



Carrageenan: Harming you AND your cat!

By Laurie Goldstein

Carrageenan is a food additive so ubiquitous in processed foods, it can be difficult to avoid, and that includes canned pet foods. It is used by the human and pet food industries to “improve” texture. It is a thickening, stabilizing, binding, and emulsifying agent. It is almost impossible to avoid in many dairy products (especially ice cream), salad dressings, infant formula, processed meat, vegan milk alternatives (soy, almond, and coconut milk) – and what concerns us here – canned pet foods.

Carrageenan is harvested from specific red seaweeds, including *Gigartina*, *Chondrus*, and *Eucheuma*. Sounds harmless, doesn't it? A seaweed extract. It's “simply” a gel that coats the insides of the stomach like honey, or the pectin in applesauce.

Do a just a little digging, and you'll find that high weight molecular carrageenans (“undegraded”) are supposed to be considered to be safe and have been given GRAS (Generally Recognized as Safe) status by the FDA. It is the low molecular weight carrageenans (“degraded”) that are dangerous. Degraded carrageenans are linked to inflammation, ulcerations and cancers of the gastrointestinal tract in animals. But that's not what goes into our food or our pets' foods, right? So why the concern?

University of Illinois at Chicago physician and professor, Dr. Joanne Tobacman, has been publishing research on the health effects of carrageenan for more than a decade. She is concerned enough about the health risks of food grade carrageenan to have petitioned the FDA in 2008 to prohibit its use in food. Her petition cited decades of publicly-funded, peer-reviewed science (including her own) on carrageenan-induced inflammation in animals and cells. The FDA responded with a letter of denial. (1)

Dr. Tobacman maintains that both types of carrageenan are harmful. In a presentation to the National Organic Standards Board in April 2012, Dr. Tobacman noted that

- drug investigators use carrageenan to cause inflammation in tissues in order to test the anti-inflammatory properties of new drugs;
- when laboratory mice are exposed to low concentrations of carrageenan for 18 days, they develop "profound" glucose intolerance and impaired insulin action, both of which can lead to diabetes;

- degraded carrageenan inevitably arises from higher molecular weight (food grade) carrageenan;
- acid digestion, heating, bacterial action and mechanical processing can all accelerate degradation of food-grade carrageenan. (2)

Obviously it comes as no surprise that research *has* demonstrated that digestive enzymes and bacterial action convert undegraded carrageenans into the dangerous low molecular weight carrageenans. These, in turn, cause “pathological alterations in cellular membranes and intracellular tissues” at “concentrations much less than those frequently used in food products...” (3, 4, 5, 6, 7)

According to the Cornucopia Institute:

“The rising incidence and prevalence of ulcerative colitis across the globe is correlated with the increased consumption of processed foods, including products containing carrageenan,” says Dr. Stephen Hanauer, MD, Chief, Section of Gastroenterology, Hepatology and Nutrition, and Joseph B. Kirsner, Professor of Medicine and Clinical Pharmacology, University of Chicago School of Medicine.

Many individuals experiencing gastrointestinal symptoms (ranging from mild “belly bloat,” to irritable bowel syndrome, to severe inflammatory bowel disease) have noticed that eliminating carrageenan from their diets leads to profound improvements in their gastrointestinal health. (8)

With undegraded carrageenan now linked to all the problems of degraded carrageenan that include inflammation, suppressing the immune system, GI tract cancers, contributing to inflammatory bowel disease, and potentially inducing diabetes – at the levels (even less than) fed in food - just why would we feed it to our pets?

References

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