

White paper

Scent of an opportunity: improving pet food smell



Now more than ever, the smell of pet food matters!



Seeing a pet enjoy a meal is one of the special pleasures of pet ownership. Mealtime is one of the best moments for owners and their pets to express mutual love and tenderness. But unpleasant odors can reduce the owner's appreciation of the pet's meal experience.

To make mealtime a shared happy moment, pet food manufacturers must take into account a new dimension: the pet owner's olfactory satisfaction. A successful pet food is one that not only appeals to a pet's keen sense of smell [1] but also seduces the delicate nose of pet parents.

Pet food odor strongly affects pet parents' meal experience

To evaluate the importance of pet food odor for owners, Diana Pet Food launched an online usage and attitude consumer survey, questioning 970 American pet owners and 852 French pet owners. Results clearly highlighted the impact of pet food's smell on pet parents' purchasing habits.

of pet owners

say **pet food odor is a** very important criterion when choosing pet food.



do not like to keep wet pouches opened in the refrigerator because of the smell.

How better smelling products add value to pet food brands

A customer is often attracted to a brand or product based on its sensory appeal [2]. Indeed, our senses are linked to memory and can tap right into our emotions [3]. The emotional quality of products is thus becoming important to maintain a differential advantage on the market [4]. Improving the smell of pet food can be an efficient way to upgrade pet owner meal experience, build consumer trust, and establish a positive brand image.

Three scent strategies can differentiate pet food products and support brand positioning. Pet food manufacturers can mask off-notes to smooth their product's olfactory profile for better human acceptance; they can enhance the recipe to improve pet owner perception of quality ingredients; and they can give their brand a signature scent that is unique and recognizable to pet







Offering pet food with a smell that is in harmony with recipes and claims delivers true benefits to pet owners and supports brand storytelling.





Never compromise on palatability

When it comes to smell, human and pet preferences can differ. Using flavors tailored to human preferences in a pet food can significantly decrease its palatability for cats and dogs. To create a unique feeding experience, sensorial solutions should combine the assets of uncompromised palatability for pets with great smell for pet owners. To guarantee mutual satisfaction, it is crucial to validate a product's performance with both human and animal panels.

of American & of French



giving wet pet food at least once a week think it is important that the smell of the food matches the recipe and the ingredients list.

of American



think that an appealing smell is a sign of a brand's quality.

to characterize pet food smell



Wet PetscriptTM

Petscript[™], describing pet food odor

The first step to improve the smell of a pet food is to have a reliable tool to describe it. In the past 10 years, human sensory panels have been used to characterize pet foods [6], but there was a lack of a common and reproducible language to describe their smell.

Diana Pet Food experts created Petscript™, a unique and universal sensory language specifically conceived to describe the smell of pet food. Two versions of Petscript™ were developed, one for dry food and one for wet food, each gathering 25 odor terms associated with exclusively designed olfactory references [7].

Emoscript©: identifying pet parents' emotions toward pet food odor

To help pet food manufacturers create happy moments around pet mealtimes, Diana Pet Food also developed Emoscript©. Built from focus groups conducted with pet owners, this unique tool gathers a list of 22 emotions grouped in five clusters, specifically selected to describe the emotions triggered by pet food smell.



Wet Emoscript©

The combined use of Petscript[™] and Emoscript© allows a complete and objective characterization of a pet food smell. With these powerful tools, manufacturers can map their products according to their olfactory profile, reach a specific smell target, and differentiate from the other products on the market.

Connecting pet food smell with owner preferences and emotions

A holistic approach toward wet food odor

In humans, it has been widely demonstrated that aroma perception is closely connected to emotions, behaviors and memories. When it comes to pet food, which is generally not consumed by pet owners, questions arise about how smell is perceived by owners and how it impacts their emotions.

A pioneer research was carried out to investigate the link between a pet food's smell, the emotions it triggers in pet owners, and its influence on product liking.

