritional needs by writing "for supplemental feeding only" somewhere discreet on the packaging where nobody will read it.</p>
Bacteria found in raw pet food harmful to infants and elderly	Legislation	March 6, 2019 1:00am	https://www.dailytelegraph.com.au/news/national/bacteria-found-in-raw-pet-food-harmful-to-infants-and-elderly/news-story/43893222548d415fad1b935d82b052ef	<p>IT IS the latest fad in doggy diets, but the raw meat you feed your pooch could put your household at risk.</p> <p>Research published in the <i>British Medical Journal</i> conducted by Vet Record found 60 packs of raw meat products for dogs, bought from a range of stores, contained bacteria.</p> <p>Those at highest risk of the bacteria would be infants, the elderly or those with poor immunity, who interacted closely with dogs after they had eaten raw meat.</p>

				<p>They warn dogs can transfer potentially harmful and antibiotic-resistant bacteria by “kissing” faces immediately after eating.</p>
<p>Major push to properly regulate manufacturers of Australia’s \$4 billion pet food industry</p>	<p>Legislation</p>	<p>February 11, 2019 9:58am</p>	<p>https://www.dailytelegraph.com.au/news/nsw/major-push-to-properly-regulate-manufacturers-of-australias-4-billion-pet-food-industry/news-story/5a36c647489ef25ee48d336fe896642d</p>	<p>Industry members pushing for more power to regulate manufacturers, who currently have no obligation to recall products even when they kill or harm an animal.</p> <p>But despite the size of the industry, the PFIAA only has a part-time executive manager who oversees everything from maintaining stakeholder relations to handling public inquiries and running PetFAST, the only recall mechanism available.</p> <p>Former executive manager Duncan Hall told a Senate inquiry it was “not a well-resourced association”.</p> <p>“The whole system and supply chain — there’s a bunch of holes and gaps in regulation that really need to be filled,” Dr Orr said.</p>
<p>Hill’s Pet Nutrition issues voluntary recall on canned dog food in Australia and around the world</p>		<p>FEBRUARY 3, 2019 4:37PM</p>	<p>https://www.news.com.au/lifestyle/home/pets/hills-pet-nutrition-issues-voluntary-recall-on-canned-dog-food-in-australia-and-around-the-world/news-story/ce0ce561d1c901f101daa42882cfe6c4</p>	<p>Australian dog owners have been warned to check their canned pet food after a popular brand issued a voluntary recall on products.</p> <p>Hill’s Pet Nutrition is voluntarily recalling 13 select canned dog food products due to potentially elevated levels of vitamin D.</p> <p>The global recall affects dog owners in Australia, where the canned products were sold through pet stores, veterinary clinics and online.</p> <p>The recall involves Hill’s Prescription Diet and Hill’s Science Diet canned foods.</p> <p>Hill’s stated the error has forced them to implement “additional quality testing” prior to their release of ingredients.</p> <p>“In addition to our existing safety processes, we are adding our own further testing of incoming ingredients,” it also said.</p>
<p>Yummi Pet products</p> <p>ANNOUNCEMENT We Will No Longer Be</p>	<p>Safety</p>	<p>Published on January 25, 2019</p> <p>Linked in</p>	<p>https://www.linkedin.com/pulse/announcement-we-longer-importing-meat-products-from-asia-grainger/?fbclid=IwAR2b7tJzfWwYazM5qFR</p>	<p>In order to provide only the safest treats for your dog, effective immediately we will no longer be importing any meat products from Asia. These meat products include rawhide, duck jerky, and chicken fillets.</p> <p>Yummi Pet Products has become aware that some treats of Asian origin may contain numerous chemicals harmful to pets. We’re also aware that chicken and duck products of Asian origin may contain vegetable glycerine</p>

Importing Meat Products From Asia			NhlzRjdvjUXfOIP2Ixue9kigRBuZebwj-RZXeKCl	derived from palm oil. If overfed, vegetable glycerine can lead to numerous health issues for your pet.
Pet food Advance Dermocare linked to megaesophagus outbreak, research shows	Safety	Thursday 13th December 2018, 3:32 PM	https://mobile.abc.net.au/news/2018-12-13/pet-food-linked-to-megaesophagus-outbreak-in-dogs/10614742?pfmre_dir=sm&fbclid=IwAR3UkJN3gJq0kOIQR2PyhGOa9njcCBuPukXjf0-ATNHdLNTPXqPwVpebmUQ	<p>Researchers today released a report which found there was a significant statistical link between Advance Dermocare pet food produced from mid-2017 and a decrease in the number of cases following the voluntary withdrawal of the product throughout Australia in March this year. U-Vet Hospital director Caroline Mansfield said researchers looked at a sub-set of dogs with megaesophagus and found the odds of them being fed Advance Dermocare in the six months prior to diagnosis were 437 times greater for cases compared to the control group.</p> <p>"This is an extremely strong association, there is about a one in a million probability that this occurred by chance, supporting the hypothesis that Advance Dermocare was associated with this outbreak of idiopathic megaesophagus in dogs," Associate Professor Mansfield said.</p> <p>"We suggest that the primary cause of this outbreak of megaesophagus is likely to be multifactorial.</p> <p>"As not all dogs fed this diet were affected, there may be some individual factors such as breed predisposition to food intolerance or household factors contributing."</p>
<p>Pet owner discovers mould in dog food</p> <p>Royal Canin responds to claims.</p>	Safety Conflict of Interest	Last updated: 30 November 2018	https://www.choice.com.au/outdoor/pets/products/articles/royal-canin-mouldy-dog-food?fbclid=IwAR0WgVN4qFqWKfn8q939oRRgH9bbPez81ap_RNp2niDNqYohALb-hrjKGyo	<p>"There was a substantial amount of mould in the food, including a big clump of mould in the bottom of the bag,"</p> <p>The discovery was made on 3 September 2018 after Bella had been eating the mouldy food for two weeks. The Royal Canin dog food's expiration date was 31 January 2019.</p> <p>Raised concerns among both pet owners and vets about conflicts of interest, since vet practices stand to benefit financially from their commercial relationships with pet food makers and might not want to draw attention to pet food problems. Pet food is a \$3 billion a year industry in Australia.</p> <p>Vet practices stand to benefit financially from their commercial relationships with pet food makers.</p>

<p>Australian pet food pulled from shelves after Perth dogs become ill</p>	<p>Safety</p>	<p>November 7, 2018 — 3.25pm</p>	<p>https://amp.watoday.com.au/national/western-australia/australian-pet-food-pulled-from-shelves-after-perth-dogs-become-ill-20181107-p50emg.html?fbclid=IwAR2B2pyyS7sv6g31Ek5D4vruuHvG6_96dEG15hphrHXAIHONr-HgZlhumkk</p>	<p>Black Hawk confirmed it was currently investigating the incidents. The brand did not clarify how many official reports they had received. Masterpet chief executive officer Sean Duggan said the brand was being cautious about the distribution of their products.</p> <p>"Due to the popularity of Black Hawk Grain Free Salmon, we recently broadened our network of suppliers of salmon meal".</p> <p>"We have completed extensive testing of the product to ensure that it poses no harm. All tests to date have come back well within normal ranges.</p> <p>"Until we can guarantee the exact same level of consistency and quality that our pets are accustomed to, we have ceased production of the product and quarantined all remaining stock.</p>
<p>Pet food under the spotlight</p>	<p>Legislation</p>	<p>Friday, 19 October 2018</p>	<p>https://www.foodsafety.edu.au/pet-food-under-the-spotlight/</p>	<p>It is a requirement that all dog food made in Australia must be made to the same food safety standards as human food. However, that is where the similarities in food stops, as there is not the same labelling and testing requirements on the food for our furkids as for ourselves.</p>
<p>Senate inquiry calls for tougher rules on pet food in Australia</p>	<p>Legislation</p>	<p>October 17, 2018 4.08pm AEDT</p>	<p>https://theconversation.com/senate-inquiry-calls-for-tougher-rules-on-pet-food-in-australia-102410</p>	<p>Compulsory rules for the standards and labelling of pet food in Australia are among the recommendations.</p> <p>The pet food industry in Australia is <u>self-regulated</u>. The Australian Standards for the manufacturing and marketing of pet food are voluntary, and published behind a <u>paywall</u>.</p> <p>There is no mandatory recall system for pet food, and no mechanism for consumers to report adverse events.</p> <p>There is minimal government oversight of this industry.</p> <p>The Senate report makes seven recommendations including calls for:</p> <p>The standards to be made mandatory and publicly accessible</p> <p>A national pet food manufacturing and safety policy framework to be established.</p> <p>Create a consumer reporting mechanism and improved recall systems by the Australian Competition and Consumer Commission (ACCC)</p>

				<p>No specific laws in Australia that force a pet food manufacturer to initiate a recall if their food is making pets sick.</p> <p>PetFAST: It relies on veterinarians to recognise a possible link between a disease and a pet food, and on the pet food manufacturer to investigate and recall a product if required. Unfortunately it isn't able to be used by consumers to report safety incidents, only veterinarians.</p> <p>The standards around the safety and nutrition of pet food aren't mandatory. Combined with the lack of independent oversight of the industry, this creates a situation in which consumer trust and industry transparency are thin on the ground.</p> <p>RSPCA also recommends mandatory auditing against the standards and expanding the standards to cover other pets such as rabbits and birds.</p>
Inquiry questions regulation of pet food industry after illness	Legislation	Duration: 2min 29sec Broadcast: Wed 29 Aug 2018, 12:27pm	https://www.abc.net.au/radio/programs/worldtoday/inquiry-questions-pet-food-regulation-after-dog-deaths/10178186?fbclid=IwAR2mZE59kRz--7CHH_0Z1uSFdYmLhK_ZWN2MkDV_unhZET_XINGrRw-f9YMQ	Several vets have expressed concern about an industry self-regulated. It should have a regular free framework where nutritionists, vets, microbiologists and toxicologists look into the food.
Pet food industry needs better oversight, says RSPCA	Legislation	Tuesday 28 th August 2018	https://www.rspca.org.au/media-centre/news/2018/pet-food-industry-needs-better-oversight-regulation-says-rspca	<p>The pet food industry in Australia need stronger regulation and independent oversight in order to meet the expectation of pet owners. The current model of industry self-regulation was not meeting the needs of Australian pet owners.</p> <p>An independent federal authority must enforce mandatory standards for all pet food products sold in Australia, from manufacturing to marketing. "We also believe that manufacturers of pet food products must be required to undergo regular audits against these standards, with clear mechanisms in place".</p>

