

Part B: The Summary

Pet foods: Not all brands follow meat regulations

Researchers in Chapman University's Food Science Program have just published a study on pet food mislabeling. The study focused on commercial pet foods marketed for dogs and cats to identify meat species present as well as any instances of mislabeling. Of the 52 products tested, 31 were labeled correctly, 20 were potentially mislabeled, and one contained a non-specific meat ingredient that could not be verified.

Co-author on the study, Dr Rosalee Hellberg said "Although regulations exist for pet foods, increases in international trade and globalization of the food supply have amplified the potential for food fraud to occur," Dr Hellberg also said. "With the recent discovery of horsemeat in ground meat products sold for human consumption in several European countries, finding horsemeat in The United States (also commonly known as the U.S.) consumer food and pet food products is a concern, which is one of the reasons we wanted to do this study."

Chicken was the most common meat species found in the pet food products. Pork was the second most common meat species detected, and beef, turkey and lamb followed, respectively. Goose was the least common meat species detected. None of the products tested positive for horsemeat.

Of the 20 potentially mislabeled products, 13 were dog food and 7 were cat food. Of these 20, 16 contained meat species that were not included on the product label, with pork being the most common undeclared meat species. In three of the cases of potential mislabeling, one or two meat species were substituted for other meat species.

In the study, DNA was extracted from each product and tested for the presence of eight meat species: beef, goat, lamb, chicken, goose, turkey, pork, and horse.

Dr Rosalee Hellberg continued by saying "Pet food safety was another area of concern, particularly with pet foods that are specifically formulated to address food allergies in both cats and dogs,".

The pet food industry is a substantial market in the U.S. Nearly 75 percent of U.S. households own pets, totaling about 218 million pets (not including fish). On average, each household spends \$500 annually on their pets, equating to about 1 percent of household expenditures. In the past five years, pet industry expenditures have increased by \$10 billion, with \$21 billion spent on pet food alone in 2012.

The foods developed for pets are regulated by both federal and state entities. The U.S. Food and Drug Administration Center for Veterinary Medicine regulates animal feed and pet foods. While the U.S. Department of Agriculture regulates the interstate

transportation and processing of animal products, as well as the inspection of animal product imports and exports.

While a seemingly high percentage of pet foods were found to be potentially mislabeled in this study, the manner in which mislabeling occurred is not clear; nor is it clear as to whether the mislabeling was accidental or intentional and at which points in the production chain it took place.

The study was published in the journal *Food Control* and was completed with Chapman undergraduate student Tara Okuma.