

KERRY

Pet Food with a Purpose

How to Win with Functional Pet Nutrition





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Introduction

More than 21,000 new pet food and treat products have been introduced between 2017-2019 to the global market. And, with 62% of pet consumers regularly seeking new flavors and varieties of food and treats, this momentum shows no sign of slowing down.^{1,2}

As pet consumers around the globe continue to seek only the highest quality ingredients for their pets, the competition to deliver unique and novel premium pet food and treat products has never been more fierce.

As the world's leading taste and nutrition company, our pet wellness and nutrition solutions help dog and cat food and treat manufacturers bridge the nutrition gap between what pets need and people want.

The combination of pets living longer lives and pet consumers getting more involved in what goes into their pet's diets is driving a key trend in the industry – functional nutrition. This trend is anchored with a strong consumer need.

72%
DOG OWNERS

67%
CAT OWNERS

"I believe that foods are effective in preventative healthcare."

And, more than 75% of dog and cat owners believe that pets with specific health concerns can benefit from nutrition formulas targeting those concerns.³

This e-book is intended to help you gain a broader awareness of the leading functional nutrition trends and key considerations when deciding to add functional benefits to your existing or new products.



Macrotrends influencing pet consumer behavior

From Physical to Holistic Health and Wellness

Consumers are becoming increasingly aware of how their life choices impact their health and are taking a more holistic approach to manage their wellbeing.

Holistic wellness is shifting the way consumers think about their food and beverage choices. An observed outcome is an evolving definition of 'natural'. Rather than avoiding chemicals, consumers are adopting the perception that their bodies are an ecosystem that helps support overall health and wellness. Through this lens, the microbiome is emerging as way to help support holistic health, naturally. Each person's microbiome is unique, which supports another growing trend – customization.

77%

77% of U.S. adults claim to be actively trying to improve their health in some way.⁴

65%

65% of consumers seek added functionality from everyday food and beverages.⁵



Macrotrends influencing pet consumer behavior *continued*

Me, Myself and My Pet Mentality

Nearly one in six pet consumers purchase their pet food most often on Amazon or other online retailers, which has nearly doubled since 2017. With the rise of online retail options, consumers have a growing list of choices for pet products that can be tailored to meet their pet's unique needs.⁶

According to Mintel's Make it Mine trend, consumers' perceptions are evolving to the mindset that personalization is a right, not a privilege. And, the ability for consumers to have input in what they buy has affected every industry and nearly every part of the globe. The pet market is no exception, as 61% of U.S. pet consumers are willing to pay more for food customized for their pet's specific dietary needs.^{1,6}

Not surprisingly, the opportunity to provide customized pet food/treats appears to be highest in the online channel.

U.S. PET CONSUMERS WILLING TO PAY MORE FOR CUSTOMIZED PRODUCTS

73%
Online

68%
Pet Specialty Store

47%
Supermarket

Generational differences are key drivers as well, as younger shoppers (18-34) are significantly more likely to pay more for customized pet foods/treats than older shoppers (55+), which indicates that this trend toward customization will continue to grow as younger shoppers begin their pet parenting journey and gain more buying power.⁶



Pet nutrition industry trends

Consumers are paying more attention to nutrition's role in pet health and wellness

As the line between pet and child continues to blur, pet consumers are extending a similar level of involvement in their pets' health and wellness as they would if it was their own child.

Pet consumers have raised the stakes on what it means to provide complete and balanced nutrition and they are looking for value-added solutions that help keep their pets healthy and thriving.

A recent survey revealed that 72% of dog owners and 67% of cat owners agreed to the statement, "High-quality dog foods/cat foods are effective in preventative healthcare."³

75%

75% of both dog and cat owners agreed pets with specific health concerns can benefit from pet food with nutrition formulations targeting those concerns.³

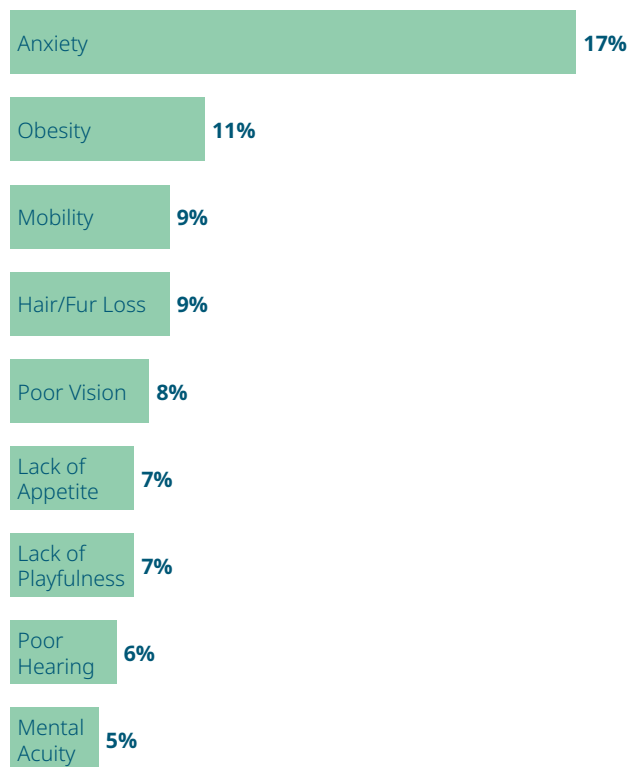
According to the survey, the most popular formulas of functional pet foods among pet owners are oral/dental health, skin and coat, senior/mature, weight management, joint/mobility and digestive/sensitive stomach for both dogs and cats, and hairball formulas for cats as well.⁷