				<p>“These standards should be extended to ensure the safety and nutritional quality of manufactured foods for birds, rabbits, reptiles, guinea pigs and other pets”.</p>
<p>Woolworths baxters – sick/deceased dog reports</p>		<p>July 20, 2018</p>	<p>https://www.petfoodreviews.com.au/news/woolworths-baxters-sick-deceased-dog-reports/?fbclid=IwAR0tG5InlVM6RG1JG3he-QBFMs4DI0I18_o3tB8b74JU1X-aWDQkjLW4jBY</p>	<p>Below we will list over 200 reports of sickness and death related to Woolworths Baxters. The product is still sold today and Woolworths have taken no accountability.</p>
<p>Pet food regulation</p> <p>Who can you turn to when something goes wrong with your pet food?</p>	<p>Legislation Safety Conflict of interest</p>	<p>Last updated: 09 July 2018</p>	<p>https://www.choice.com.au/outdoor/pets/products/articles/pet-food-regulation#case</p>	<p>Unlike some countries, where members of the public can report issues directly to the regulator, the only official reporting stream is via <u>PetFAST</u>, through your vet. "As it's a voluntary initiative, potentially not all vets are aware of, or involved with, the program. Additionally, pet food companies aren't under any legal onus to initiate a recall based on a pet food safety concern, so it requires negotiation with the industry."</p> <p>There have been very few recalls in Australia. In the last seven years since the standard was introduced, the only recalls announced have been Advance Dermocare dog food (linked with megaesophagus), Weruva BFF cat food (thiamine deficiency), Whiskas dry cat food (contained foreign objects) and Woolworths dog biscuits (foreign objects).</p> <p>The low number of recalls in Australia is used by industry to suggest that self-regulation is working well. However, we know some foods that appear to have problems are quietly withdrawn from sale, and any pet owners that complain to the company are compensated.</p> <p>In May 2018 there were complaints in the media and social media about Applaws It's All Good Duck & Venison dry food. People who complained received a refund or other compensation, but Applaws didn't issue a recall. Indeed, a few weeks after the first complaints were made public, we were still able to buy a pack from that same batch at Woolworths.</p>

				<p>Consumers shouldn't have to get food independently tested to ensure it's safe for their pets.</p> <p>"Self-regulation of any industry comes with concerns around transparency and conflicts of interest," (RSPCA)</p> <p>"Voluntary, self-regulation cannot control those who act outside of the system. It also relies on everyone doing the right thing for the 'common good' of the industry.</p>
How to spot hazardous irradiated pet treats from china – in your supermarket	Safety Legislation	June 22, 2018	https://www.petfoodreviews.com.au/blog/how-to-spot-irradiated-pet-treats-from-china/?fbclid=IwAR1L7CJCACZvzwSaAULFOW41E_Z830IVK5byM-Vz8gyKsV6l6wDtOxn55V0	<p>Take a look at the label of the Pigs Ear. You won't find the word "irradiated" anywhere on the label. It doesn't even tell you which country the product came from, only that it was "processed and packed in Australia".</p> <p>The key words are MUST NOT BE FED TO CATS.</p> <p>The Australian Standard for Manufacturing and Marketing of Pet Food (AS 5812:2017) stipulates these words are the only labelling requirement for an irradiated and imported pet meat.</p>
Toxic fears: Farmers warned not to eat the beef they sell	Safety	June 22, 2018	https://www.theage.com.au/national/victoria/toxic-fears-farmers-warned-not-to-eat-the-beef-they-sell-20180622-p4zn32.html	<p>Farmers near Esso's Longford gas plant and the East Sale RAAF Base in Gippsland have been warned not to eat meat, offal or dairy from their own livestock due to contamination by toxic chemicals but there are no restrictions on them selling such products.</p> <p>Elevated levels of PFAS — per- and poly-fluoroalkyl chemicals historically used in firefighting foam — have been detected in 45 cattle and 45 sheep on three properties near Esso Longford, Victoria's chief veterinary officer Dr Charles Milne has confirmed to <i>The Age</i>.</p> <p>PFAS has spread beyond the boundaries of both RAAF East Sale and Esso Longford, and has been detected on nearby properties as well as popular nearby hunting and fishing spots.</p> <p>Esso has fenced off some seven dams on properties near its Longford plant to stop livestock from drinking PFAS-contaminated water. Current government guidelines do not specify acceptable levels of PFAS for irrigation or livestock watering.</p>

				<p>The potential risks to humans of consuming livestock exposed to PFAS depend on the likelihood of people eating sufficient quantities, Dr Milne said.</p> <p>If a beef animal goes into an abattoir, it will be sold to wherever and people use small parts of the animal," he said. "But if it is home-killed, then the family's going to eat the whole animal."</p> <p>There are <u>no regulations in Australia for maximum recommended levels of PFAS in food for human consumption</u>, according to Dr Milne, nor are there any overseas.</p> <p>Food Standards Australia New Zealand (FSANZ) says there is no "consistent evidence that these chemicals cause any adverse health effects in humans, including people highly exposed occupationally". Some cattle farmers near the Oakey and Williamtown bases in Queensland and NSW have previously expressed fears they could be selling contaminated meat due to PFAS exposure.</p>
Radioactive water reignites concerns over fracking for gas	Safety	June 24, 2018	https://www.smh.com.au/politics/federal/radioactive-water-reignites-concerns-over-fracking-for-gas-20180622-p4zn4r.html	<p>High levels of a radioactive material and other contaminants have been found in water from a West Australian fracking site but operators say it could be diluted and fed to beef cattle.</p> <p>Buru Energy said a "relatively high concentration" of Radium-228, a radioactive element, was found in two water samples from a well in 2015 and 2016.</p> <p>The samples exceeded drinking water guidelines for radionuclides. However Buru Energy said samples collected from retention ponds were below guideline levels and the water posed "no risk to humans or animals".</p> <p>Water monitoring also detected elevated levels of the chemical elements barium, boron and chloride.</p> <p>Buru Energy said while the water was not suitable for human consumption, the "reuse of flowback water for beef cattle may also be considered".</p> <p>The water did not meet stockwater guidelines but this could be addressed "through dilution with bore water".</p>

<p>'Having a pet die is an absolutely terrible thing': Senate announces inquiry into pet food industry</p>	<p>Legislation</p>	<p>Updated 20 Jun 2018, 10:19pm</p>	<p>https://www.abc.net.au/news/2018-06-20/inquiry-to-be-held-into-pet-food-industry/9890398</p>	<p>Self-regulation in the pet food industry. Pet food recalls are almost unheard of. No framework to implement mandatory recalls. No real repercussions for manufacturers who fail to notify their industry body or the public of potential hazards and initiate product recalls within a reasonable time. Industry scrutiny is overdue. There are no laws governing pet food manufacturing in Australia, only a voluntary standard. The PetFAST system is only an alerting mechanism, so that if three similar cases come through, we alert the pet food company involved. PetFAST is not used to store data or report on incidence, so is an alerting tool, rather than an investigative tool. Improvements can be made: Federal regulator should have powers to implement a pet food recall, if circumstances warrant this action Two voluntary recalls in two years (in comparison to US: 20 only this year): Advance Dermocare Best Feline Friend (Weruva)</p>
<p>Animal ear tags among plastic and metal rubbish being ground up and put into pet food, insiders confirm</p>	<p>Safety</p>	<p>Updated 19 Jun 2018, 9:14pm</p>	<p>https://www.abc.net.au/news/2018-06-19/pet-food-insider-lifts-lid-on-plastic-and-rubbish-going-into-pe/9875184</p>	<p>Plastic and other pieces of rubbish are being processed with meat to make a key pet food ingredient (shoddy industry practices). Live, plucked chickens sent for rendering. Australian Tallow Producers is well known among locals in the Melbourne suburb of Brooklyn for the foul smell of its operations. Contamination was an industry-wide issue. Educate abattoir workers to remove objects, including animal ear tags (it's a low-paid, low-skill job) (ARA). Butchers and supermarkets are responsible for throwing plastic gloves in with meat bound for pet food. 295 customer complaints about foreign objects in 2015, mainly metal and plastics (Nestle Purina). Pet food standards should be 'same other foods'.</p>

<p>Plastic, mould found in dog food sparks call for regulation of pet food industry</p>	<p>Safety Legislation Conflict of interest</p>	<p>Updated 19 Jun 2018, 11:44am</p>	<p>https://www.abc.net.au/news/2018-05-16/plastic-mould-in-dog-food-prompts-call-for-industry-regulation/9764318</p>	<p>Bag of Applaws Duck and Venison dry dog food with an expiry date of May 2019 — it was mouldy (manufacturing problem at its Australian plant).</p> <p>Company was under no obligation to issue a public recall.</p> <p>MPM Products: it had received about 20 complaints about mould and two reports of dogs becoming sick, but their illnesses had not been conclusively linked to the food.</p> <p>The company also revealed coloured plastic found in its dry dog food two years ago came from a supplier failing to remove plastic ID tags from chicken carcasses before processing. There was no public recall.</p> <p>Pet owners said Baxter's — made for and sold by Woolworths — had caused vomiting and diarrhoea in their pets. There are also some claims of seizures and paralysis.</p> <p>Big pet food companies had too much influence. "A lot of vets sell pet food including food that caused the megaesophagus in dogs, a lot of universities get free pet food, the AVA (Australian Veterinary Association) gets sponsorship from pet food companies."</p> <p>Pet food recalls in Australia were rare because of the industry enjoyed a regime of self-regulation. "Why don't pet food companies recall food quickly? That's easy. First, they're in denial, second they don't want to lose money".</p> <p>'Anybody can produce whatever they want to'.</p> <p>There are no laws governing pet food safety only a voluntary standard. Nowhere else to turn to complain about pet food other than the manufacturer.</p>
<p>Pet food industry in the spotlight as number of megaesophagus cases jumps</p>	<p>Safety</p>	<p>Updated 6 Jun 2018, 3:43pm</p>	<p>https://www.abc.net.au/news/2018-06-06/number-of-megaesophagus-cases-soar-advance-dermocare/9839982</p>	<p>The number of dogs struck down by a debilitating and potentially fatal condition believed to be linked to a popular Australian dog food has jumped from 74 to more than 100</p> <p>"Mars had the opportunity to recall this product much earlier than they did, and so possibly reduce the number of affected pets,".</p> <p>"There is no protection for any pet owner in Australia purchasing from an unregulated industry, and it needs to change."</p>

Protect our pets: food regulations now! Stirling Griff's response	Legislation	14 May 2018	https://www.change.org/p/protect-our-pets-food-regulations-now https://www.change.org/p/protect-our-pets-food-regulations-now/responses/41341	Call on the Australian government to introduce regulations that would ensure the food we give our beloved pets is safe for them to eat. The global company knew their food made nine police dogs seriously sick in December but didn't recall the dangerous product until months later. Pet owners across Australia have been finding mould or plastic throughout their pet food. There are currently no laws protecting our pets from harmful food, and these global pet food companies seem to only care about their profit.
Dozens of dogs confirmed sick in investigation into popular dog food Advance Dermocare	Legislation	Updated 30 Apr 2018, 1:05pm	https://www.abc.net.au/news/2018-04-30/popular-dog-food-suspected-of-making-dogs-sick-advance-dermocare/9699866	More than 70 dogs across Australia have been struck down by a debilitating and incurable illness. "The only way a recall of a pet food will occur is if a company decides off their own back to do it". Mars Petcare wasn't required to inform vets or any government authorities when it learnt of a potential problem with its product, as the pet food industry is self-regulated. Pet food needs to be regulated. The Federal Government has signalled it's not willing to get involved. The Pet Food Industry Association and the Australian Veterinary Association said they were first alerted to a potential problem by Mars Petcare in March.
Dogs, Dermocare, and Megaesophagus (AUSTRALIA) Closed group	Safety	Created 19 th April 2018 (78 members)	https://www.facebook.com/groups/223381705083894/	This group is for dog owners to share information relating to the recent spike in diagnoses of megaesophagus in dogs in Australia, specifically those that have been fed Advance Dermocare dog food.
Advance Dermocare dog food voluntarily recalled after	Safety	Updated 26 Mar 2018, 6:09am	https://www.abc.net.au/news/2018-03-25/advance-dermocare-dog-food-	Mars Petcare Australia says recall a "precaution". Dogs with megaesophagus have been euthanased in Victoria and South Australia. Owners urged to return affected products for full refund.

