

Insect repellent, antiviral drug detected in jerky pet treats

Whether illnesses stem from the contaminants is unknown

May 16, 2014 By: Edie Lau

Chicken jerky treats consumed by dogs that became sick have been found to be tainted by the insect repellent DEET and the drug amantadine, according to a veterinary pathologist leading an independent probe of the ongoing pet treat mystery.

Samples of the treats were solicited through a survey conducted by the Veterinary Information Network (VIN), an online community for the profession and parent of the VIN News Service.

Dr. Kendal Harr, head of the chicken jerky treat team for VIN, said samples of suspect treats were submitted by a variety of veterinarians whose patients became ill after eating the treats. A total of 16 animals were involved, some of which had consumed more than one type of treat, she said. Whether the adulterants are responsible for making the pets sick is unclear.

“The clinical significance is unknown ... but these are contaminated treats,” Harr said. “I think what the illegal residues tell us is that we have a contaminated food source.”

Harr owns a pathology company, URIKA, LLC, in Washington state, but she said the samples were collected by a member of the VIN jerky team who works at Cornell University and sent for analysis to the New York State Department of Agriculture and Markets (NYSDAM) Food Laboratory in Albany.

The [NYSDAM laboratory](#) made headlines in January 2013 after it detected illegal antibiotics in pet treats containing chicken imported from China. The discovery led to [recalls](#) of jerky and related treats for dogs, including leading brands sold by Nestle Purina PetCare Co. and Del Monte Corp., now named Big Heart Pet Brands. Those Purina and Big Heart Pet brands — Waggin’ Train, Canyon Creek Ranch and Milo’s Kitchen — have since returned to the market.

In an [update](#) posted today, the U.S. Food and Drug Administration (FDA) also announced that it had detected [amantadine](#) in some pet treats made with chicken imported from China, and noted that during the past six months, the agency received some 1,800 reports of illness related to pet treat consumption. About 4,800 jerky-related complaints of illness have been received by the agency since the issue surfaced in 2007 in the United States. The problem has appeared in [Canada](#) and [Australia](#), as well.

Reports to the FDA “involve more than 5,600 dogs, 24 cats, three people and include more than

1,000 canine deaths," the agency said.

The agency stated that about 60 percent of the cases report gastrointestinal/liver disease; 30 percent, kidney or urinary disease; and the remainder, a variety of other signs, including convulsions, tremors, hives and skin irritation. Of the kidney and urinary cases, about 220, or 15 percent, tested positive for Fanconi syndrome, a rare condition that has come to be associated with jerky consumption.

The human cases derived from three separate incidents involving two toddlers and one adult, according to FDA spokeswoman Siobhan DeLancey. One of the infants subsequently was diagnosed with *Salmonella*. The second infant had gastrointestinal illness and fever, symptoms that matched those of dogs in the household who ate the same treats. The adult reported nausea and headache.

DeLancey said the toddlers ate imported pet jerky products, while the adult ate a domestic jerky pet treat.

The FDA stated that it does not believe that amantadine detected in jerky contributed to any reported illnesses "because the known side effects or adverse events associated with amantadine do not seem to correlate with the symptoms seen in the jerky pet treat-related cases."

At the same time, the agency said, "it should not be present in jerky pet treats. The agency has notified Chinese authorities that FDA considers the presence of amantadine in these products to be an adulterant. Chinese authorities have also assured us that they will perform additional screening and will follow up with jerky pet treat manufacturers." The FDA said it also has notified the U.S. companies that market the products that tested positive for amantadine.

The antiviral medication is approved for use in humans to treat Parkinson's disease and to prevent and treat influenza A, although, the FDA said, it no longer is recommended for the flu because some strains are resistant to it.

In fact, the [World Health Organization](#) in 2005 raised concerns about the reported use of amantadine by poultry producers in Asia as prophylactic against avian influenza, pointing to misuse and overuse as a factor in promoting resistance.

An [article](#) in the *British Medical Journal* that same year cited an American news report that Chinese farmers had been using amantadine since the late 1990s. China's Ministry of Agriculture denied that it approved of the practice, the journal article said.

According to the FDA jerky update, amantadine was prohibited in the United States in 2006 for use in poultry. It is used legally in an extralabel manner in dogs for pain control.

DeLancey told the VIN News Service that the University of California, Davis, a member of the

FDA Veterinary Laboratory Investigation and Response Network, detected the amantadine in treats that were purchased a year or more ago.

She said DEET was not among the findings. "Of course, we are always interested in findings from other laboratories, as well," DeLancey said.

Although typically and commonly applied by people to their skin to repel biting insects, N,N-diethyl-meta-toluamide, better known as [DEET](#), also is used as an insecticide, Harr, the veterinary pathologist said.

"It melts plastic," she said. "You get it on your tent and you have a hole in your tent. It certainly doesn't belong in the food supply."

A spokesman for the NYSDAM laboratory did not reply today to questions from the VIN News Service.

Harr said the VIN jerky treat survey, which began in early 2013, is ongoing. The researchers are seeking more samples. Veterinarians who have suspect cases may participate by completing an [online survey](#). Practitioners who are not members of VIN may call (800) 700-4636 for a temporary login and password to access the link.

The FDA noted that a call it made in October for information from veterinarians netted "many well-documented case reports" and provided the opportunity for the agency to perform necropsies on 26 dogs. Half of the dogs appeared to have died from a condition unrelated to eating jerky pet treats. In the other half, an association with jerky treat consumption "could not be ruled out," the agency said. Eleven of the dogs appeared to have kidney disease; two had gastrointestinal disease.

The agency also announced a collaboration with the U.S. Centers for Disease Control and Prevention on a study comparing foods eaten by sick dogs with foods eaten by dogs that do not get sick, to determine whether sick dogs are eating more jerky treats than healthy dogs.

URL: <http://news.vin.com/doc/?id=6295069>