



Pet Essential Nutrition Quarterly

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Petfood Forum 2015

It was a pleasure to connect with many of you during the Petfood Forum on April 27-29 at the new venue in Kansas City, Missouri, in the United States. This was a memorable exhibition, which allowed us to meet friends, network with new people in the industry, and share important information.



DSM will be a sponsor of Petfood Forum Europe. We hope to meet you at this conference, which will be held June 10, 2015, at the Koelnmesse, in Cologne, Germany, in conjunction with Victam International 2015. Besides myself, you will have the opportunity of meeting our global technical manager for pet nutrition, Dr. Shiguang Yu and our technical marketing manager for pet nutrition Europe, Sarah-Jane Godfrey.

This will be my first visit to the beautiful city of Cologne and I look forward to my time there. If you come to the Petfood Forum Europe, please stop by the DSM table to say hello.

Sincerely,
Jeff Alix,
Global Marketing Manager Pet Nutrition



DHAgold® S17-B a proven solution for older dogs

Like humans, dogs are living longer and therefore spend a longer period in the senior life stage. Nutritional studies indicate that dogs supplemented with marine fish oil rich in the omega-3 fatty acids DHA and EPA help avoid the onset of certain age related health issues.

It is therefore understandable that over the past ten years we have seen a significant growth in pet products that claim health benefits from fish oil. The most common of these health benefits are related to skin, coat, and joint health. There is, however, a growing body of evidence supporting brain and vision health. Companies like Hill's Pet Nutrition demonstrated that nutrient supplementation with DHA-rich fish oil can significantly impact the achievement of genetic potential in the puppy, increasing puppy trainability. Similar evidence now exists that demonstrates DHA supports cognitive function in older dogs. Improving trainability or maintaining cognitive function can only help to strengthen the bond between owner and pet.

With a growth in the older dog population, more and more pet parents will experience the strain of having an older dog presenting with a decline in cognitive function. This condition is called Cognitive Dysfunction Syndrome (CDS) and is compared to Alzheimer's disease in humans. Experts have developed a

checklist of symptom categories. In one study at the University of California-Davis, 62% of 11- to 16-year-old dogs showed signs in at least one category of CDS. It is predicted that many pet owners will be seeking to prevent the onset of CDS using nutritional intervention because this condition is not reversible.

Fish oil as a source of EPA and DHA has many challenges including potency degradation, price variability, and eminent supply shortages all attributed to over-fishing our oceans.

DHAgold S17-B is a natural, non-GMO, stable, dried whole-cell marine algae



that is produced in the U.S. simply by growing a biomass in a fermentation tank. This ingredient was successfully used as an alternative to fish oil in a study measuring learning and memory performance in old dogs.

The leader in measuring the cognitive decline in dogs, CanCog Technology, investigated the influence of feeding a commercial dog food containing DHAgold S17-B to 8.5-11 year old dogs. The study demonstrated that after 2-3 months on the DHAgold S17-B supplemented diet there was a significant improvement in learning and memory performance, and after 3-5 months, a significant improvement in visual function.

DHAgold S17-B is a smart, sustainable alternative to fish oil.

Percent of pet owners that agreed with the statement*

Omega-3 DHA supports improved vision and memory in older cats/dogs.	87%
Omega-3 DHA is a critical nutrient that supports healthy brain/eye development in cats/dogs.	84%
Using natural alternatives to fish oil to deliver the same nutrients into my pet's food is a smart way to protect the world food supply.	83%
Using a high quality marine algae like DHAgold as a source of Omega-3 DHA makes sense as an alternative to fish oil and other fish ingredients.	84%

SOURCE: DSM 2015 U.S. Pet Consumer Study by MetrixLab

* Top 3 box score

Growing demand for fish may soon out-strip supply

While the global population has swelled to more than 7 billion people, the world's natural resources are considered nearly static. The ever-increasing global consumption of EPA and DHA containing marine fish oil is bringing us to the critical point where supplies will fail to meet the growing demand. Projections indicate that continuing to overfish our oceans will result in a shortage of commercially harvested fish and potentially lead to extinction of certain species.

Science continues to substantiate the benefits of dietary EPA and DHA supporting a broad range of health benefits relevant to both humans and animals. As manufacturers of pet nutrition products it has become critical to identify alternatives to marine fish oil.

Pet Consumer Insights

A sampling from our 2015 U.S pet consumer study highlights show how pet parents not only understand the benefits of DHA, but agree that natural alternatives to fish oil such as DHAgold marine algae is a smart way to protect our world food supply.

The study specifically explored how owners perceive DHA supporting growing and senior dogs and cats. A strong preference was shown to statements connecting DHA to both kitten and puppy brain and eye development and improved vision and memory performance in older pets.

Based on good science and consumer recognition, DHAgold is leading the way to meeting the growing demand for highly sustainable alternatives to fish oil for our pets.