megaesophagus outbreak			voluntarily-recalled-megaesophagus/9584518	
Urgent recall of Advance Dermocare dog food after deaths from incurable illness		MARCH 25, 2018 10:38AM	https://www.news.com.au/lifestyle/home/pets/urgent-recall-of-advance-dermocare-dog-food-after-deaths-from-incurable-illness/news-story/6787028f0074bc7af2005a1bb0d3a12	PET owners are being urged to return a popular brand of dog food after a number of deaths due to a rare illness. The company has run hundreds of tests on Advance Dermocare and has not found a link to the condition. “Regardless, we are voluntarily recalling these products as a precaution while we work to get to the bottom of the issue as soon as we can,” a spokesperson said in a statement on Saturday.
Victoria Police dog euthanased after contracting rare illness, others dogs sick.	Safety	Updated 23 Mar 2018, 8:51pm	https://www.abc.net.au/news/2018-03-23/victoria-police-dog-euthanised-after-falling-ill-others-sick/9579796	A police dog has been euthanased and eight others are sick with a rare illness identified as megaesophagus, Victoria Police have said.
Stand up for safe pet food	Legislation	2018	https://action.choice.com.au/page/27180/petition/1?locale=en-AU	CHOICE is calling for regulations to ensure pet food is safe. These include: Higher standards Faster recalls Independent regulator
Vets are warning about a popular pet food making dogs sick	Safety	Jan 19, 2018	https://www.fiveaa.com.au/news/Vets-Are-Warning-About-A-Popular-Pet-Food-Making-Dogs-Sick	According to News Ltd, the Pet Food Reviews website has received 20 reports of dogs becoming ill after eating Woolworths homebrand Baxter’s products. And the site’s editor says he has received more than 50 more reports about the products. But Woolworths says it won’t be pulling the food from its shelves.

<p>Vets urge caution over cheap pet food amid claims of Woolworths' Baxter's food making dogs sick</p>	<p>Safety</p>	<p>January 19, 2018 12:00am</p>	<p>https://www.adelaidenow.com.au/news/vets-urge-caution-over-cheap-pet-food-amid-claims-of-woolworths-baxters-food-making-dogs-sick/news-story/a0bf367d7f8d4dbcac0f8436f2b72829</p>	<p>VETS are urging people to be wary of cheap pet food, amid claims animals are getting sick after eating a popular homebrand variety. Pet Food Reviews editor Dave, who did not want to give his surname, claimed he had also personally received more than 50 reports about Baxter's products from consumers. Dr Parker said there had been no cases of pets reacting to Baxter's dog food reported through their Pet Food Adverse Event System of Tracking (PetFAST). Mitcham-based Pet Food Industry Association of Australia executive manager Duncan Hall said there had been two inquiries from consumers regarding the Baxter's brand, and the organisation had referred them to Woolworths. Woolworths category manager Ben Boyd said the product would stay on its shelves, and customers had responded positively since it was launched more than a year ago.</p>
<p>Pet fooled</p>	<p>Safety Nutrition</p>	<p>2017</p>	<p>https://www.petfooled.com/pet-fooled-part-1.html Part 2 in progress</p>	<p>The pet food industry is telling us what to feed our pets based more on what they want to sell us than on what's necessarily good for the pet. Corn, wheat and soy cause allergies and disease in our pets. Now that corn and wheat are subsidized and cheap to produce, it makes adding those ingredients a super cheap way to make a food for somebody who can't say no. We can abuse dogs and cats nutritionally by feeding them foods that are not biologically appropriate, and they can have overall degenerative changes and decreased vitality due to their diet. Since major pet food companies are involved with and have influence over vet students, lack of education surrounding raw diets exists heavily among traditional vets." The pet food industry uses substandard protein sources, such as nefarious byproduct. Byproduct is defined as what's left over after an animal has been slaughtered and all the edible parts have been removed. Roadkill, euthanized animals and diseased animals are put in pet's food. Feeding dry kibble to a cat can cause kidney disease. BHA is a toxic preservative.</p>

				Chicken byproduct meal is totally rendered and inappropriate nutrition for dogs and cats.
Interview Dr. Tom Lonsdale	Safety	16 May 2018	ABC radio, Brisbane https://www.youtube.com/watch?v=3eoKDS-PZOfk	<ul style="list-style-type: none"> • Concern about voluntary recall and food standard compliance. • Concern about the starch on the food. This pet food is junk. • Concern about teaching vet students nutrition by pet food companies. • Relationship between processed food and periodontal disease. <p>Pet food companies that supply commercial diets also are the ones that makes prescribed diets, do the research, sponsor universities and conferences, and advertise at universities.</p>
Interview	Safety	25 June 2018	ABC radio, Brisbane https://www.youtube.com/watch?v=vobEExFZXpA	<p>One person protest at AVA conference and at different places around Brisbane to put pressure on pet food companies to reduce the amount of sugar in their products.</p> <p>Pet food is full of chemicals, flavours, colours, palatability enhancers and carbohydrates that make the dog and cat fat and that can lead to diabetes</p>

The following submissions that were made to the Senate enquiry are also freely available on the internet, and can be found when searching for pet food safety using Google, Yahoo or Bing search engines:

<p>Submission 4 Submission 8 Submission 9 Submission 11 Submission 12, 13, 40,39 (some of the submission related to megaesophagus Submission 14 Submission 30 Submission 51 Submission 54 Submission 57 Submission 71 Submission 79 Submission 103 Submission 117 Submission 120</p>	<p>Our dog is one of the dogs affected by the recent recall of Advance Dermocare range of dog food. Our dog became symptomatic in February 2017 with recurrent regurgitation, which progressively became worse over the next 7 weeks. Our dog was tired, lethargic and was struggling to keep food and water down, often regurgitating up to 6 times per day.</p> <p>Our dog was exclusively fed Advance Dermocare from February 2017 and underwent an endoscopy in April 2017, which revealed he had developed severe oesophagitis.</p> <p>It was recommended trialling an elimination diet to determine whether food hypersensitivity or allergies were causing our dog's recurrent regurgitation and oesophagitis.</p> <p>We commenced feeding our dog exclusively on Royal Canin hypoallergenic food, (hydrolysed soy protein range of food that is the least unlikely to trigger allergic reactions in dogs) to determine whether our dog was reacting to the Advance Dermocare range of dog food, we ceased PPI medication for the duration of the trial.</p> <p>After just over 1 week on an elimination diet our dog's symptoms disappeared for a month. After a one-month trial on a strict hypoallergenic elimination diet and becoming asymptomatic we challenged our dog with Advance Dermocare to determine whether he was reacting to his usual food. Within days our dogs' symptoms reoccurred.</p> <p>I contacted Advance via their customer service line multiple times in August 2017 about our dog's reaction, however did not receive a response until I posted a question via Facebook messenger in September 2017 saying that our dog had reacted to Advance Dermocare and requesting a list of all the protein containing ingredients in Advance Dermocare. I received a response after 8 days via Facebook messenger and a follow-up phone call.</p> <p>Mars were aware of our dogs' reaction to Advance Dermocare in September 2017, with the police dogs being reported in December 2017. If Mars were to have acted sooner and voluntarily recalled Advance Dermocare in December 2017, it would have prevented over 100 dogs developing megaesophagus</p>
--	---

On the 20th of April 2018, I purchased a 2.7 kg bag of Applaws Duck and Venison dry dog food from Woolworths, The Stables Shopping Centre, GOLDEN GROVE, SA 5125 to feed my dog. I had never used this brand of dog food before. This bag had a best before date (BB) of 13/5/19. I took the bag home and opened it to immediately find that the entire food contents were covered in a whitish mould.

I then contacted the Applaws company via their Facebook page and also via phone. I advised them of my findings and eventually the General Manager (unfortunately I didn't write down his name) rang me from the UK where he is based and said they were taking this report 'seriously' He stated that there was a production line problem – that the food hadn't been dried sufficiently enough, that they were moving to new premises and including new quality control procedures (including an extra drying step) in order to prevent this from re- occurring. He said that because of the time of the year that the food had been processed, it was warm in temperature so any excess moisture remaining in the food would have contributed to the mould growth. He said that they had 'quarantined' batches at the factory – removing any of this affected batch at the factory location - including extra batches either side of that production run. I asked if there was going to be a public recall on this food by requesting it to be pulled from the shelves of retail shops to stop its sale and protect consumers who were unaware of this issue , and he replied that this incident appeared to be 'isolated', that the mould on the food 'shouldn't pose a risk' to pet health – 'that a dog's digestion is much stronger than a humans' etc etc. He stated that the mould may make the food more unpalatable and if customers found this in their purchased food then the Applaws company were happy to refund/replace the food but NO RECALL. It should be noted that this food could still be sitting on shelves anywhere in Australia available for sale till May next year (2019). Given the high level of contamination that I found in the food I bought at that time – I am extremely concerned at what state it will be in by its BB date!

I have tried repeatedly to contact the Pet Food Industry Association of Australia in May 2018– but the phone number (8383 9386) they have listed on their web page <https://www.pfiaa.com.au/ContactDetails/ContactPFIAA.aspx> is 'disconnected'. They have no social media presence. I have sent two emails marked 'URGENT' to them using their 'Contact PFIAA' page – but have received no response whatsoever. It appears that they are not interested in liaising with the public even when major food contamination issues are raised with them.

I was contacted by a person who stated that they had become ill upon being exposed to the mouldy Applaws food in addition to her dog becoming ill from eating it.

In March 2018 we received devastating news that our beloved Stan had been diagnosed with Megaesophagus after eating Advance Dermocare. I pay a high price for food which I think is nourishing for my dog, Advance Dermocare was not cheap food and it killed my dog.

I have personally purchased Applaws dry dog food (a brand I was previously happy buying for almost 2 years, and which my dogs seemed to enjoy) which has had mould inside the bag. The bag was sealed and was at least 18mths within date. I contacted Applaws, along with a group of other concerned owners and was told that they weren't concerned as the mould was harmless. No recall of their food was made and I have since heard of other bags with mould in them being purchased.

Unfortunately it was the delay in reporting or issuing a recall that ultimately led to our dog being hit with this disease (megaesophagus).

We were not made aware of this link until a media release reported this on Saturday 24th March 2018. Had this process been expedited it may have saved our pet and possible many others. One can't help but think that if it had not been for the police dogs and the fact that this RARE disease became a news issue, we may never have been told.

