



A question of

TASTE

Michael Bellingham, chief executive of the Pet Food Manufacturers' Association, talks about the science behind palatability and how pet food companies ensure foods are tasty and nutritious

Palatability is as important to pet food formulation as the core ingredients. After all, the ingredients can't provide the nutritional benefits if pets won't eat the food, and equally important, their owners don't perceive that their pet is enjoying the food.

What affects palatability?

Palatability is based on many factors, including aroma, ease of grasping the food, kibble size, shape and texture, as well as the quality of the ingredients, the manufacturing process and packaging. In order to have the best possible palatability, all these factors must be taken into account.

First impressions count

Physical characteristics are important and pet nutrition knowledge has shown that first impressions do count for cats and dogs. The presentation of the food should ideally be appropriate to the size of the animal. For instance, cats and small dogs prefer their food in small pieces which are not too sticky, whereas

larger dogs are able to eat foods of a much broader range of size and shape. Dogs, and to a lesser extent cats, rely on their sense of smell to a much greater degree than we do when eating.

Is palatability the same in cats and dogs?

Palatability is completely different in cats and dogs, and the more we learn about palatability, the more this is confirmed. For example, sweet taste has a greater appeal to dogs, whereas acidic taste has greater appeal for cats. Cat foods differ from dog foods in many other ways including smell, texture, kibble shape and size, aroma, taste and nutrient composition. Owners shouldn't feed dog diets to cats or vice versa.

Quality of ingredients

The quality of an ingredient affects its palatability. For example, fresh fat is far more appealing than rancid fat. It's important to ensure palatability for the life of the product and some manufacturers use antioxidants to help them do this. Antioxidants will help prevent foods from spoiling and stop the fats from going rancid.

Certain ingredients are generally more appealing to cats and dogs, for instance the protein-based or dairy-based products. Pet food manufacturers may also use other ingredients that are considered to contribute health benefits but may not be as appealing to cats and dogs. The challenge then for the manufacturer is ensuring an appealing end product so that benefits from all the ingredients can be fully maximised. Flavourings, for example, chicken

digests may be used to enhance the palatability.

The preparation method is also important: extruding kibble reduces cooking time and helps to produce an appealing dry food. The moisture of the meats used in canned food give canned foods a stronger odour which makes them appealing to most pets.

Other factors affecting palatability

■ **Food storage:** For **dry foods**, palatability remains at its best for one month after the bag is open. To help keep the food at its best the bag should be closed carefully after each use. It should also be stored in a dark, cool, dry place, ideally in a container with a lid. **Canned foods** have a shelf life of two years unopened. Once opened, it deteriorates quickly. Any unused portions should be covered stored in the fridge. Unused food should be thrown away after three to five days.

■ **Temperature:** Canned food straight out of the fridge is less palatable than food served at room temperature. Owners can warm in the microwave.

Cats and dogs should be fed in a quiet place where they won't be interrupted. Noise and disruption can cause stress, which can temporarily affect feeding.

If owners are changing from one food to another, this should be done slowly over a period of seven to 10 days by gradually introducing the new food, while decreasing the old food.