

In support of raw feeding as a responsible practice

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ABSTRACT

This article will counter assertions made against raw food feeding in [VT45.46](#) and examine evidence suggesting it can be a safe, responsible practice.

Raw feeding is growing rapidly in the UK. Most of the evidence against it used by veterinary professionals is out of date or inappropriate because of worldwide variations in laws concerning bacteriological content of raw foods. Obesity, diabetes mellitus and periodontal disease are all increasing in an age of heat-treated foods, such as kibble and tinned diets.

Home-prepared diets can be unbalanced and incomplete, but can be improved with education. Taurine is maintained in appropriately frozen and thawed raw meat diets. Bacteriological vigilance is high in the UK and issues of infection from food are rare considering the thousands of animals fed raw food. Responsible raw bone feeding also appears to be equally safe.

The evidence points to responsible raw food as being a safe, simple and highly nutritious way to feed dogs and cats in the UK.

“First do no harm” is the searing message in the article [“Evidence-based nutrition: raw diets”](#) from VT45.46.



Raw food manufacturers produce convenient, complete and balanced frozen raw diets.

The article presents personal anecdotes, papers up to 57 years old and inappropriate data from the US and Canada, where pet food legislation is different – and arguably less rigorous – compared to the UK. It seems, therefore, the evidence against raw food feeding in the UK is less than replete. There appears to be no significant evidence for criticism of feeding raw food in this country.

As president of the Raw Feeding Veterinary Society – an international group of veterinary professionals dedicated to responsible, safe and species-appropriate raw food feeding – I would like to respectfully disagree with the drive of this article that “it is irresponsible of the veterinary, veterinary nursing and allied professions to recommend raw diets”.

The main points this article will focus on include:

- Raw food feeding for cats and dogs is growing rapidly in the UK.
- Evidence against raw feeding is poor.
- Evidence of risks in feeding raw are few, are of poor quality or from other countries with different hygiene regulations.
- All home-prepared diets are unregulated, but most raw home-prepared diets are found to be nutritionally sufficient in practice. Education is the key.
- Raw food manufacturers produce many complete and balanced diets.
- Responsible feeding of bones is generally considered as safe as any treat or toy.
- Raw feeding appears safe, nutritious and simple when fed responsibly.

Raw industry

The growth of raw feeding in the UK outstripped all other pet food sectors in 2015. The raw food industry is rapidly evolving, as in January last year there was one raw food manufacturer in the Pet Food Manufacturers’ Association (PFMA). By the end of the year, there were eight.

It is not unusual to see a raw food freezer in the waiting rooms of veterinary practices. Raw food manufacturers are engaging with vets and VNs daily.

Evidence

Schlesinger and Joffe (2011) concluded: “There is a lack of large cohort studies to evaluate risk or benefit of raw meat diets fed to pets.”

I think this is the nub of the problem; there is a paucity of good studies to endorse or condemn raw feeding in the UK. All the commonly cited studies by detractors of raw food are small, underpowered or geographically irrelevant because they are based in countries, such the US and Canada, where legislation demands less of manufacturers (Freeman et al, 2013).

For every anecdote of the perils of raw diets, dozens exist where moving to a responsible raw food diet has cured a pet. Anecdotes are not science – they are bragging at best – but they do highlight our profession is, at once, fearful and embracing of the raw concept. We must move forward together.

Personal experience

My experience with raw began more than 20 years ago. I am convinced raw food, when formulated appropriately, is beneficial to the majority of patients we see in practice. This was one of the conclusions of a survey I conducted among 79 raw-feeding vets, with a combined experience of raw feeding of almost 1,000 years.

When done badly, we do see feline hyperparathyroidism, orthopaedic disease in young animals and occasional foreign body issues. But this is very rare, based on the lack of evidence.

There is a saying in the raw feeding community raw food can be the best or the worst of nutrition; the difference is owner education.

The same can be said for more conventional pet diets. Obesity in dogs is estimated at 58% in the US (Association for Pet Obesity Prevention, 2016). The incidence of diabetes mellitus is increasing dramatically – hospital prevalence in US cats increased from 8 cases per 10,000 in 1970 to 124 per 10,000 in 1999, as it is in the human population (Prahl et al, 2007; Chen et al, 2012). In 2012 the American Veterinary Medical Association reported periodontal disease in the US was at 80% in dogs and 70% in cats aged two years.

Diabetes in cats



Nutritional disease in raw fed animals, including puppies and kittens, is almost unheard of in the UK.

Hoening (2002), in the final paragraph of his review of diabetes in dogs and cats, summed up: “An interesting observation recently has been a high protein diet reduces the insulin requirement of diabetic cats. Cats are strict carnivores and, as such, the diet of feral cats consists of a large amount of protein and fat, but very little carbohydrate.

“Yet, many commercial pet food types that are available for cats have large amounts of carbohydrates. We have shown high carbohydrate diets decrease insulin sensitivity and cause hyperinsulinemia, compared to a diet high in protein.

“The clinical effect of the high protein diet has been encouraging and, in some diabetic cats, insulin treatment is no longer required. While the long-term effect of this diet needs to be investigated, a lesson of nature may be learned from it.”

I would like to address the common criticisms of raw feeding and try to bring some reasoned logic to bear.