Royal Canin with not much to report. However the situation has changed since we started purchasing new version of Royal canine of Mini Digestive as all of the sudden my generally health 3 year healthy dog started licking, biting his paws after every meal, itch constantly, ear infections and generally signs of allergy to something in the Royal Canin Dry food which to my surprise had no extra ingredients labelled on the package? . My 3 year old was always very sensitive to the fish based products.

Look forward to hear from you and investigation in the dog food labelling as Royal Canin representative admitted 2 out of 100 dogs develop allergy to their product over alive time and they think its ok? No it's not the labelling should be clear and consumers should choose whether they would like to make their pet 2 out of a 100 dogs which become allergic!

I have asked the Royal Canine representative what is labelled as animal fat and they are admitted they use fish fat and they do not think they cause allergy... HOW wrong my pet is allergic to fish oil and fish products and I was not able to get this information

Its also has changed formulation of the product in the last 6-8 month and has not bothered to change the packaging of their product to correctly display the change.

In 2016 my dog had been vomiting, and had diarrhoea, clay coloured stool each and every time I fed him Optimum dog food. My three cats also were vomiting from Optimum cat food.

The veterinary treatment costs were crippling, and I've nearly lost my dog, and he developed a chronic pancreatitis which predisposes him to a pancreatic and hepatic cancer in the near future.

Mars Petcare (please see attachment) response was to reimburse me for the product, and a voucher of an insulting amount of \$20.00 or \$30.00 was enclosed, and nothing for the veterinary costs.

Rendered or by-products should never contain euthanized animals, cancerous tumours or anything that could be harmful to animals and humans alike. Out of date decomposing, rotten corpses should never be added to pet food. Rendered products should be rigorously tested for safety and nutritional value.

Rendered additions should be clearly labelled, and the rendering facilities should be regularly inspected for the quality of rendered products to fit for pet food and therefore human consumption.

My story happened a few years ago when I used to buy 15kg bags of dog food online. Buying online seemed to be ok for a while until one day when I opened a new bag of food. This bag stunk of mould. When I called the food manufacturer, they confirmed that online suppliers are not constrained to where they store the pet food and as a consequence, could even expose the pet food to the sun. Because of this, I have stopped buying pet food online

In the last two months we have purchased Applaws Complete Dry Dog Food (lamb and kangaroo) which turned out to be mouldy and resulted in our 2 year old Soft Coated Wheaten Terrier to continuously vomit over a period of 24 hours. When Applaws was contacted by me via their facebook page to ask why the product was still available to be purchased there was no response from the company. It has since transpired that this company also allowed food to be sold with plastic included in the dry food which resulted in dogs becoming ill having eaten it, but again

there was no recall of the product instigated by the company. We would be pleased to provide more information with regards to our dog becoming ill from

At one stage I was giving my dog canned food as an occasional treat. I had checked to make sure that it only contained 100% kangaroo. Then suddenly, my dog started to have severe allergies. It took some time to identify the source of the allergen. The dog food company had changed the ingredients of the food from 100% kangaroo to “mostly” kangaroo with meat from other species. However, because it still contained mostly kangaroo, it continued to be labelled as such. The company changed the label at the back of the can to include the new ingredients, but they kept the front label exactly the same.

Having had one dog with pancreatitis, I was required to feed it a low-fat diet. The majority of canned and dried foods followed a version of AS5812 section 3.1.6 and included the “min % crude fat” content. However, the value that I needed to see was “max % crude fat”. Given that high fat foods have more deleterious health effects than low fat foods, it would make more sense to require that the manufacturer provide the value for maximum fat content.

The ingredients list on most canned and dried foods is also inadequate. Additives (e.g. colours, additives, flavours, preservatives etc) can be listed using a generic term, such as “antioxidants” or “preservatives” (AS5812 section 3.1.10). As a customer, I am left wondering, which antioxidant, which preservative? In addition, as only a generic term is being used, manufacturers can currently change preservatives without the public ever knowing about it. However, some of the additives used in pet foods have been found to be skin irritants. For sensitive dogs or those with compromised immune systems, (my dog suffered from allergies and was on chemo therapy as part of her treatment for her immune mediated poly-arthritis) these additives may be contributing to or causing the dog’s symptoms.

A month after his death Mars Petcare recalled Advance Dermocare, Homer’s food, with concerns there might be links between food and this rare condition. I only found out about the recall because I received an email and text message from the pet food shop I regularly purchased Homer’s food. As I was part of their loyalty program they had a record of my purchases. I forwarded this recall information to my local vet and animal hospital - neither were aware.

We have recently learnt that in some pet foods they use Ethoxyquin to preserve animal fat which is a pesticide and used for making rubber, it has also been linked to liver problems and cancer in our pets. Sulphite is used to preserve fresh meat which causes thiamine deficiency. The only way we know if pet food is irradiated is if the label reads that it must not be fed to cats.

Some of the pet-food products that I buy have 'Australian Owned' on the packaging or are distributed from an Australian address but I am unsure as to whether the food product is sourced from Australia.

Communication of correct diagnostic procedures, costs, treatment and management of pets harmed or disabled due to adverse food events has not been considered.

"Advance Pet" advised concerned pet owners in public forum that if their dogs had not shown signs of Megaesophagus after eating Advance Dermocare then there was "probably nothing to worry about". Manufacturers should be prohibited from communicating any unsubstantiated advice.

The emotional and psychological burden on owners related to the care and management of pets diagnosed with life changing or terminal conditions due to adverse food events is not considered.

Costs incurred by owners related to management and veterinary treatment for pets adversely affected by pet food consumption has not been considered.

Lifestyle changes required and associated costs incurred by owners, including but not limited to; specialist care of pets left with special needs and disability, have not been considered.

The reluctance of pet owners (for whatever reason) to report concerns to vets in relation to pet food, as opposed to an independent and impartial authority, has not been considered.

Humans are commonly in direct contact with pet food, including small children feeding a family pet. The possible ramifications of exposure to unidentified sources of disease, infection or illness have not been considered, especially in the efficiency and communication of recalls.

Contact in most states with the RSPCA reports similarly that unless an animal is directly injured by physical contact from an offender, then they believe that they have no authority to act. This highlights the need for a clear and

common federal point of contact of authority for consumers in the instance of illness, injury or death related to pet food consumption.

Legislation currently in place for the protection of pet owners choosing to feed raw, commercial or non-commercial food and affected by any adverse food event, has not been considered.

Nation-wide legislation currently in place for the protection of cruelty to animals has not been considered in ensuring the safety of pet food.

Terrible ingredients like propylene glycol are added to pet products to keep products moist particularly in Prozym chews that are sold. This is simply ridiculous and unacceptable, for most people, pets are an actual part of the family and we make every effort to ensure our pets are healthy and these lack of regulations are making them sick.

The manufacturers should be made to state all ingredients. I don't want to give my dog diseased or euthanised animals because pentobarbital will be ingested by my dog and can kill. Nasty preservative chemicals such: propylene glycol Ethoxyquin, BHA, BHT, TBHQ, Propylgallate, just to name a few, should not be permitted for use. They should only be able to use natural preservatives such tocopherals, etc.

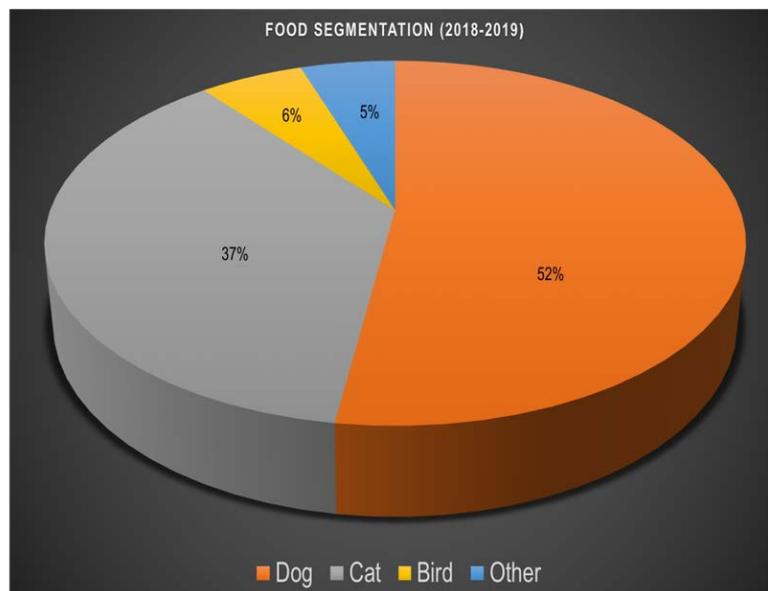
Objective 5: Review and report on the volumes of pet food sold each year in Australia, the number of manufacturers, and how much is made domestically versus how much Australia imports.

Much of this information is commercial in confidence, and as such we relied on searches of industry reports to provide us with this data.

Around 5.7 million of Australia's 9.2 million households have a pet, or roughly 62% [1]. Of these, 38% are dog owners and 29% are cat owners. According to a survey conducted by Animal Medicines Australia [2], the percentage of households with pets across the country is:

- Northern Territory (82%) (small sample size, this should be interpreted with caution)
- Australian Capital Territory (75%)
- South Australia (68%)
- Tasmania (66%)
- Victoria (65%)
- New South Wales (60%)
- Queensland (58%)
- Western Australia (57%)

Revenue growth for the pet food production industry has been solid over the past five years. Overall, industry revenue is expected to increase at an annualised 3.2% over the five years through 2018-19, to a total of \$2.2 billion per annum. Cats and dogs dominate the food market (see figure below).



This trend includes expected growth of 0.2% in the current year, due to an increase in discretionary incomes and ongoing solid demand for premium pet food ('premiumisation'). Industry revenue is forecast to grow at an annualised 3.3% over the five years through 2023-24, to total \$2.6 billion [3].

One of the challenges in determining the manufacturers is that many parent companies will have smaller 'boutique' brands as part of their portfolio. These boutique brands often change. Imported

products are also difficult to track, as the products may be the same but labelled differently when sold in retail outlets. Additionally, many manufacturing plants in Australia will produce 'private label' products, and so smaller shopfront operations can come and go quite quickly.

The predomination of dog food in sales corresponds to their main popularity as pets. The table below outlines the number (in 000's) of pet dogs and cats in Australian households. It is possible that this estimation is inaccurate, as it relies on registrations and other traceable documentation, and so does miss on a proportion of owned but not registered pets.

	2014	2015	2016	2017	2018	2019
Dogs	4,612.7	4,643.9	4,693.3	4,746.9	4,808.0	4,878.8
Cats	3,677.2	3,732.4	3,792.1	3,860.3	3,933.7	4,012.3

Source: Euromonitor International from official statistics

Estimations of pet food sales don't indicate the full diet that many pets ingest, as they often have non-prepared, or homemade food. As the table below indicates, dogs are more likely to receive homemade diets, and this likely includes table scraps, bones and other meat scraps.