Product liking

Liking Test





Smell description







Emotional response



Wet Emoscript©

150

owners

pet





A preliminary study was conducted to build the olfactory landscape of the European wet pet food market. 25 expert judges used the wet Petscript[™] to describe the smell of 32 products bought in France, UK, and Germany. A Principal Components Analysis (PCA) was then performed in order to map the products according to their odor profile. The results highlighted the existence of 6 clusters gathering products with similar aromatic characteristics: "Chicken Breast", "Marine", "Aromatic Herbs", "Gamey Meat", "Sweet" and "Other" clusters [7].

7 representative wet cat foods (A-B-C-D-E-F-G) were then selected among products from the previously defined olfactory clusters. In addition, a premium wet cat food prototype (S) was manufactured and flavored with Sensol Provence Herbs, a sensorial solution from

the SPF FeelGood collection, specifically designed to provide pet food with a pleasant smell for owners while ensuring a high level of palatability for cats and dogs. This flavored prototype was also positioned in the European wet cat food olfactory map after its smell has been described by the expert judges with Petscript™.

150 pet owners from Diana Pet Food in-home panels (Milou, Duchesse & Moi) used Emoscript© to describe the emotional responses triggered by the odor of the 8 wet foods. They were also asked to rate products' smell liking on a scale ranging from 1 to 9 according to their level of appreciation.

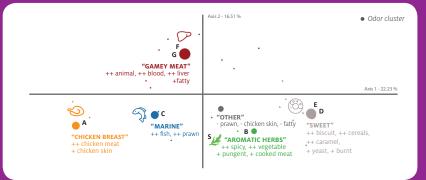
Connecting pet food smell with owner preferences and emotions

The liking test revealed 3 classes of differently appreciated products. The combined analysis of smell descriptors and owner preferences showed that products with olfactory notes from the "Marine", "Aromatic Herbs", and "Chicken Breast" clusters tended to be preferred over those with olfactive notes typical of the "Gamey Meat" cluster.

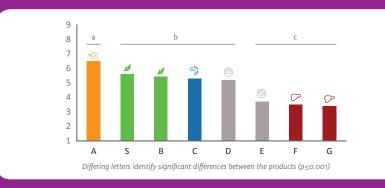
In addition, the products' emotional-response profiles were consistent with the owner-preference scores: the foods with higher preference scores also triggered a higher number of positive emotions. It was also possible to correlate several emotions with smell descriptors. For instance, the "liver" and "animalic" notes were significantly associated with the feeling of disgust.

The prototype food containing Sensol Provence Herbs generated a high number of positive emotions and was one of the most liked products. This confirmed that using flavors specifically design for pet food could be a powerful lever to increase pet owner satisfaction.

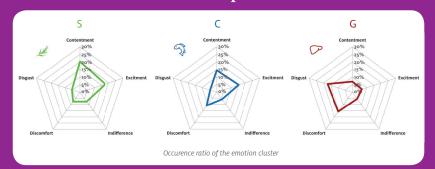
Olfactory space



Preference score



Emotional profiles





Conclusion

Scents have a unique power to instantly create strong feelings in people. They can evoke underlying memories and emotions, both good and bad. Using pet food with a nice smell is thus crucial for pet parents wishing to enjoy a pleasant experience when feeding their beloved companion. But what is the definition of a good smell? What are the odors that trigger the most positive emotions in pet parents? A comprehensive sensory approach of pet food smell can bring the beginnings of an answer to pet food manufacturers wishing to improve the smell of their

Thanks to innovative tools, it is now possible to objectively describe the odor of pet food and to map products in the global market olfactory landscape. Determining which pet food odors are typically associated with high preferences and connecting them with specific emotions can allow experience of the pet's meal, thus establishing a strong, positive brand image.



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FeelGoodProa creating a unique feeding experience

The FeelGood Program offers pet food manufacturers innovative solutions to improve the smell of dry and wet pet food, as well as treats. Born from the unique combination of Diana Pet Food deep expertise in pets and Symrise knowledge in flavors, the FeelGood range of sensorial solutions successfully combines the assets of premium palatability performance and gourmet flavors. The unique smells created enhance the feeding experience for both pets and their owners.

To know more about the FeelGood Program, visit (www.diana-petfood.com/spf/feelgoodprogram)

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inspired by pets, creative by nature



Diana Pet Food is the global leader and pioneer of high value solutions improving pets' well-being and owners' satisfaction.