Home-prepared

Home-prepared diets are not, and never will be, regulated. People adding meat or scraps to kibble, as they frequently do, may also imbalance meals. We rely on education and the ability of the animal to cope with the nutritional imperfection.

Neither the raw food nor conventional diet world are immune to stories of people feeding their cats only liver for years or dogs nothing but treats “because he likes them”, or the famous “I only feed her tinned tuna because that’s all she’ll eat”.

Most laypeople take it on themselves to research or watch lectures when they embark on raw feeding. Some need a little help, but many find a balance between what they find convenient, what their pets enjoy and what is best for them nutritionally.

Home-prepared diets are one side of raw food. In the past year, most of the main raw food manufacturers became members of the PFMA, adhering to the European Pet Food Industry Federation guidelines and codes of practice, ensuring quality, safety and regulation. They offer, among other things, complete and balanced products appropriate to most life stages and all offer, like more orthodox food manufacturers, excellent communication channels that clients can contact for expert advice.

Taurine

The 2002 paper from the University of California, Davis (Glasgow et al, 2002) mentioned in [VT 45.46](#) – where kittens were assigned a thawed, ground, whole raw rabbit diet or a premium brand cat food – is very interesting.

After 10 months, it was found 70% of the raw group were showing signs of dilated cardiomyopathy consistent with taurine deficiency, unlike the premium brand group that was normal. The explanation? Excessively long frozen food storage periods and the watery thaw juice from the raw rabbit mince was discarded.

Taurine is very water-soluble – it was being thrown away in preparation, causing taurine deficiency. The study missed this small, but critical, detail in its evaluation of raw diet feeding. It did mention palatability of raw was better than the commercial diet and stool and coat quality rapidly improved in the raw group. I know of one manufacturer that has measured taurine in meat post-freezing and found it was maintained.

Hickman et al (1990; 1992) showed heat-processed cat foods resulted in lower plasma taurine levels and greater losses compared to the same food frozen-preserved. This was the consequence of increased sensitivity of taurine to intestinal bacterial degradation owing to heat processing (Morris et al, 1994).

Interestingly, Glasgow et al (2002) noted no difference between the two groups in terms of bowel inflammation, small intestinal bacteriology and the rate of growth of kittens.

The raw group, despite having better objective health improvements, such as coat, stool and appetite, produced “slightly” more gut pathogens (*Giardia* and *Cryptosporidium* oocysts) than the commercial diet group, but the statistical significance is not known as both groups shed these “pathogenic-type organisms”.

Pathological organisms



Raw bones and carcasses are generally very safe to feed to pets, if done responsibly.

The contamination issue is always substantial for raw sceptics. Quoting papers from North America is universal, but not helpful (Schlesinger and Joffe, 2011; Stiver et al, 2003) as UK legislation is much tighter historically than in the US.

Responsible UK raw meat producers are regulated by EU law. Strict microbiological standards exist for *Salmonella* and *Enterobacteriaceae* in raw pet foods contained within the EU Animal By-Products Regulations. These regulations are enforced in England by the APHA and the full details are contained in Annex XIII Chapt II 6 of EU Regulation 142/2011. *Salmonella* should be absent from raw pet foods and the *Enterobacteriaceae* levels are lower than for most human meat products.

UK raw pet food producers use human grade foods and a zero tolerance approach to *Salmonella*, *Escherichia coli* and *Campylobacter* species, and other contaminants are strictly monitored.

It's interesting to read the steady stream of non-raw pet food recall reports in the US. I know of no recalls, on bacteriological grounds, of any raw food in the UK, but, over the years, numerous *Salmonella* and other bacteriological contamination issues have surfaced, according to the US' Centers for Disease Control and Prevention.

Campylobacter species are found in 23% to 88% of healthy dogs in the UK (Savsnet, 2016). If a diarrhoeic dog is found to be positive for campylobacteriosis, it is usually treated with antibiotics. If the dog has eaten raw food, that is usually blamed. Causality is rarely established.

Treats and bones

Pet treats are, in my opinion, usually junk food and should not be fed. Most treats are cooked, smoked or heat treated in some way; therefore, a discussion of their merits are appropriate in a raw food article. Freeze or air-dried products seem to be nutritious and delicious to dogs in the UK and better for them, if treats “need” to be given.

Raw bones, on the other hand, are integral to the raw diet and part of the nutritional component, not a “treat”, as such. They provide micronutrients, behavioural stimulus, cartilage precursors, bulk out the stool and clean teeth. They are generally safe, given all foods can harm.

Nothing exists in the conventional pet food world to match them for their multi-function use. Thousands are fed daily in the UK, with very little report of foreign body obstruction (Freeman et al, 2013).

Conclusion

Taking an empirical approach to the little UK evidence we have and referencing vets in practice, it would seem raw food is not as dangerous and irresponsible as we may fear.

Home-prepared diets can be balanced with a little thought and effort. Complete and balanced bacteriologically tested frozen meals are available in most pet shops, online and in many veterinary practices. Taurine is maintained in frozen meat if you don't discard the thaw juice. Contamination of raw pet food with pathological organisms is tightly regulated in the UK, unlike the US.

The more I look at responsible raw and the better conventional diets, the more I speak to vets in practice, the more I see common ground. Vets and VNs, allied professions and the pet food industry are all striving for consistent safety, complete and balanced nutrition and education on the part food can play in medicine of the future.

- [Evidence-based nutrition: raw diets](#)

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