Consumption of Food by Prepared vs Non-prepared: % Analysis 2014-2019:

		2014	2015	2016	2017	2018	2019
Prepared	Cat	66.8	67.6	68.5	68.9	68.9	69.0
	Dog	44.0	44.2	44.5	44.8	45.1	45.4
Non-Prepared	Cat	33.2	32.4	31.5	31.1	31.1	31.0
	Dog	56.0	55.8	55.5	55.2	54.9	54.6

Source: Euromonitor International from official statistics

The pet food production industry provides a range of pet food products, especially for dogs and cats. The products primarily consist of canned wet food products and packaged dry food products. According to Euromonitor International data, the volume of pet food sales is largely stable, but pet owners are paying more for their animals' food than previously, likely associated with higher disposable income and higher attachment to pets [1].

Pet food sales

Cat food

The cat food sector includes canned wet cat food, packaged dry cat food and other cat treats. Wet cat food is experiencing stronger than dry cat food in sales currently, as cats generally tend to prefer the former [1]. Overall, the cat food segment has increased as a portion of revenue over the past five years. This trend is partly due to premiumisation trends, as manufacturers have released a growing array of gourmet lines, age-specific food options and other therapeutic cat foods [3].

Dog food

The dog food sector includes packaged raw food (BARF diets), canned wet dog food, packaged dry dog food, dog treats and chilled snacks.

Lower volume sales, reflecting the growing preference for smaller dogs with a lower caloric intake, underlie this fall in relative terms. The increasing number of pet owners sourcing fresh and human-grade food for their dogs from butchers has also contributed to this decline [3].

Sales of Cat Food by Category: Volume 2014-2019 – Forecast 2019-2024 in tonnes

		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Treats	Treats	13.7	14.1	14.6	15.2	15.9	16.6	17.3	18.1	19.0	19.9	20.8
	Mixers	118.6	124.3	129.7	133.9	138.0	141.9	145.6	148.6	151.6	154.6	157.6
Dry	Economy	6,366.4	6,242.3	6,092.5	5,958.4	5,833.3	5,719.6	5,619.5	5,535.2	5,457.7	5,386.7	5,322.1
	Mid-Price	26,218.6	25,772.8	26,625.9	26,935.6	27,153.5	27,402.2	27,599.8	27,809.5	27,992.0	28,213.1	28,469.8
	Premium	15,720.8	16,475.4	17,360.4	18,060.5	18,761.5	19,371.6	19,998.9	20,643.6	21,304.4	21,968.0	22,627.1
Wet	Economy	9,746.5	9,429.7	8,859.8	8,206.2	7,634.5	7,170.4	6,765.1	6,417.8	6,118.2	5,833.4	5,570.2
	Mid-Price	58,621.2	57,829.8	57,077.7	56,639.0	56,186.1	55,307.4	54,423.6	53,528.3	52,635.0	51,732.3	50,788.7
	Premium	24,173.2	25,526.9	26,854.3	28,152.8	29,080.2	29,923.8	30,773.7	31,591.9	32,364.7	33,112.9	33,874.0
TOTAL		140,978.9	141,415.3	143,015.0	144,101.7	144,803.0	145,053.5	145,343.3	145,693.1	146,042.5	146,421.0	146,830.5

Source: Euromonitor International from trade associations, trade press, company research, trade interviews, trade sources

Sales of Cat Food by Category: Volume 2014-2019 – Forecast 2019-2024 in AU million

		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Treats	Treats	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	Mixers	6.3	6.8	7.2	7.6	8.1	8.5	8.8	9.1	9.3	9.6	9.9
Dry	Economy	18.0	17.2	16.6	16.1	15.6	15.2	14.8	14.5	14.2	14.0	13.8
	Mid-Price	114.2	110.7	113.3	113.7	113.9	116.5	116.7	117.1	117.4	117.8	118.2
	Premium	201.8	209.2	218.4	225.2	231.3	236.0	240.2	244.1	247.5	250.8	254.1
Wet	Economy	28.6	27.6	26.1	24.3	22.8	21.6	20.5	19.5	18.7	18.0	17.4
	Mid-Price	238.9	234.2	230.0	226.8	224.1	226.8	224.0	221.2	218.3	215.4	212.3
	Premium	296.4	312.3	328.8	346.6	365.5	385.4	397.4	409.3	420.8	431.7	442.8
TOTAL		904.4	918.1	940.6	960.6	981.6	1,010.2	1,022.7	1,035.0	1,046.4	1,057.5	1,068.7

Source: Euromonitor International from trade associations, trade press, company research, trade interviews, trade sources

Sales of Dog Food by Category: Volume 2014-2019 – Forecast 2019-2024 in tonnes

		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Treats	Treats	74.8	79.2	83.6	88.1	90.3	92.8	95.5	98.6	101.9	105.5	109.4
	Mixers	13,364.1	14,099.2	14,271.0	14,595.2	14,960.1	15,378.9	15,824.9	16,331.3	16,886.6	17,484.4	18,120.8
Dry	Economy	57,451.2	56,589.4	55,799.7	55,127.0	54,575.7	54,040.9	53,603.2	53,201.1	52,834.0	52,506.5	52,196.7
	Mid-Price	65,610.9	63,806.6	62,976.6	61,912.5	61,414.5	60,984.6	60,551.6	60,158.0	59,797.0	59,492.1	59,242.2
	Premium	76,867.3	80,018.9	82,397.2	85,212.1	88,151.9	91,272.5	94,540.0	97,981.3	101,577.2	105,518.4	109,644.2
Wet	Economy	52,764.9	50,759.8	49,627.7	48,585.6	47,613.8	46,709.2	46,102.0	45,548.7	45,093.2	44,664.9	44,236.1
	Mid-Price	67,149.5	64,329.2	61,677.8	59,704.1	57,853.3	56,117.7	54,557.6	53,100.9	51,752.2	50,717.1	49,753.5
	Premium	37,856.8	39,314.3	40,532.3	41,676.8	43,163.7	44,601.1	46,113.1	47,685.5	49,335.4	51,072.1	52,905.6
TOTAL		371,139.5	368,996.5	367,365.9	366,901.3	367,823.3	369,197.6	371,387.8	374,105.5	377,377.6	381,560.9	386,208.4

Source: Euromonitor International from trade associations, trade press, company research, trade interviews, trade sources

Sales of Dog Food by Category: Volume 2014-2019 – Forecast 2019-2024 in AU million

		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Treats	Treats	0.7	0.8	0.8	0.9	0.9	1.0	1.0	1.1	1.1	1.2	1.2
	Mixers	256.3	270.8	281.6	291.6	302.7	315.1	329.3	345.0	362.2	380.3	399.7
Dry	Economy	87.1	83.3	80.0	77.1	74.6	72.6	69.3	66.2	63.4	61.0	59.0
	Mid-Price	147.7	143.8	142.2	140.5	138.7	137.3	135.7	134.0	132.2	130.4	128.4
	Premium	561.7	593.9	618.9	647.1	676.8	705.2	734.2	763.5	790.2	817.1	843.3
Wet	Economy	139.1	134.2	128.8	124.0	121.2	118.7	116.3	114.1	112.6	111.5	110.4
	Mid-Price	241.4	233.1	225.3	218.1	211.5	205.6	201.3	197.3	193.4	189.6	186.1
	Premium	361.6	367.4	372.5	377.0	381.3	388.9	397.6	406.6	416.2	426.2	436.4
TOTAL		1,795.5	1,827.3	1,850.2	1,876.2	1,907.8	1,944.4	1,984.6	2,027.7	2,071.3	2,117.2	2,164.5

Source: Euromonitor International from trade associations, trade press, company research, trade interviews, trade sources

Number of manufacturers

The industry is highly concentrated, with the three largest players accounting for more than three-quarters of industry revenue in the current year: Wrigley Uno 2 Australia Pty Limited (Mars PetCare), VIP Topco Pty Limited (Real Pet Food Company) and Nestle Australia Ltd.

The remainder of the industry is made up of small- and medium-sized producers [3]. In 2018, Mars Australia continued to lead dog food, as it has a strong presence across economy, mid-priced and premium dog food in both the wet and dry segments. Mars Australia captured the largest share of sales in premium wet dog food and Nestlé Purina PetCare Australia led premium dry dog food in 2018 [1]. The industry is highly concentrated, with the three largest manufacturers estimated to account for more than three-quarters of industry revenue in 2018-19.

Around 15% of the market is contributed to by the following parent companies with several boutique or gourmet brands. More details of the products and brand names produced by these companies are listed in Objective 6:

- Performance Pet food
- Westfarmers Ltd
- Safcol Australia Ltd (marketer member PFIAA)
- Woolworths Ltd (marketer member PFIAA)
- MPM products Ltd (marketer member PFIAA)
- Macro Investments Pty Ltd
- 4legs Pet Food Co
- Show 'em How Much You Love 'em Pty Ltd
- Macro Meats

There are a large and indeterminate number of shopfront producers that make up the remaining 10% of the market, particularly of BARF style products throughout Australia, that are not members of PFIAA. As PFIAA is a voluntary organisation, and there are no standard requirements to produce raw pet food products, it is not possible to determine how many producers there are in Australia.

However, the following companies are listed as manufacturer members of PFIAA, and potentially contribute to this 10% of the market.

- Advanced Pet Care of Aus P/L
- Appetite Foods Group Pty Ltd
- Blackmores -PAW*
- Bucket O Beef Pty Ltd
- Cool Off Pty Ltd*
- CopRice Specialty Products*
- Freeze Dry Australia
- Freez Dry Industries Pty Ltd
- GrainFeed Pty Ltd*

- Hypro Australia
- Lovitt's Group Pty Ltd*
- Mars-Pet Care
- Masterpet Pty Ltd
- Nestle Purina Petcare
- Next Generation Pet Foods
- Nova Concepts Australia Pty Ltd*
- Paringa Pet Foods P/L
- Pet Products Development & Services*
- Premier Petfoods
- Propharma Australia Pty Ltd*
- Raw Pet Meats
- Rawbone Pet Foods Pty Ltd
- Real Pet Food Company
- Reward Petfoods Pty Ltd
- Ridley Agriproducts
- Rivalea (Australia) Pty Ltd*
- Sunstate Petfoods Australia Pty Ltd
- Vetalogica
- U-Chews Pty Ltd
- Vet's Best Products Pty Ltd

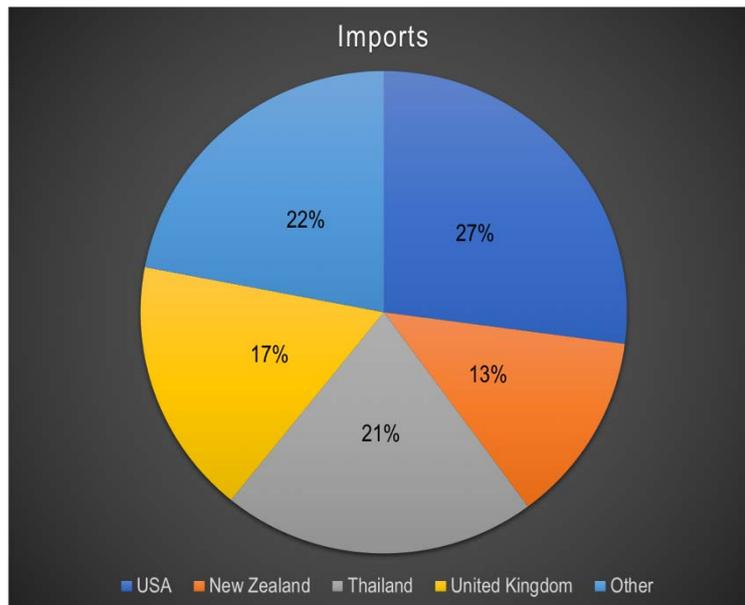
*Manufacturers of raw materials, services or probiotics for the pet food industry

Imported products

The domestic market accounts for most of the industry demand. This is partly due to the low-value and bulky nature of pet food products, which reduce the cost-effectiveness of transporting products across long distances. Local companies face moderate competition from imports, with imports accounting for an estimated 18.6% of domestic demand in the current year [3].

