

What's In Your Pet Food?

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Abdominal cramps, diarrhea, nausea, vomiting, yes, we have all experienced one or more of these symptoms, that make us wonder what we ingested to make us that sick. Usually foodborne illnesses are the result of improper handling or consumption of improperly cooked foods, and the range of pathogenic microorganisms that cause such infectious disease includes bacteria, fungi, parasites, and viruses. Many of those that are infectious to humans also affect animals, while some are mutually exclusive.

Recently, the lab was involved in one such multijurisdictional investigation that centered on a sick dog with gastrointestinal distress. The veterinarian, suspecting the raw meat pet



Figure 1. *Listeria monocytogenes* (blue colonies) growing on special agar medium.

food, sent samples to our laboratory via the Veterinary Diagnostic Services (NM Department of Agriculture) to be tested for the usual suspects. After days of rigorous testing using conventional biochemical and microbiological techniques, and through the tenacity and perseverance of the lab analysts, the genuine culprit, *Listeria monocytogenes*, was identified in the pet food. *Listeria monocytogenes* is a bacterium that causes listeriosis and is the third leading cause of death by a foodborne infection. Although the disease primarily affects the elderly, pregnant women, newborns, and adults with weakened immune systems, it could also infect animals and anyone without these risk factors. Symptoms of

listeriosis include fever and muscles aches, sometimes preceded by diarrhea or other gastrointestinal symptoms, headache, stick neck, confusion, loss of balance, convulsions, septicemia, and/or meningitis. Animals display some of the same symptoms as humans.

This discovery beefed up the investigation by a discrete measure to involve other divisions and agencies of the state along with the FDA, as regulations stipulate a zero tolerance policy for the presence of *Listeria* in raw animal feed. As a consequence the laboratory received 16 sealed packages and an open package of various raw meat pet foods, including turkey and beef – all the same brand that the sick dog had eaten. Rigorous analyses of these products identified *Listeria monocytogenes* in thirteen of the seventeen packages submitted. These results were communicated to the FDA and the investigation was wrapped up through a voluntary food recall notice, with retailers being asked to remove the tainted products from their shelves, and with the laboratory sending isolates to the FDA for further characterization.



Figure 2. Stomachers used for the processing of food samples.

Food safety is an essential, fundamental ingredient of public health and laboratories nationwide, such as ours, are the gatekeepers protecting millions of lives daily. Warnings and directions, that the public is constantly choked with on the proper handling, storage, and cooking of raw meats, exist for a reason. Raw meat sickens, if not kills – you, your loved one, and your pets. So, the next time you get skewered in the latest fad, give yourself a moment to ponder – what’s in your pet food!



Figure 1. An example of an unopened raw pet food package that was tested.