

- Long-term palatability testing; and
- Testing products consumed in small quantities (treats and pharmaceuticals).

At Summit Ridge Farms, palatability dogs and cats are chosen by using science and accurate validation procedures, according to the protocol testing facility. The "taste testers" undergo extensive training and validation. The animals are introduced to two bowl feeding stations and then the temperament of each animal is monitored, including its acceptability of two bowl feedings, and the dog's or cat's willingness to make a choice. Panels are periodically validated by presenting the same diets simultaneously to verify a null response. The animals are then offered a highly palatable diet versus a standard diet to verify a positive response.

The patent pending Palatability Monitoring System from Summit Ridge collects data for true side-by-side, two bowl palatability testing of group housed cats. The feeding trial company has developed hardware and software that allows them to provide historical data, as per standard two bowl palatability testing, with the addition of timed-event-consumption data. The system also provides continuous palatability recording in a community environment with data acquisition and analysis that allows Summit Ridge to present data in multiple formats. Up to 40 feeding stations can be used with one central computer via USB connection; the company is currently developing stations that operate wirelessly.

### Dental testing

Dental testing feeding trials are the evaluation of products that make dental health claims for acceptance and efficacy. Summit Ridge Farms is one US facility that runs these important trials. The Veterinary Oral Health Council (VOHC) has set stringent guidelines that must be met for a product to maintain the VOHC Seal of Approval. Periodontal disease is the most common disease occurring in dogs and cats, and pet owners have begun to recognise the importance of dental health, often seeking out products with the VOHC Seal.

### AAFCO nutritional adequacy testing

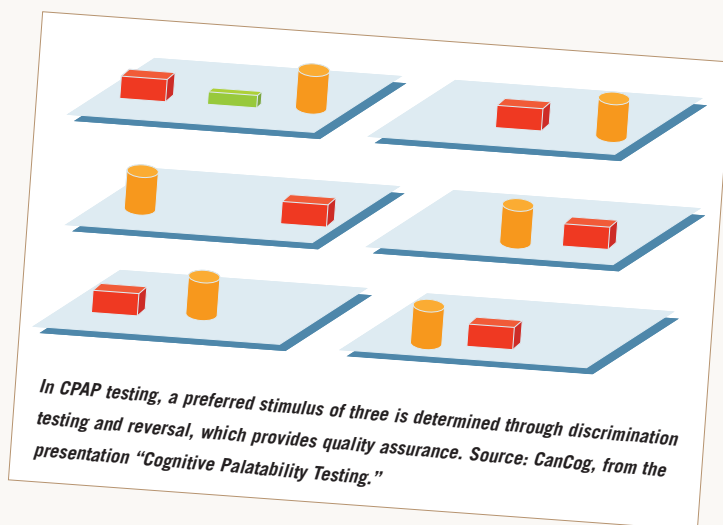
When a diet is fed as the sole source of food to a population of companion animals, problems are more readily identified within a controlled environment. According to Canine and Feline Nutrition - A Resource for Companion Animal Professionals, testing food through a series of feeding trials is the most thorough and reliable evaluation method available. Summit Ridge also conducts Association of American Feed Control Officials (AAFCO) nutritional adequacy testing.

In 1975, AAFCO developed Policy Statement 21 (a) and 21 (b), which were to become approved statements for nutritional adequacy. Policy Statement 21 was developed jointly by the Pet Food Institute (PFI) and the AAFCO Pet Food Committee and in 1980 was adopted. This policy statement required that labels show the basis for Nutritional Adequacy Statements.

AAFCO then formed a Canine and a Feline Expert Subcommittee to develop a standard of nutritional adequacy in dogs and cats. The NRC guide was replaced with AAFCO Nutrient Profiles for Dogs in 1991 and for Cats in 1992. The minimum feeding trial protocols were also changed. More recently, AAFCO has assigned a scientific panel of experts to reexamine the nutrient profiles and feeding protocols.

### The impact of feeding trials

According to Claire Larose, ethologist at Panelis, an expert centre in palatability measurement and feeding behaviour study, there are several different aspects that can influence feeding trial results and interpretation. At Panelis, all these parameters are taken into account whatever the methodology. First of all, the protocols are adjusted to dogs and cats feeding behaviour as well as to products specificities.



*In CPAP testing, a preferred stimulus of three is determined through discrimination testing and reversal, which provides quality assurance. Source: CanCog, from the presentation "Cognitive Palatability Testing."*

For example, the choice of the panel can have a major impact. The panel should ideally represent the targeted populations. That's why Panelis is established in Europe and Brazil today and will soon open a new panel in the US. The panel size is an important parameter as the specific preference of an animal can have a strong impact on the average result if the group is too restricted. The panel size can also have a direct impact on the results, by masking a difference between two products if the number of pets is not high enough. On the other hand, a test designed to give 50/50 ratios can give completely different results if the number of pets is too low.

When doing a versus test, consumption not only the consumption ratios and the first choices made, but also the distribution of consumption need to be noted, says Larose, so no adverse effects occur during testing. This information is important, she stresses, especially before a new product launch.

There is no universal protocol for feeding trials, but essential parameters have to be controlled. It seems best to combine different tools and methodologies, according to targets, since there is so much information available. Above all, the use of animals should be scientifically and ethically justified. Whatever tests you choose to implement should have the goal of having pets barking and meowing, bon appetit!

### Dogs and cats not the only ones tasting petfood

Simon Allison eats petfood for a living and what's more, he enjoys it. Chicken dinners, beef strips or jerky treats - it's all the same to Allison. If it's a dog's dinner or a cat's breakfast, you can bet he eats it. That's because Allison is a senior food technologist for UK company Marks & Spencer (M&S) with a specialised responsibility in petfood. No M&S pet product reaches pet bowls without being tasted by him first.

According to Allison, whose first sampling of petfood was a turkey and cranberry meal in 2006, the taste isn't much to shudder at. "It's quite bland, really," he says. "Dogs enjoy all food universally, while cats can be very choosy about what they will eat. They respond more to aroma than seasoning flavors that you would recognise." Allison even has a favorite pet meal: M&S's organic luxury chicken dinner with vegetables for cats.

The human tester does, however, draw the line at swallowing the stuff and always has a glass of water nearby to wash his mouth out. Afterward, he always remembers to chew gum to prevent "dog breath."

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