Pet nutrition industry trends *continued*

A recent survey of 1,695 U.S. pet consumers showed that 51% have not observed any health issues with their pets. However, nearly the same number of consumers claim that their pets struggle with one or more of a variety of conditions.

US: PET HEALTH CONCERNS 2019



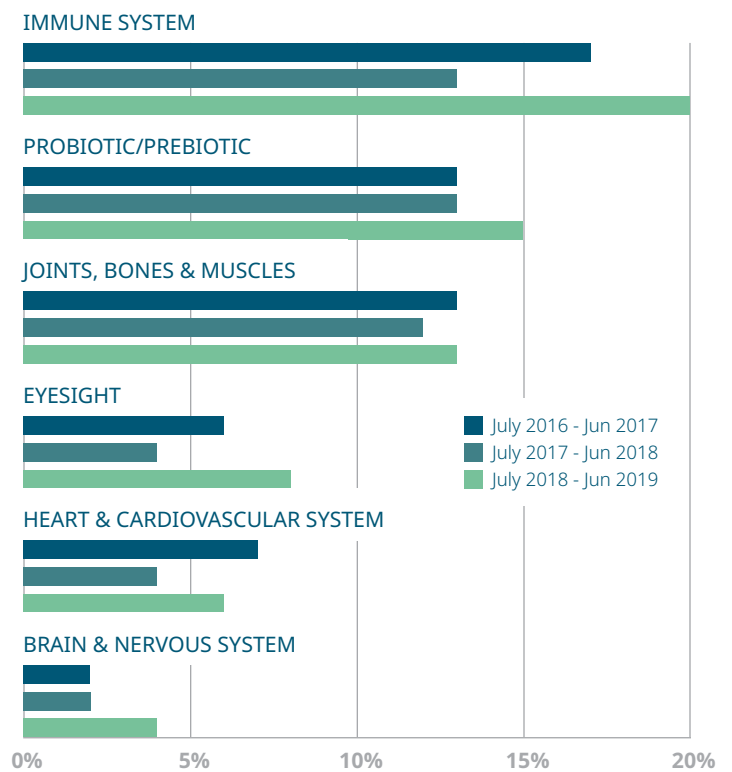
Of the pet health and wellness conditions noted, anxiety is the leading concern, indicating that pet consumers are zoning in on the mental wellness of their pets. Obesity followed closely as the second highest concern, with mobility, hair loss, and poor vision rounding out the top five concerns.⁸

59%

In a 2017 report, 59% of U.S. pet consumers claimed to be skeptical of the health claims most pet foods make.

A broader macro trend of food transparency is a likely driver of this skepticism. The challenge for pet food manufacturers will be going beyond making claims and making them compelling and believable.⁹

US: INCIDENCE OF SELECT FUNCTIONAL HEALTH CLAIMS IN DOG AND CAT FOOD



Pet food manufacturers have been responding to rising consumer demands for products with a purpose. Immune system, probiotics/prebiotics and eyesight have seen the strongest uptick in new product introductions in recent years. A notable trend is a significant rise in brain and nervous system packaging claims from 2018-2019.

5 Ways to add value through functional nutrition

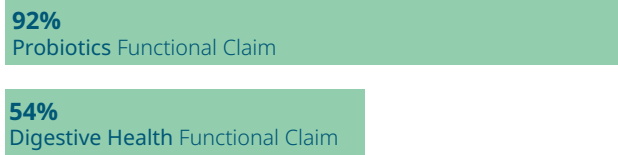
Support digestive health with 'biotics'

Between 2015-2019, new products that included a digestive health functional claim on the packaging have increased by 54%. During the same time period, probiotics have seen a 92% increase.¹ For many pet food manufacturers, probiotics are the clear choice to help support pet digestive health.

Key to the rise of probiotics in pet food is that they are widely used and accepted by consumers in their own foods and beverages. When it comes to driving preference amongst pet consumers, making messages and claims easy to understand with a clear promise are key – probiotics hit both critical points.

Driven by mega consumer trends, the importance of microbiomes will accelerate the inclusion of probiotics into pet foods and treats. Pet microbiomes, the population of bacteria, fungi, protozoa and viruses that live within the ecosystem of the body have been shown to function more similarly to the human microbiome than once thought.¹⁰ This connection provides a clearer path for pet food manufacturers to optimize pet diets with ingredients commonly known to support digestive health in people.