Imports are expected to increase at an annualised 9.2% over the five years through 2018-19, to account for 18.6% of domestic demand. Imports have grown strongly over the past five years, largely due to the increasing popularity of private-label pet food, which is often imported. A large proportion of industry imports are sourced from Thailand and New Zealand, due to free trade agreements that link the two countries. Other key import sources include the United States and New Zealand [3]. The bulk of importation from Thailand are fish-based cat diets (Safcol), which are sold under several different brands.

Products that are imported are not required to fulfil the AS5812:2017 requirements, but many exceed these based on their country of origin. Particularly products from Royal Canin, Hills Pet Nutrition, even if produced outside of the US, will fulfil AAFCO requirements and have been tested by feeding trials.



References

1. Euromonitor, I., Pet Care in Australia. Passport, 2019.
2. PIAA. Australian Pet Ownership Statistics. 2018 Jan 31, 2018
3. Bao, V., Ibis World Industry Report OD5476: Pet Food Production in Australia. Ibis World, 2019.

Objective Six: Assess and report on Australia's pet food industry's uptake of and compliance with the requirements of AS 5812:2017

The following companies and products are listed on the PFIAA web-site as being certified to fully comply with AS5812 manufacturing requirements, as of February 4, 2018 (document attached in appendix 8). The relevant company web-sites were then accessed and searched to determine the pet products they sold and if they clearly promoted membership of the PFIAA, adherence to AS5812-2017 and location of production of pet food to the consumer on their website.

Prior to submission of the report, all web-sites were accessed again on 20/8/2019 to ensure accuracy. Note: when the same company is listed but for different factory sites, the companies are assessed only once.

There is no listing on the PFIAA web-site of pet food company's adherence to marketing regulations of AS5812.

Company name	Pet food products sold in Australia	PFIAA membership listed on web-site	Adherence to AS5812-2017 listed on web-site	Can the consumer determine where the products are manufactured?
Nestle Purina	<ul style="list-style-type: none"> - Beyond - Bonnie - Dentalife - Denti - Fancy Feast - Felix - Friskies - Lucky Dog - Petlife - Purina Proplan - Purina One - Supercoat - Tidy Cats 	Yes	Yes	No
Premier Stockfeeds	No direct pet food sales			
Australian Pet Brands t/as Real Petfood co	<ul style="list-style-type: none"> - Billy & Margot - Ivory Coat - Doctor B's BARF - Tucker Time - Farmers Market - Natures Goodness - Natures Gift - Fussy Cat - VIP petfoods 	Not in the parent company or brand web-site, except on one occasion it was mentioned that they are members of PFIAA (i.e. in FAQ section stating that they do not use horse meat) [Natures Gift website].	No	No
4 Legs Pet Food (Trading as RawbonePet Foods Pty Ltd)	4 Legs	No	No	Yes
CopRice	<ul style="list-style-type: none"> - CopRice Dog (Family, Working, Drover) - Max's Cat Food 	No	Not directly but does refer to meeting international and national accreditation standards.	Yes
Grainfeeds	Unable to locate web-site			
SPF Diana	No direct pet food sales			

Mars Petcare (Wodonga and Bathurst)	<ul style="list-style-type: none"> - Pedigree - Advance - Whiskas - Nutro - Greenies - Dine - My Dog - Optimum - Iams - Eukanuba - Dentastix - Good-O - Chum - Schmackos - Temptation - Waltham 	Not listed on parent web-site Not listed on any brand web-site	Not on parent web-site. Advance mentions adherence in section discussing recall of Advance Dermocare product. Not listed on any other brand web-site, although the international brands (Royal Canin, Waltham, Eukanuba) refer to maintaining high product quality and integrity standards.	No
VIP pet foods	Purchased as part of Real Petfood Company (listed above)			
Cool Off/ Dried and True	<ul style="list-style-type: none"> - Aussie Pet Health Treat - The Healthy Pet Treat Co 	No	No, but links to description of factory is present.	Yes
Paringa Petfoods	<ul style="list-style-type: none"> - FurFresh (freeze dried treats) - Paringa - Vets All Natural - Lean Cat - Boomer - Best Care - Regal BARF - Lean Dog - Fresh meaty bones 	No	No	Yes
Ingham Enterprises Pty Ltd	No direct pet food sales			
Consolidated Manufacturing Enterprise	Acquired by Real PetFood Company			
Hypro Australia Pet Care	<ul style="list-style-type: none"> - Dogpro plus - Dogpro - Supervite 	No	No	Yes

	<ul style="list-style-type: none"> - Premium greyhound racer - Catpro Plus - Adore 			
Vetalogica	<ul style="list-style-type: none"> - Vetalogica Naturals - Australian Naturals treats - Vetalogica Biologically Appropriate - VitaRapids natural treats 	Yes	No	Yes
Natures Gift	Acquired by Real Petfood company (details above)			
Next Generation Pet Foods	<ul style="list-style-type: none"> - Evolution holistic dry food - Purrfection pet treats - Evolution purpose treats - Box 1 	Yes	Yes	No
CJ's Factory Management t/a Petz Toowoomba	No website			
Freeze Dry Australia	<ul style="list-style-type: none"> - Raw dog food - Freeze dried meat - Bone broth 	Yes	Yes	No
Lovitts	Ripper treats (dogs) Mainly bird, rabbit and guinea pig products	No	No- but does have section on quality control in general	Yes
Safcol (tropical canning)	Unable to access Australian linked content, but US web-site lists that they provide product for private label market. Images on the web-site include Snappy Tom, Ultimates and Hug product lines. The US web-site lists that they are FDA/USDA approved and CFIA approved.			
Reward petfoods	Vitreatz and a range of dried meat treats	Yes	Adherence to standard 5182-2011 is listed on the web-site	Yes
Apetite Food Groups	<ul style="list-style-type: none"> - Pets Own milk - Smokehouse Snax 	No	No	No, but only one site is listed so this can be extrapolated.

	<ul style="list-style-type: none"> - Vita Bics - Blackdog treats 			
--	--	--	--	--

Other pet food companies that are named on the PFIAA web-site as being members, but are not on the certified manufacturer list include the following (*please note that these companies may be fully compliant but are not listed as being certified*):

Company name	Pet food products sold in Australia	PFIAA membership listed on web-site	Adherence to AS5812-2017 listed on web-site	Can the consumer determine where the products are manufactured?
Advanced Petcare of Australia	<ul style="list-style-type: none"> - Vitality - Krunchies - AusDog - Buffet 	No	No, but states exceeds AAFCO standards.	Yes
Bucket O'Beef	Own brand air dried treats, BARF and pet rolls	Yes	No	Yes
Blackmore PAWS	Supplement and probiotic range, not pet food or treats			
Cool Off Pty Ltd	Provides meat products to producers, no direct sales			
Masterpet Pty Ltd	<ul style="list-style-type: none"> - Vitapet - BlackHawk 	No	No	No
Nova Concepts Australia Pty Ltd	Bow wow dog treats	Yes	No	No
Pet Products Development and Services Pty Ltd	A range of treats	Yes	A copy of certification is provided on their web-site	No
Premier Petfoods	<ul style="list-style-type: none"> - Boomer - True Blue - Bio Pet - Winning Edge - Kennel Mix - MaxiCat - Private Label production 	Yes	No	No
Propharma Australia Pty Ltd	No direct pet food sales			
Raw Pet Meats	RAW (variety of mince/meat products)	No	No	No (but Gippsland, Victoria prominent in advertising)
Ridley Corporation	Cobber	No	Yes, but the standard and year is not specified	No
Rivalea (Australia) Pty Ltd.	No direct pet food sales			

Sunstate Petfoods Australia Pty Ltd	No publicly available web-site			
U-Chews Pty Ltd	Variety of air-dried meat treats	Yes	Yes (but year not specified)	Yes
Vets Best Products (trading as show 'em how much you love 'em)	Vets Best Rewards (treats)	No	No	Yes

Other pet food companies that are not members of PFIAA as manufacturers but are listed as marketers include Hills Pet Nutrition and Royal Canin. These companies adhere to international standards (Europe and North America) and import their products. In many instances, these standards exceed the Australian standards. Some companies such as Safcol, are also importers, and although their products are badged with FDA approval it is not possible to find out which products imported into Australia adhere to these standards and which do not.

Objective Seven: Consider if more informative labelling on pet food and pet food treats would address issues such as compliance with standards etc.

The current labelling requirements for Australia include a statutory statement that details:

- Species and indications for feeding of the diet
- Instructions for use
- Ingredient list (Note ingredients can be individually listed or under groups such as cereals)
- Typical analysis
- Best before date
- Net weight and batch number
- Registration number

The following items must be listed if they are specifically added to the diet:

- Vitamin A
- Vitamin D
- Vitamin E

- Copper
- Preservatives
- Antioxidants
- Colouring agents

It is important to note that if naturally occurring high concentrations occur (such as high amounts of Vitamin D in fish-containing products) there is no requirement to list this or test and list each batch as safe for these levels.

There also remains confusion about what the terms “All natural” or “Natural with added...” means, and this can create some ambiguity. The authors recommend alignment with the current AAFCO recommendations for the use of the term natural as it relates to pet food:

- [· A whole product can claim to be all-natural or 100% natural when every ingredient used to manufacture the product complies with the feed term.
 - o There should not be claims such as “all-natural with added. . .” because a product cannot be “all-natural” if it has synthetic ingredients.
- Natural may apply to a specific ingredient used to manufacture a product provided that only the specific ingredient is identified as natural.
 - o For example, if the label reads “contains natural chicken flavor,” a consumer understands that the manufacturer only claims that flavoring meets the definition of natural.
- Products in which synthesized ingredients play a role in manufacturing but otherwise comply with AAFCO’s definition can be called natural.
 - o Provided that the synthesized ingredients used are limited to synthetic vitamin, mineral and trace nutrients
 - o They must display the disclaimer “Natural with added vitamins, minerals and trace nutrients” (or similar).
 - o Synthesized ingredients other than vitamins, minerals and trace nutrients do not qualify under this exception.
 - o The phrase “Natural with added vitamins, minerals and trace nutrients” is a disclaimer—not a boast—that identifies the synthetic ingredients in an otherwise natural product.]

