

FOOD INTOLERANCE NETWORK FACTSHEET

Cats, dogs and food additives

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Which food additives are most likely to kill your pet?

Sulphite preservatives have been associated with a number of deaths in pet cats and dogs. In one of the best documented cases, the owner of an 11 year old cat with allergic dermatitis followed her vet's instructions to feed her cat an exclusive diet of vacuum packed meat and a daily multi-vitamin supplement. This was meant to exclude food allergy as a cause of its itchy skin. 38 days after starting the 'fresh' meat diet, the cat developed coordination and breathing difficulty and died suddenly. Investigation showed that the cat died as a result of acute thiamine deficiency due to undeclared sulphite preservatives in the 'fresh' meat¹.

The Australian Veterinary Association (AVA) warns that dogs and cats can suffer fatal health problems if they are fed exclusively with pet mince, pet meat or pet rolls which often contain high levels of sulphur dioxide. This preservative is known to inactivate thiamine (Vitamin B1) leading to a wide range of symptoms of brain damage. Dogs with the condition are known to tilt their heads to one side and may appear to walk around in a confused or disoriented state. Cats can show dilation of the eyes and neck muscle weakness leading to head bobbing. Degeneration of brain function can quickly lead to paralysis, seizures and death. Pups, kittens, and pregnant or lactating females may be more vulnerable to the condition than other animals.

The President of the Australian Small Animal Veterinary Association, Dr Matthew Retchford recommends that "people who prefer to feed their animals with meat should purchase it from a butcher, because legislation prohibits the use of preservative in meat for human consumption that could lead to a thiamine deficiency".²

The Food Intolerance Network would like to add that buying meat for humans does not guarantee freedom from sulphites. In Australia, sulphites are permitted in sausages and some processed meats. As well, surveys show that many butchers will use sulphites in mince meat unless they think they will be caught.

A survey by NSW Health found 58% of samples of fresh mince for humans tested in Sydney and the Hunter region contained illegal sulphites³. Pet owners might want to test for sulphites, too. See <http://www.fedupwithfoodadditives.info/features/sulphites/sulphites.htm>

Sulphites can be labelled as

- 220 sulphur dioxide or sulphites
- 223 sodium metabisulphite
- 220-228 sulphur dioxide, sodium sulphite, potassium sulphite etc

Or as in the case above, sulphites may not be labelled at all.

References

1. Steel RJ. Thiamine deficiency in a cat associated with the preservation of 'pet meat' with sulphur dioxide. Aust Vet J 1997;75(10):719-21. (available free through www.pubmed.com)
2. AVA press release www.ava.com.au/images/news/AVA2006-019%2Fsulfides.pdf
3. Regulation of Sulphur Dioxide in Mince, NSW Food Authority Annual Report 2004/2005 p23. http://www.foodauthority.nsw.gov.au/Documents/corporate_pdf/NSWFA+AR_04_05.pdf

Are dogs calmer on additive-free diets?

Additives that can cause irritability, restlessness, overactivity and inattention in humans¹ can also affect animals. We noticed that our first dog barked more if he ate dog food with artificial colours. Our second dog has never been given artificial colours by us, but at the age of 12 months, he was given a coloured treat by a well-meaning passerby during his afternoon walk. At the time we thought nothing of it, but that night, instead of going to sleep at the usual time, he very noticeably ran around in circles and generally made a nuisance of himself.

Laboratory studies confirm that animal behaviour can be affected by additives. A study in 1980 reported 163% more activity and 128% greater failure in avoidance learning in rat pups given small amounts of food dyes as compared with controls². In 2006, a study with tartrazine (102) and mice found some similar adverse neurobehavioural effects including increased activity and delayed learning depending on dose, age and gender³.

Dr C K Connors, Professor Emeritus of Medical Psychology at Duke University Medical School and author of the widely used Connors Rating Scales (CRS) for hyperactive children, says: 'I once whimsically suggested to Dr Feingold (well known author of Why Your Child is Hyperactive) that I intended to publish a book called Why Your Dog is Hyperactive, and he responded that it was no joke – dogs did calm down with additive free food.'⁴

References

1. Rowe KS, Rowe KJ. Synthetic food coloring and behavior: a dose response effect in a double-blind, placebo-controlled, repeated-measures study. J Pediatr. 1994;125(5 Pt 1):691-8.
2. Goldenring JR and others. Effects of continuous gastric infusion of food dyes on developing rat pups. Life Sci. 1980;27(20):1897-904.
3. Tanaka T, Reproductive and neurobehavioural toxicity study of tartrazine administered to mice in the diet. Food Chem Toxicol. 2006;44(2):179-87.
4. C. Keith Connors, Feeding the Brain, Plenum Press, New York and London, 1989, p191.

