

continues from pg. 2

The report describes an investigation of 8 cases where the disease is associated with the long-term feeding of cats on a gamma-irradiated dry food diet. This study is available on the internet from the link below:

www.vetpathology.org/cgi/content/full/44/6/912

2) THE FORMATION AND RELEASE OF FREE RADICALS IN IRRADIATED FOODS

A second major impact of irradiation is the formation and release of free radicals.

Irradiation does not affect all foods equally. ORIJEN is a nutritionally dense food with much higher levels of long-chain fatty acids (DHA, EPA) than conventional pet foods. These fatty acids are susceptible to oxidation following irradiation. Bi-products from fatty acid oxidation, mainly free radicals, are released into the body with the potential to cause tissue damage.

Combined with the loss of antioxidant vitamins (see Vitamin A described above), free radicals are thought to be a major contributing factor.

- When irradiation is applied to food, the molecular structure of long chain fatty acids (DHA, EPA) is altered. This causes the formation of free radicals that are then released into the body.
- ORIJEN CAT foods contain very high levels of EPA and DHA unsaturated fatty acids and therefore have a much greater potential for free radical formation (in response to irradiation) than do conventional dry cat foods.
- Scientific evidence shows that increased oxidative bi-products combined with decreased presence of antioxidant vitamins (see above) are consistent with the symptoms shown in Australian cats. The fact that cats in Australia treated with vitamin and antioxidant supplementation have shown improvements supports this finding.
- An excerpt from the American College of Veterinary Pathologists' study supports this position:

*"Irradiation is known to reduce the vitamin content of food, the effect of which may be indirect, in that inadequate amounts of these compounds may be available to counteract the effects of free radicals generated by normal cell metabolism. A previous study found that irradiation of a feline diet containing 9.8% fat with a 2- to 5-Mrad dose totally destroyed its vitamin A and β -carotene content, whereas thiamine, vitamin B6 (pyridoxine), and folic acid were depleted to a lesser extent, and vitamin E concentrations appeared to be unaffected by this dose of radiation. **The relatively high dietary fat requirement of cats may be significant in this context in that irradiation of this fat component could potentially generate higher concentrations of micronutrient-damaging free radicals than would be generated on irradiating diets of lower fat content.**"*

Q: WHAT SHOULD I DO IF I LIVE IN AUSTRALIA AND FEED ORIJEN CAT?

A: Please return any unused portion of ORIJEN Cat food to the place of purchase for a full refund. If you think that you see any symptoms of this syndrome in your cat please contact your veterinary immediately. There is evidence that health can improve with vitamin and antioxidant supplementation.

SIGNS

- Changes in your cat's way of walking – the gait may be wobbly, or your cat's legs may slip under when going around a corner
- Unwilling to jump onto sofa or bed
- Loss of balance and falling off of bench-tops, tables etc

PREVENTATIVE MEASURES

- Fresh food carnivorous diet consisting of fresh meat, occasional fish, occasional vegetables
- Premium dry food if unable to feed the above

continues from pg. 3

- Anti-oxidants – Cysteine/Glutathione to protect liver and kidneys – for 6-8 weeks
 - Omega fatty acids ie. Fish Oil to act as anti-inflammatory and anti-oxidant
 - Vitamin A – oral form for 3 week period – weight of the animal and specific dose is important, please consult with your vet or with Champion Petfoods for specific dosages.
- Regular exercise and play
- Access to fresh spring water or reverse osmosis (RO) water

TREATMENT OPTIONS

- Anti-oxidants, Omega fatty acid, Vitamins
- Prednisone, Metacam or Antibiotics if needed on veterinarian's advice
- Exercise, movement and physical therapy are crucial for recovery

Q: ARE ORIJEN DOG FOODS IN AUSTRALIA ALSO IRRADIATED?

A: **YES.** All ORIJEN diets sold in Australia and subjected to the same irradiation process.

Q: ARE ORIJEN DOG FOODS SAFE?

A: Champion Petfoods has examined the issue of safety in dogs very closely.