The above was obtained from the web-site: <https://talkspetfood.aafco.org/natural>

The remainder of the pet food label that determines nutritional value and quality is optional, and many manufacturers do not include this.

For example, ideally the following should also be included on the label:

- What are the specific ingredients, including types of fibre and source of ingredients?
- What is the full analysis of the diet, including calories and the life stage of the pet that the product is aimed at?
- Who formulated the recipe and determined the nutritional requirements?
- Who produced the food and where was it produced?

- Where have the ingredients been sourced?
- How has the diet has been tested for safety?
- Have any health benefits been claimed, and if so how have they been verified?

To cover the last few points in more detail:

If a diet has not been tested or formulated to meet nutritional requirements for that life stage and species, then the label should have wording to the effect of:

- “This product should only be fed intermittently as it does not supply the required nutrition for your pet”

If a diet is to be marketed as being complete, then the label should clearly state how this was determined:

- “This diet has been determined to be completely balanced for your pet by feeding trials or formulation.”

The rationale for this requirement is that extensive research has been made in the nutrition of companion animals using traditional food sources and this can be used as a reference for the creation of new products (by formulation). However, a deficiency may occur even if a diet contains the required minimum amount of a nutrient because of reduced bioavailability or interaction with other ingredients in the diet. This may be a concern for diets based on exotic ingredients, whose nutritional properties may not be as well studied (Freeman, Stern, Fries, Adin, & Rush, 2018).

In addition, if certain nutrient levels are outside the values stated in the nutritional guide or novel ingredients that have not been previously used in foods or were produced using novel technologies are used, there is a place for feeding trials or more rigorous testing. Traditional testing of pure compounds would not identify the synergistic toxicity of the two compounds when consumed simultaneously (Buchanan, Baker, Charlton, Riviere, & Standaert, 2011).

Exotic ingredients have different nutritional profiles and different digestibility than typical ingredients and have the potential to affect the metabolism of other nutrients. For example, the bioavailability of taurine is different when included in a lamb-based diet, compared with a chicken-based diet, and can be affected by the amount and types of fibre in the diet (Freeman et al., 2018).

In addition, a study made by Gosper et al. in Australia in 2016, to investigate if the label information and nutrient composition of commercial cat foods were accurate and compliant with the Australian Standard (AS 5812–2011) and if they met the nutritional requirements of an adult cat. They found that when compared with the Australian Standard, 9 of the 20 cat foods did not adhere to their ‘guaranteed analysis’ and 8 did not adhere to the standards for nutrient composition. Also, various deficiencies and excesses of crude protein, crude fat, fatty acid and amino acid were observed in many of the cat foods.

Furthermore, all the commercial cat foods varied in their adherence to the nutritional requirements of a 4-kg adult cat in maintenance as recommended by AAFCO. The various nutrient deficiencies and excesses observed in most of the foods in this study highlight a serious issue in the nutritional composition of commercial cat foods in Australia.

References:

<https://www.petfoodindustry.com/blogs/10-debunking-pet-food-myths-and-misconceptions/post/6954-do-aafco-feeding-trials-matter-for-pet-food-nutrition>

Buchanan, R. L., Baker, R. C., Charlton, A. J., Riviere, J. E., & Standaert, R. (2011). Pet food safety: a shared concern. Br J Nutr, 106 Suppl 1, S78-84. doi:10.1017/s0007114511005034

Freeman, L. M., Stern, J. A., Fries, R., Adin, D. B., & Rush, J. E. (2018). Diet-associated dilated cardiomyopathy in dogs: what do we know? J Am Vet Med Assoc, 253(11), 1390-1394. doi:10.2460/javma.253.11.1390

Gosper, E. C., Raubenheimer, D., Machovsky-Capuska, G. E., & Chaves, A. V. (2016). Discrepancy between the composition of some commercial cat foods and their package labelling and suitability for meeting nutritional requirements. Aust Vet J, 94(1-2), 12-17. doi:10.1111/avj.12397

There are currently strict regulations around products that make therapeutic claims to be registered through the AVPMA as veterinary prescription diets. However, many products on the market make health claims such as 'hypoallergenic', or 'suitable for skin sensitivities' that provide no evidence to support those claims. Regulations should enforce that such claims are clearly flagged as being either supported by feeding/treatment trials or based on extrapolation from ingredient lists and formulation. Similarly, many claims are made when a diet lacks a product (i.e. that is healthier when it is grain-free), but without any clinical data to support this.

Of two of the major outbreaks since 2012, adherence to current labelling would not have prevented the megaesophagus or Hills Vitamin D toxicosis events. The high levels of Vitamin D were in raw ingredients in a batch error, and this was a contamination issue rather than a product formulation issue. There were no nutritional deficiencies or toxicities identified in Advance Dermocare and additional labelling would not have prevented the outbreak. As the BFF-associated outbreak is unclear in its aetiology, it is uncertain whether labelling would have prevented an outbreak.

Due to the increasing and emerging trend of ordering pet food on line, label requirements on packages only represent one aspect of ensuring that accurate information is given to consumers. Often the foods are linked to health advice, or the ingredient list/information available on the label is not visible on the web-site. Therefore, any change to label requirements should also explicitly mandate that these are made visible and accessible on all digital platforms whenever purchasing pet food.

Objective Eight: Review and compare AS 5812:2017 with similar pet food standards in other countries (e.g. New Zealand, North America, Canada and Europe), including any relevant components from the Australian Standard for Hygienic Production of Pet Meat (AS 4814:2009) and the Australian Standard for Hygienic Rendering of Animal Products (AS 5008:2007)

Canada

Information obtained from web-site: <https://pfac.com/>

Canada has a similar system to Australia, with a voluntary Pet Food Association of Canada (PFAC). There are no mandatory safety legislations or recalls outside of specified risk materials which have been listed as part of the country's biosecurity program.

All reporting of suspected pet food safety or adverse events is through the company.

The labelling and advertising of pet food is regulated by the *Consumer Packaging and Labelling Act* and the *Competition Act*, administered by Industry Canada. Members of PFAC abide by these acts and a guideline, which is a voluntary guide to aid customers in selection of pet foods. The labelling guides are very similar to those in Australia, except for some language requirements for sale in Quebec.

The labelling guide is found here: <https://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/01229.html>

There are some aspects in the Canadian system that are beneficial and could be used in the Australian system effectively:

- A document outlining the issues and complexities of starting a pet food business (attached as appendix 9)
- The recommendation to use on the label the following claim if a product has successfully passed an animal feeding protocol for a given life stage, then the following or a similar claim may be used on the product label:
"Animal feeding tests using procedures outlined in (insert name of program) substantiate that (insert product name) provides complete and balanced nutrition for (insert life stage(s))".

OR

If a product successfully meets the nutrient values in a nutrient profile program for a given life stage, then the following or a similar claim may be used on the product label:

"(insert product name) is formulated to meet the (insert name of organization) Dog (or Cat) Food Nutrient profile for (insert life stage(s))

AND

If a product is not intended to be the sole source of nutrition for an animal, then the following claim must be used on the product label:

"(insert product name) is intended for intermittent or supplemental feeding only".

- The Canadian labelling and marketing guide also recommends that claims are limited to ensure that no misleading statements are made, and in particular that claims “ must not be made where they are based on the absence of ingredients which have never been associated with the product category”

United States

The US Food and Drug Administration (FDA) regulates and reports all pet food (including treats and chews) incidents, whilst the Federal Food, Drug, and Cosmetic Act (FFDCA) legislates the safety of pet feed (along with human food). As well as this federal legislation, the states also have their own requirements for products to be registered and for labelling requirements. The Food Safety Modernization Act (FSMA) in 2011 overhauled the FFDCA to move towards a preventative type program. This allowed the FDA to inspect facilities to ensure compliance with food safety standards.

Additionally, the FSMA required pet food manufacturers to employ standards equivalent to or exceeding AS5182 level standards of manufacturing, develop a food safety plan and comply with requirements for foreign suppliers. The FSMA document is attached in the appendices (#10).

Raw ingredients cannot be used in pet food until they have been accepted by FDA and adopted by the Association of American Feed Officials (AAFCO), the organization of state regulatory officials that develops model bills and regulations for pet food that states can adopt into their respective state laws and regulations. The FDA recognises many common ingredients such as meat, poultry and grains and safe, so do not need the pre-approval. Likewise, commonly used minerals, vitamins or preservatives may also have this pre-approval if used for that purpose in the appropriate concentration.

Labelling of pet food is governed by the FDA and Federal Trade Commission (FTC), the latter to ensure claims are not false or misleading. The AAFCO guidelines are adopted to ensure that the products are clearly identified as a dog or cat specific food, the nutritional values are clearly displayed, the ingredients are listed in descending order by weight, feeding instructions are clearly articulated as well as how the nutritional adequacy was determined.

The points of difference of the US system that are worth adopting include:

- Regulation, inspection and mandatory recall authority of the FDA under the auspices of the food safety legislation to oversee pet food safety.
- Adoption of AAFCO recommendations for nutritional guidelines and key nutrients.
- Approval of key ingredients.
- Labelling that details how a completely balanced diet was determined to be so.

Japan

The full industry details of Japan are difficult to access due to language difficulties, but a translated excerpt is attached within the appendices (#11).

The system is like the US with mandated recalls.

Europe

The European Union (EU) currently consists of 28 nations and three regulatory bodies exist within the EU: the Council (Member State authorities), the European Parliament (EP) and the European Commission (EC). These regulatory bodies are responsible for making decisions or setting legislation about food safety.

There is no legislation in the EU written specifically for pet foods. In EU legal texts a distinction is made between the term “food” which is reserved for food stuffs for humans and “feed” which is reserved for animals. Europe operates a co-regulated system for pet food, whereby industry works with government and other stakeholders to develop requirements for the manufacturing of pet food.

Regarding pet food, there are hundreds of pieces of legislation and all are under regular review to adapt to scientific and technological developments.

Such legal acts are divided into:

- Regulations: a binding legislative act that must be applied in its entirety across the EU.
- Directives: set out a goal(s) that all EU countries must achieve. However, it is up to the individual countries to devise their own laws on how to reach these goals (https://europa.eu/european-union/eu-law/legal-acts_en).

Pet food regulations or directives consist of:

- Regulations (EC) No 1069/2009 and (EU) No 142/2011 outlining health rules for animal by-products and derived products not intended for human consumption (Animal by-products Regulation) including-
 - Animal and public health rules for the collection, transport, storage handling, processing and use or disposal of animal by-products, to prevent these products from presenting a risk to animal or public health.
 - Approval of pet food plants including the requirements, which must be fulfilled by the plants.
 - Specific health requirements for feed materials, processed animal proteins and pet food with regards to feed material origin (Category 3), heat treatment, prevention of re-contamination, packaging and microbiological testing.
 - Health requirements and health certificates for import of animal by-products including feed materials, processed animal proteins and pet food from 3rd countries.

- According to feed hygiene regulation 1831/2003, imports from third countries must comply with the requirements of this directive until the European Commission will have drawn up third country lists and third country lists of establishments
- Directive 98/51/EC outlines the conditions and arrangements for approving and registering certain establishments and intermediaries operating in the animal feed sector
- Directive 82/475/EEC describes the categories of feed materials for the labelling of compound feed stuffs.
- Directive 2006/114/EC concerning misleading and comparative advertising
- Regulation (EC) No 767/2009 on the marketing and use of feed.