Can additives cause epileptic seizures (fits) in dogs?

[922] 635: Epileptic seizures in a dog due to flavour enhancer (June 2010)

My Jack Russell (Eddie) had epileptic fits as a puppy and I noticed that they always seemed to occur after giving him scraps from junk food we were eating. McDonalds food in particular seemed to cause him to have fits. The vet dismissed my theory and offered to give my dog a highly toxic barbiturate epilepsy medication. I refused the medication and adopted a wait-and-

see approach. I researched the relationship between food additives and epilepsy in children because there was not much information about dogs. Based on this, I banned all artificial colours/flavours and preservatives and my dog went from severely fitting to having no fits at all for the past 4 years. When I told my vet he dismissed my theory that food additives were the cause of my dog's epileptic fits and stated he had simply 'grown out of it'.

About 2 weeks ago I let my dog lick a cup from which I had just finished drinking instant soup. As I was doing it I thought: I shouldn't be letting him have this. I had become complacent because my dog had not had a fit in so many years. Within an hour of licking the cup he had his first epileptic fit in over 4 years. I felt terrible and immediately read the ingredients list. The instant soup contained flavour enhancer 635.

I have no doubt whatsoever that food additives caused the epileptic seizures in my dog. I have no doubt whatsoever that giving him an all natural diet cured his epileptic seizures. I have no doubt whatsoever that flavour enhancer 635 caused his recent seizure.

The information on your site confirmed that I was on the right track with my treatment of his seizures. Without sites like yours I would be faced with the dismissive attitude of my vet and my dog may have spent a lifetime on toxic medication for no reason. As it is - I have returned to a strictly natural diet for my dog and he has not had another seizure since. I would never risk poisoning him again with these additives and I hope my experience helps someone else.
– Pamela, by email

[950] Another dog with fits due to additives in dog food (July 2010)

I was particularly fascinated by the reader story [922] on the dog with fits. One of our rescued dogs was adopted from the vet. She was doing very well on their dry food (additive free) and we decided to keep using this. OK so far. Then we adopted another dog - this time a pure bred and we fed her the same food. But we decided this was getting very boring and in a creative (oh no!) moment, we decided to mix a bit of canned dog food just to give the dry food some taste variety. Although I was aware of failsafe food, I didn't think to read the labels - given that the dogs would eat absolutely anything they can find (we live out bush) the last thing I thought of was food sensitivity. Kai started to fit in groups of three about every 2 weeks. Two vets encouraged us to put her on medication (would have been for life) but we instinctively felt we should wait a little longer before we did this.

Our neighbour had been a vet nurse and casually remarked that they had found additives caused dog fitting. The tinned foods! We stopped them (have since added fresh dog food without additives to their diet). No more fits. We told the vet who was dubious about the cause of them. We had no doubts after one night when, after being fit free after we removed tinned food, she had three fits. I thought that our theory had been disproved until my husband realised that without thinking he had opened a tin I had neglected to throw away -- and had given her a small amount. No more fits ever since. – Jane, NT

From [356] One-liners (Nov 2004)

Our Beagle dog's seizures are related to ribonucleotides (flavour enhancer 635). – SA

What do vets say about additives in dog food?

There are numerous reports of MSG-related seizures in dogs on the internet and one vet has devised a glutamate-free, aspartame-free diet for dogs with epilepsy - You can see some reports including from other vets at <http://www.lab-retriever.net/board/epilepsy-diet-g-t47643.html?t=47643>

According to holistic UK vet Richard Allport, skin conditions often clear with a more natural diet. 'There are many problems with the ingredients in commercial pet food. Dogs and cats are designed to eat lots of meat but the percentage in most products is tiny and it's usually bulked out with wheat, which is the most common allergen ... An additional factor in skin

sensitivity may be the over 400 permitted artificial additives in pet foods, including colourings and flavour enhancers, plus the large amount of sugar and salt'. From 'It's a dogs dinner but not as we know it' : <http://www.dailymail.co.uk/home/you/article-1178888/Health-notes-Its-dogs-dinner--8211-know-it.html#ixzz0s0w1JQL1>

A scientific article with a number of animal studies about seizures, see references below http://www.truthinlabeling.org/Proof_BrainLesions_CNS.html

References

Bhagavan HN, Coursin DB, Stewart CN. Monosodium glutamate induces convulsive disorders in rats. *Nature*. 1971;232(5308):275-276.

