



Sorry for the delay in publishing our 2018 first quarter addition of Pet Essential Nutrition Quarterly. It has been a fast-paced and exciting first months of the year for our pet team at DSM. We are busy with new development projects designed to deliver ingredient solutions to expand the health and well-

being of companion animals. More on that topic when I am able to share the details.

During Q1, some of us were in Bangkok Thailand attending Petfood Forum Asia, which took

place during VICTAM, on March 28. Our Global Technical Manager, Dr. Shiguang Yu, gave a compelling talk on “Health benefits of Nutritional Lipids Beyond Recommendations”. During his talk, we learned about the important science related to dietary long-chain fatty acids. Among those were omega-3 DHA and EPA delivering important benefits for dogs and cats, such as support for joint health and cognitive function. This was another opportunity to share our research results demonstrating the significant benefit of our DHAgold product on visual and memory performance in older dogs.

As sponsors of this event, we were pleased to hear from a variety of industry experts discussing everything from alternative protein sources to building a social community to support pet food eCommerce. Each talk providing important and relevant information in support of our growing pet product business.

We hope you join us at each Petfood Forum, and other industry events held worldwide, to discuss ways of sharing knowledge for the continued growth of our industry.

Sincerely,
Jeffrey Alix
Global Marketing Manager, Pet Nutrition



Why do we emphasize the importance of vitamins in a pet nutritional product?

Pet owner and consumer awareness level surrounding the health benefits relating to vitamins is high, often supporting the 'reason to believe' important label claims such as supporting immune function and bone and joint health. In fact, vital for the efficiency of a broad array of functions in the body, vitamins are crucial for healthy, thriving, long-living pets; therefore, selection of the correct type and quality of vitamin becomes critical to the brand.

High vitamin form quality

For commercially produced pet nutrition products, the vitamins used within them must be safely produced and formulated into specialized forms. These forms must be selected and applied consistently throughout the supply and production chain, from storage and handling to their proper inclusion in a premix, considering the pet food type, production process, and finished food product storage. It is therefore important to first understand the importance of vitamin forms, premix formulation considerations, and their application.

Appropriate vitamin formulation

Vitamin compounds are formulated into specific vitamin forms to make them suitable for use in a variety of pet food, treat, drink, and supplement products. The formulation process ensures basic vitamin stability "as-is" during storage, when used during processing and storage of the final product, whilst remaining bioavailable to the animal. In addition, vitamin forms are optimized to ensure regulatory compliance, good handling properties and optimal mixability in premixes and dispersion in the food. Many forms of vitamins are produced ensuring many pet nutrition products can be supplemented with vitamins.

Ensuring delivery of your pet foods brand promise of quality is vital for consumer assurance. Whilst there are many aspects used to assess quality, the expectation is that the food is safe when consumed and it is what it claims to be on the label. By fully understanding vitamins, vitamin product forms, their application in pet food formulation and vitamin premix quality manufacturers can take the right steps that will ensure the correct and safe supplementation of their products, which in turn helps to protect brand equity, a company's most valuable asset.



Dog and Cat owners across Western Europe*

76% strongly, 87% somewhat agreed "Being active is important for my dog's happiness."

75% strongly, 88% somewhat agreed "Being active is important for my cat's happiness."

Consumers that spend more for pet food are keenly observant of their pet's quality of life (a.k.a. Happiness)