Note: The current version of the EU Catalogue of feed materials (Regulation (EU) 68/2013) lists feed materials permitted in animal feed in a voluntary way; the names used in the Catalogue are not required to be used for labelling provided the term used describes the feed material properly; feed materials not listed must be listed in the EU register of feed materials.

- Directive 2010/13/EU on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (Audiovisual Media Services Directive).
 - Regulations 1069/2009 and 142/2011 and Directive 2002/32/EC on undesirable substances in animal feed.
- Regulation (EC) No 999/2001 on the rules for the prevention, control and eradication of certain transmissible spongiform encephalopathies (TSE Regulation), import/export restrictions and rules on processed animal proteins (meat meals).
- Regulation (EC) No 1831/2003 concerning additives in animal nutrition .
- Regulation (EC) No 429/2008 on detailed rules for the implementation of Regulation No 1831/2003 as regards the preparation and presentation of the applications and the assessment and the authorization of feed additives.
- Recommendation 2011/25/EU establishing guidelines for the distinction between feed materials, feed additives, biocidal products and veterinary products http://ec.europa.eu/food/food/animalnutrition/feedadditives/registeradditives_en.htm.
- Directive 2002/32 on undesirable substances in feed sets maximum limits for several contaminants (mycotoxins, heavy metals, dioxins etc) with specifications for raw materials, finished feed and per animal species.
- Commission Recommendation (EU) 2016/1319 of 29 July 2016 amending Recommendation 2006/576/EC as regards deoxynivalenol, zearalenone and ochratoxin A in pet food
- Establishes guidance values for deoxynivalenol, zearalenone, ochratoxin A, fumonisins B1+B2 and T-2 and HT-2 toxin in feed materials and pet food.
- Directive 2004/10/EC on the principles of good laboratory practice and the verification of their applications for tests on chemical substances
- Directive 2009/34/EC relating to common provisions for both measuring instruments and methods of metrological control.
- Regulation (EC) No 152/2009 detailing the methods of sampling and analysis for the official control of feed.

- Regulation (EC) No 178/2002 specifies the general principles and requirements of food law, establishing the European Food Safety Authority and outlining procedures in matters of food safety. The Regulation applies to all stages of the production, processing and distribution of food and feed for, or fed to, food producing animals, not directly to pet food. The Regulation's principles on safety, traceability, self-responsibilities and definitions must be observed by pet food manufacturers.
- Regulation 183/2005/EC on Feed Hygiene, the Rapid Alert System for Food and Feed (RASFF) applies to pet food.

Copies of all the base documents and amendments can be obtained from the website: www.europa.eu.int/eur-lex.

The European Pet Food Industry Association (FEDIAF) is an industry association. Like Australia, there are no consumer stakeholders and the nutritional guidelines are not considered mandatory. FEDIAF is composed of member associations from 18 countries in Europe and five pet food manufacturers: Affinity Petcare, Hill's Pet Nutrition, Mars PetCare, Nestlé Purina Petcare and Wellpet.

Some differences of note between the EU/FEDIAF and Australia/PFIAA are:

- Free access and publication on the FEDIAF website to the guide to good practice for safe manufacture of pet food (equivalent to AS5182:2017). Link: http://www.fedialf.org/images/FEDIAF_Safety_Guide_February_2018_online.pdf and attached in appendices (#12).
- Species other than dogs and cats assessed (so ornamental fish, birds, reptiles, small mammals).
- FEDIAF annually reviews legislation and works with government to update the directives and regulations.
- FEDIAF publishes an annual report that is free and openly available on their website.
- The pet food manufacturer must apply for registration and/or approval to the competent authority for its relevant activities. (Article 9 & 10 of Regulation (EC) No 183/2005).
- The government authority of each EU country (typically the department of agriculture) can force mandatory product recalls. The European authority cannot enforce a mandatory recall. If the manufacturer knows or 'has reasons to believe' that a product is unsafe, a recall of the product in question is mandatory.
- The pet food companies in Europe are legally required to do their own product quality assurance and testing.
- The EU directives include written procedures for wood, metal, glass and hard clear plastic breakages in feed material handling, preparation, processing, packing and storage areas must be in place to ensure the necessary precautions are taken. These procedures should form part of a formal foreign bodies control policy.
- EU legislation specifically mentions GMO feed additives, whereby the Australian regulations do not.
- The **Rapid Alert System for Food and Feed (RASFF)** is a system established as a network between the Commission and Member States for the notification of a direct or indirect risk to human, animal health and environment deriving from food and feed which provide the control authorities an effective tool for exchange of information on measures taken to

ensure food and feed safety. (Regulation (EC) No 178/2002 and Regulation (EC) No 1831/2003)

The EU Rapid Alert System for Food and Feed (RASFF) provides an early warning and reporting system for human and animal food products. **RASFF alerts are available to the public and are published on a website.**

In each EU country, pet food companies are legally required to inform the government authority of any adverse events. The government authority then informs the European authority so that the information becomes available for all countries in which the issue has relevance.

- All animal material used in pet food in the EU comes from animals passed as fit for human consumption. This happens at a State and not Federal level in Australia.

FEDIAF has produced a nutritional guideline which members follow; the FEDIAF Nutritional Guidelines for Complete and Complementary Pet Food for Cats and Dogs:

[http://www.fediaf.org/images/FEDIAF Nutritional Guidelines 2019 Update 030519.pdf](http://www.fediaf.org/images/FEDIAF_Nutritional_Guidelines_2019_Update_030519.pdf) .

This is a comprehensive review of the NRC data and other existing science produced as a practical guide for manufacturers. The guidelines are peer reviewed by independent veterinary nutritionists throughout Europe.

New Zealand

The ministry for primary industries (MPI) is the agency in charge of the regulation of manufacturing or importing pet food, rendering animal material, and exporting inedible (not food) animal products such as hides, skins, and wool in New Zealand

(<https://www.mpi.govt.nz/processing/pet-food-inedibles-animal-feed-and-supplements/>).

Pet food and animal feed are agricultural compounds under the jurisdiction of the Agricultural Compounds and Veterinary Medicines (ACVM) Act 1997.

Oral nutritional compounds (ONCs) are divided into 3 groups:

- Pet foods – foods for dogs and cats made from animal material. Under the Animal Products Act 1999, pet food is an animal product intended for consumption by cats or dogs. This narrower definition applies to MPI's information about pet food.
- Animal feeds – foods for other kinds of animals
- Supplements – mixes of specific nutrients to supplement nutrient levels in animal food.

Rendered animal product legislation

In NZ, the legal requirements for rendering are covered by:

- The Animal Products Act 1999
- Animal Products Regulations 2000
- The Animal Consumption Specifications.

- The Biosecurity (Ruminant Protein) Regulations 1999 also apply to most renderers.

Operators rendering animal material for animal consumption must:

- Comply with the Animal Products Act (APA) 1999
- Operate under a registered risk management programme (RMP)
- If exporting, be registered with MPI and meet destination country requirements.

These guidelines ensure that rendered products in the animal food chain:

- Meet the requirements of the APA and related legislation,
- are safe and suitable and
- prevent animal product that is not fit for human consumption from entering the human food chain.

All manufacturers of pet food, animal feed, and dietary supplements in NZ must meet the requirements for oral nutritional compounds (ONCs). The system and labelling requirements are very similar to the Australian Standards and requirements.

A point of difference from Australia is that if the product makes claims other than just nutritional claims (for example, 'this product can help manage arthritis'), it could be classified as a veterinary medicine that then requires registration.

The NZ Animal Products Act states that a product recall can be directed by the Director General if a product is non-compliant with the act, or not fit for intended purpose or whose fitness is in doubt, or that is mislabelled or incorrectly identified. The authority would require the supplier to run the recall.

Objective Nine: If necessary, recommend any possible changes to AS 5812:2017 or any related Australian Standards, to enable the production of safe pet food.

The following recommendations are made by the authors:

- The committee membership should contain some independent members with expertise in veterinary nutrition and medicine, and pet consumer advocates.
- Mandatory adherence to AS5812 by pet food manufacturers.
- Publication of AAFCO and FEDIAF nutritional guidelines on appropriate Australian web-site for public access.
- Expand standards to include other pet animals such as birds, mammals and ornamental fish.
- Clearer documentation about how meat, poultry and fish products should be sourced ethically and safely for the pet food industry should be included in the standards. Definitions of what constitutes meat by-products should also be detailed so there is clarity

for the consumer. Many of the consumer complaints are erroneously about the type of meat used (e.g. horse) and that poor quality 'rejected' products are also used.

- 2.7
 - 2.7.1 The PFIAA ingredient purchasing guidelines should be fully published to consumers, include substances such as 1080 that need to be avoided and tested for, and how to assess for additives that are not permitted.
- 2.10
 - 2.10.1 Testing for nutritional completeness should also be undertaken alongside safety (toxicity) profiling on an annual basis, when new products are released, and when a product undergoes a major reformulation or major change in supplier.
 - 2.10.2 Testing should be performed by an independent certified laboratory. Testing should also be undertaken to ensure that products meet the claims of their labelling and marketing. One peer reviewed paper showed that many cat foods on the Australian market did not meet their label claims (appendix 13). This article did not explore all aspects of the nutritional profile, and potentially if expanded (for example to the vitamin B and D profiles) may have uncovered some potentially toxic potential.
- 2.13
 - Recalls should be voluntary or mandated through (Pet) Food Standards NZA if a suspected adverse safety event has occurred.
 - Quarantine procedures, whereby products are embargoed for sale in retail outlets/on line, rather than actively recalled should be instituted when there is a strong suspicion but not enough information to act for a recall.
- 3.1
 - 3.1.3b and 3.13 e: The authors believe the use of terms such as 'dinner' or 'stew' is misleading. Examples given in the standards include calling a product "lamb and rice dinner", when lamb is not the major meat component, but is present at more than 5% of the meat component. The labelling requirements should be changed so that if a meat is less than 20% of the meat component of the diet, it cannot be included as the sole meat in the product name. For the example given the product could be called "Chicken, Lamb and Rice" or similar, depending on the main protein used
 - 3.1.4 Pet food jerky chews and dried treats should have a separate section from dry food, and include health updates on any potential risks, including the risk of salmonellosis for people.
 - There should be a new section in the labelling standards to cover the human health risks of raw food not intended for cooking. Labels should cover the fact that these pose a risk to animal as well as human health- especially to the young, elderly and immune compromised and strict hygiene control should be undertaken.

- A new section in labelling should also ensure that every product that is marketed as being balanced and complete is labelled as such, and as to how this was determined (see previous recommendations).
 - No claims on potential health benefits should be made without a qualifying statement such as “this is believed to help x based on formulation” or “this is shown to help x based on feeding trials”.
 - 3.1.10: If thiamine has been supplemented due to sulphite (or similar) preservatives being added, then the label should state that enough thiamine is available within the diet.
- Labelling requirements should be extended to be included in the marketing/digital platforms.