Wiechert P, Gollnitz G. Metabolic investigations of epileptic seizures: investigations of glutamate metabolism in regions of the dog brain in preconvulsive states. *J Neurochem*. 1970;17(2):137-147.

I have an itchy terrier. Could this be related to food additives?

An increasing number of vets recommend an additive free diet to find out whether itchy skin is related to food allergies or sensitivity to various additives.

[932] Itchy terrier due to additives in dried dog food (July 2010)

Our Jack Russell terrier was a year old when we got him so I kept giving him the dry dog food his previous owner had used, and like many terriers he always had itchy skin. The vet thought it could be the salt water on his skin from our frequent beach walks. I experimented with rinsing him down in fresh water after a walk, different ointments, shampoos and anti-flea treatments, and changing his diet – everything except for the dry dog food he came with. I kept checking the label and it looked ok. Eventually after two years I removed the dry dog food from his diet and his itchy skin went away within two weeks. I suspect the 'natural flavour' in the dry dog food contained flavour enhancers but when I asked the pet food company they gave me a very confusing answer. – Sue, NSW

Are there any other pet health problems related to additives?

In humans, health problems associated with food additives and some natural chemicals include asthma, eczema, urticaria, irritable bowel symptoms, overactivity, anxiety, inattention (decreased learning ability) and sleep disturbance. It seems reasonable to expect that cats and dogs may be the same.

Which additives do you have to avoid

Not counting 'flavours' there are about 350 permitted additives in our food supply. Of those, most are ok (such as vitamin C 300). The additives most likely to cause a problem are:

- colours
- preservatives
- antioxidants
- flavour enhancers
- flavours

See [more information](#)

How can I tell if my pet's food contains additives?

You can't be sure. Pet food labelling is not as strictly regulated as human food labelling - and even that's not very good.

- An 'all natural' sticker does not guarantee the product is free of nasty additives – most people are alarmed to find that MSG and similar flavour enhancers are regarded as 'natural' by the food industry and food regulators!
- MSG and other flavour enhancers can be added in many forms including ribonucleotides, yeast extract, hydrolysed vegetable protein, soy/wheat/rice protein, yeast extract or "flavour/s" or "natural flavour/s". Since "flavour/s" are meant to be trade secrets, the company doesn't have to tell you what they are and can answer in ways it is impossible to understand.
- Sulphites are often used to make old meat look and smell fresh. They are permitted in sausages and some processed meats and often used unlabelled in 'fresh' dog meat, dog rolls and dog sausages. As well, surveys show that many butchers will use sulphites in mince meat for humans unless they think they will be caught.
- A survey by NSW Health found 58% of samples of fresh mince for humans tested in Sydney and the Hunter region contained illegal sulphites³. Pet owners might want to test for sulphites, too. See <http://www.fedupwithfoodadditives.info/features/sulphites/sulphites.htm>

Can you suggest some additive-free food for dogs?



- fresh chicken necks or wings
- home-made meat loaf from mince meant for humans and checked for sulphites (see recipe below)
- fresh bones – cooked bones are not suitable for pets
- slow air dried treats made of 100% liver or lamb or pigs ears from Aussie Pet Health Treats such as Lamb Crumbles or Lamb Chews www.aussiepethealthtreats.com.au which contain only one ingredient (lamb, pork or liver)
- additive free boneless leftovers such as beef, lamb, chicken, fresh fish (boneless), leftover tins from tuna, salmon

- additive-free leftovers such as cooked potatoes, beans, cabbage, Brussels sprouts
- frozen peas still frozen – they are easier for dogs to eat like that
- finely chopped raw carrots, cucumber, bananas, pears, apples
- eggs, raw or cooked
- dry rolled oats mixed with a little butter
- as suggested by a vet for animals with ‘allergies’ – duck and potato
- here’s a recipe if you have the time: 1kg beef mince (fatty is OK), 1 cup rolled oats. Mix thoroughly, put in pyrex bowl and cover. Microwave for 15 minutes at 70% power, placing a plate under the bowl in case fat leaks out. Can be frozen for up to a month.

Reader suggestions are welcome (suedengate@ozemail.com.au)

More information:

1. [Fed Up by Sue Dengate](#), Random House
2. [Fed Up with Children’s Behaviour DVD](#) by Sue Dengate
3. The RPAH Elimination Diet Handbook with food & shopping guide 2009 available from www.allergy.net.au

www.fedup.com.au

The information given is not intended as medical advice. Always consult with your doctor for underlying illness. Before beginning dietary investigation, consult a dietician with an interest in food intolerance. You can write for our list of supportive dietitians (confodnet@ozemail.com.au)

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