- ORIJEN dog diets have been sold and consumed in Australia over the same 9 months that ORIJEN Cat has been sold, only in much greater quantities.
- **NO DOGS HAVE BEEN AFFECTED.** Dogs and cats are two different species with different nutritional needs and metabolic pathways. For example, cats require higher levels of vitamins than dogs (AAFCO 2008), and cats are highly sensitive to changes in vitamins or oxidative by-products (such as occur from irradiation).
- There are no reports or scientific studies linking irradiation to health problems in dogs.

Q: WILL CHAMPION CONTINUE TO SELL ORIJEN PRODUCTS IN AUSTRALIA?

A: **NO.**

Veterinarians in Australia have recently reported households where both dogs and cats are present and cases where cats prefer ORIJEN dog food over the brand of cat food they receive.

- Of the 27 cases of illness, at least 2 cases involve cats eating ORIJEN dog food.
- As we are unable to control for cats consuming ORIJEN dog food, there is a small but measurable risk of cross-feeding in dual pet (dogs and cats) households.
- Implemented as a precautionary measure to prevent cross contamination, Champion Petfoods has elected to stop selling ORIJEN dog foods in Australia.

EVERY ORIJEN PRODUCT IS RIGOROUSLY TESTED BEFORE LEAVING OUR FACTORY. WITH THE EXCEPTION OF ORIJEN CAT FOODS IN AUSTRALIA ALL ORIJEN PRODUCTS SHOULD BE USED IN CONFIDENCE.

Champion Petfoods Ltd. is a family-owned award-winning pet food producer. For over 25 years, our mission is to promote the health of dogs and cats worldwide – a mandate in which we are passionately engaged.

Every member of our family and the vast majority of our staff share their homes with beloved dogs and cats. These relationships enrich our lives and empower our spirits. At Champion, making pet food is much more than a business operation - it is our calling, our true passion.

It is with our own pets in mind that we extend our deepest empathy to the Australian families affected by this regrettable circumstance. While we will no longer sell any of our pet foods in Australia we remain committed to on-going research into this case with the hope that our findings can be used to better inform the international community on the potential effects of irradiation on nutrient dense dry cat food.

Sincerely,



Reinhard Muhlenfeld
President & Founder
Champion Petfoods Ltd.



Peter Muhlenfeld
Sales and Marketing
Manager
Champion Petfoods Ltd.



Henry Van de Vliert
Production Manager
Champion Petfoods Ltd.



Jeff Johnston
Procurement and
Nutrition Coordinator
Champion Petfoods Ltd.



Gordon Demaniuk
Quality Assurance
Manager
Champion Petfoods Ltd.



Champion Petfoods
Canada's Best Petfood

9503-90 Avenue,
Morinville, Alberta
CANADA
T8R 1K7

phone. 780 939.6888
email. customerservice@championpetfoods.com
www.championpetfoods.com

References

1. Cassidy JP, Caulfield C, Jones BR, Worrall S, Conlon L, Palmer AC, Kelly J. Leukoencephalomyelopathy in Specific Pathogen-free Cats. *Vet Pathology*. 44: 912-916. 2007
2. Lushchak VI. Free Radical Oxidation of Proteins and Its Relationship with Functional State of Organisms. *Biochemistry (Moscow)*, Vol. 72, No. 8: 809-827. 2007
3. Lee KH, Yook HS, Lee JW, Park WJ, Kim KS, Byun MW. Quenching Mechanism and Kinetics of Ascorbyl Palmitate for the Reduction of the Gamma Irradiation-Induced Oxidation of Oils. *JAOCS*, Vol. 76, No.8:921-925. 1999.
4. Mahrou A, Caillet S, Nketsia-Tabiri J, Lacroix M. The Antioxidant Effect of Natural Substances on Lipids During Irradiation of Chicken Legs. *JAOCS*, Vol. 80, no. 7: 679-684. 2003.
5. Fujioka K, Shibamoto T. Formation of Genotoxic Dicarbonyl Compounds in Dietary Oils upon Oxidation. *Lipids*, Vol. 39, no. 5: 481-486. 2004.
6. Leeson S, Marcotte M. Irradiation of poultry feed II. Effect on nutrient composition. *World's Poultry Science Journal*, 49: 120-131. 1993.
7. Health Canada Government Website. Alteration of Chemical, Physical and Microbiological Characteristics. Section (d): i. Odour. Updated: 2003.