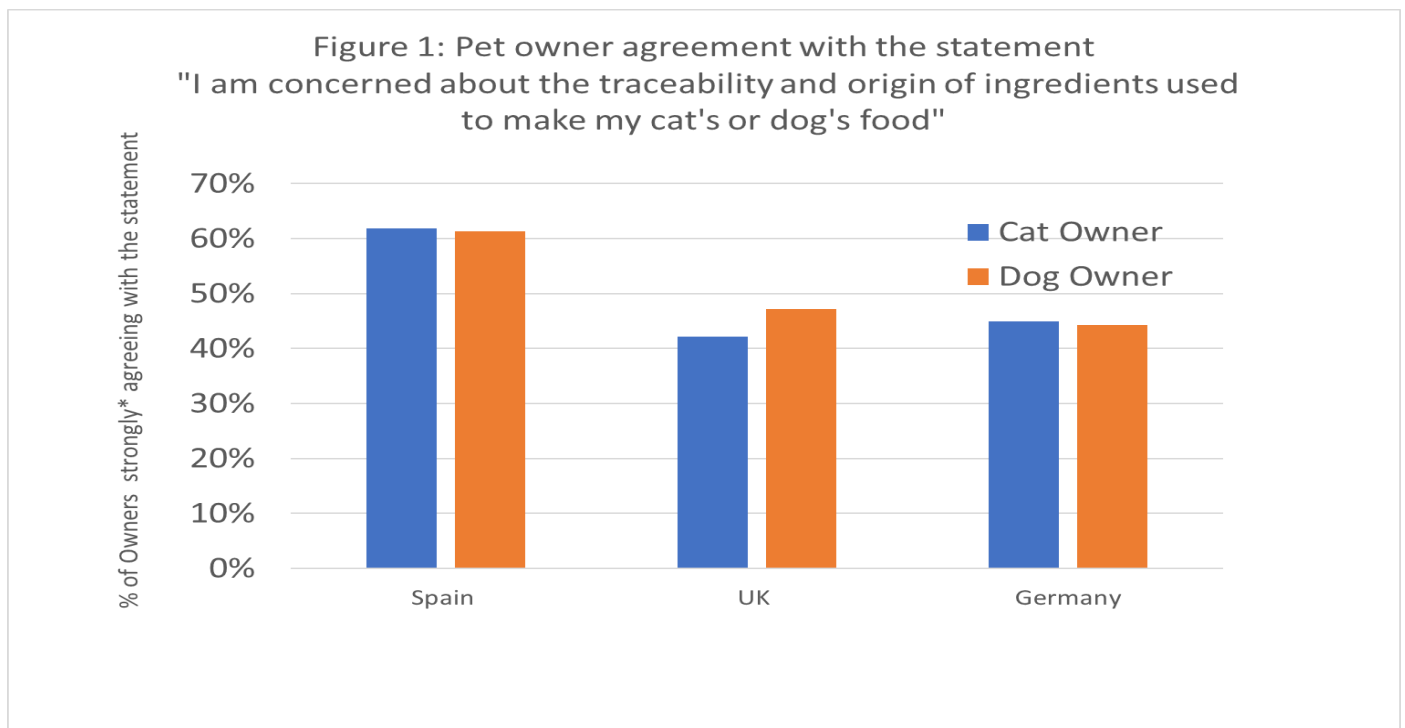
Consumers see their pets health in terms of their happiness

The perception of happiness is what consumer's often use as an indicator of their pet's health status. A pet that is active, playful, eager to engage with their human parent is seen as a clear indication of the animal's health and well-being. Furthermore, consumers are aware of the critical role vitamins play and seek to understand where these key ingredients are sourced. This transparency helps create the assurance the brand they are buying is of an exceptional quality.



What do vitamins have to do with consumer assurance?

Food quality is high on the consumers agenda, not only for themselves but also for their animal companions due to highly publicised food fraud scandals, increased nutritional health awareness and pet humanisation. DSM’s pet owner survey data (2017), demonstrated that owners are concerned about the traceability and origin of ingredients used to make their pets food (figure1). It therefore makes sense to learn more about your ingredient supply chain to fulfil the consumer need for ingredient sourcing transparency.



* Top 2 box score shown (combined score of boxes 1 and 2: 1 = Agree Very Strongly 1, 2 = Agree Strongly)

Knowing the details behind essential ingredients like vitamins underscores the importance of understanding what contributes to your product’s quality, nutritional safety and ultimately supplier selection. We also recognize that beyond the growing concerns surrounding managing your products quality and safety, it is an increasingly more difficult task for brand managers to create points of differentiation based on nutritional claims, considering regulatory and economic constraints. Leveraging our own broad portfolio of health ingredients, working with other leading ingredient manufacturers, applying years of pet nutrition knowledge and experience, combined with our own market research of pet consumer perceptions, allows DSM to be a partner that helps strengthen the quality of your supply chain whilst providing quality solutions for your brand.

In the quarter 3 issue of “Pet Essential Nutrition Quarterly” we will take a look at the importance of vitamin premix and how it will impact the quality and safety of your products.