

Safety and Quality Control – What Does It Really Mean?



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Food safety has emerged as a leading public concern, and one that is increasingly shared by the Food and Drug Administration (FDA) which implemented a variety of changes associated with traceability of feeds along the distribution chain as a result of legislation passed in 2011. These changes have been implemented in an effort to pinpoint facilities implicated in contaminations issues. This also increases regulation designed to prevent food-borne illnesses and to improve response time for recalls. The governmental preference would be to prevent contaminated products from entering the distribution chain. The pet food industry has, with the input of the Center of Veterinary Medicine at the Food and Drug Administration, strengthened microbiological testing for the potential pathogens *Salmonella* and *enteropathogenic E.Coli*, as well as for aflatoxins and mycotoxins most commonly associated with various carbohydrate sources used in the pet food industry. These are wonderful initiatives to help ensure food safety, but is this enough?

The melamine crisis of 2007 led to the deaths of over 4,000 dogs and cats, and the intentional inclusion of melamine by Chinese suppliers of wheat gluten suggests that quality control require testing for agents beyond bacteria and fungal products such as aflatoxins and mycotoxins. In 2007, intentional contamination of pet foods with melamine and its byproduct cyanuric acid led to abnormal crystal formation and kidney failure due to unscrupulous individuals selling concentrated protein products from plants based sources that were “spiked” with these two compounds to make the nutritional profile of their ingredients look more favorable. Many pet advocates suggested that optimal quality control extend to include heavy metals, polyamines from fish products, antibiotic residues, pesticide residues and melamine.

Many large companies will use near infrared spectroscopy to assure that products, particularly dried powdered meals, grains and carbohydrate sources coming into their facilities meet their nutritional requirements. This technology provides a quick and accurate assessment of ingredients. As most pet food is produced by extrusion or canning, it is tested at the end of production for many of the aforementioned micro-organisms, aflatoxins, mycotoxins. Some pet food manufacturers will do more extensive testing, but this is manufacturer dependent and many smaller manufacturers will do only the basic testing mentioned above. Such information is rarely provided by the manufacturer to the consumer or to the veterinarian, and the amount of testing could be limited only to specific diets, such as histamine or heavy metal testing in certain fish products.

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Comprehensive testing should include antibiotic testing for major classes of antibiotics often used in the agriculture, pesticide testing, detection of adulterants such as melamine and cyanuric acid, heavy metals, and even testing of heat-sensitive vitamins such as thiamine to ensure suitable concentrations in the final product. Such comprehensive testing is rarely performed in the industry, particularly amongst smaller pet food manufacturers as this usually increases the cost of manufacturing between 10-20%. At VRS we have a commitment to quality for pets and for the veterinary profession, and as such, extensive antibiotic, heavy metal, impurity, toxicity, and pesticide testing is publically available on every batch to demonstrate the transparency and rigor we associate with our food safety program. In addition, each batch of food is tested for essential vitamin and minerals to ensure that the food our veterinarians are recommending is consistent, complete, safe, and has the one of the highest quality control standards in the pet food industry.