CHANGE IN NEW PRODUCT INTRODUCTIONS WITH A FUNCTIONAL HEALTH CLAIM (2015-2019)



5 Ways to add value through functional nutrition *continued*



Probiotics

Probiotics are a trusted, understood and valued ingredient to support pet digestive health. 62% of US consumers are aware of probiotics, and 20% are interested in purchasing pet food products with digestive health benefits.¹¹ The World Health Organization (WHO) defines probiotics as “live microorganisms which, when administered in adequate amounts, confer a health benefit to the host.”

When choosing a probiotic, it is important to consider the following:

- > Inclusion rates
- > Manufacturing limitations
- > Survivability through the digestive system
- > Product shelf-life

Postbiotics

Postbiotics are an emerging trend within the food and beverage industry. According to a recent study in the International Journal of Molecular Sciences, postbiotics can be defined as “bioactive compounds produced by food-grade microorganisms during a fermentation process. Postbiotics include non-viable microbial cells, cell constituents, and metabolites.”¹² Postbiotics are an exciting area around gut health because they can potentially provide similar beneficial effects as probiotics without the survivability hurdles that living microorganisms can present.

Surging consumer interest is a strong indicator that products with postbiotic claims will likely enter the pet food/treat market within the next 3-5 years. Adding postbiotic ingredients today could present a unique opportunity for pet food and treat manufacturers to differentiate themselves and capitalize on a rising consumer trend.

The potential advantages of postbiotics include:

- > Reduced survivability challenges
- > Specificity and control of targeted benefits
- > Support during periods of stress
- > Differentiation within the pet wellness and health market



5 Ways to add value through functional nutrition *continued*

Boost immunity to maintain overall wellness

Immune system support is not a new concept to consumers. In fact, supporting a healthy immune system is the top reason consumers globally purchase a healthy lifestyle product.¹⁴ Advancements in nutritional technologies have made it possible to seamlessly integrate immune health-supporting ingredients directly into our favorite foods and beverages. In fact, 85% of today's consumers consider food to be their preferred consumption format for health-enhancing ingredients.¹⁵

With immune system being a strong driver in the food and beverage categories, it is no surprise that it has been the leading functional benefit in pet food between 2016-2019.

However, not all immune system-supporting ingredients are created equally.

When choosing an effective ingredient to add immune-supporting properties to pet food, consider the following:

✓ Retaining efficacy

A product that can withstand your processing conditions without losing its efficacy.

✓ Shelf-life

A product that can outlast the expected shelf-life of your product, look for a product with a 3-5-year shelf-life.

✓ Powder or liquid

Whether the product is delivered via powder or liquid and which will fit into your existing infrastructure.

✓ Clinical trials

A product that is backed by clinical trials that support immune function and overall health:

Overall immune function

Overall physical health

Health during periods of stress

Healthy energy levels and mental clarity

Product applications well-suited for immune support ingredients:

- > Dry dog and cat food
- > Snacks and treats with a sweet or savory coating or filling fortified with an immune-boosting ingredient
- > Pet health supplements
- > Meal mix-ins and toppers



5 Ways to add value through functional nutrition *continued*

Dental health opportunities beyond the brush

As with people, the key to preventing dental disease is prevention. And, according to the Veterinary Oral Health Council (VOHC), pet's oral hygiene should be part of their daily routine. The VOHC recommends brushing as the gold standard, but many pet consumers find it difficult to get their pets to cooperate, leaving treats, chews, food, and even treated water as alternative solutions to support daily oral care.

76% DOGS

68% CATS

While other health conditions such as anxiety, obesity and mobility often receive more attention from pet consumers, it is important to note that dental disease is the most common health issue ailing dogs and cats, affecting 76% of dogs and 68% of cats.¹⁶

When developing a dental health product, consider the following:

- ✔ **Generally Regarded As Safe**
The chemical agent should be included within the Generally Regarded As Safe (GRAS) list as an ingredient in pet food, treat or device.
- ✔ **US-FDA**
The chemical agent should be novel and reviewed and accepted as safe by the US-FDA (for U.S. market)
- ✔ **Clinical trials**
Conduct a minimum of two clinical trials using two separate groups of dogs and cats in each trial to prove repeatability in order to be considered for the VOHC list of approved products
- ✔ **Plaque & tarter**
Seek claims that support plaque control and tarter control



5 Ways to add value through functional nutrition *continued*

Help pets age with grace

According to the 2013 Banfield State of Pet health Report, the average lifespan for dogs is 11 years while cats live 12.1 years. And, improvements in nutrition and preventative care have helped both dogs and cats extend their lifespans significantly over the past 10 years. For dogs, the lifespan has risen by about ½ a year since 2002 and has risen an entire year for cats during the same time period. Most experts agree that dogs and cats begin facing age-related health effects around the age of seven, leaving four years for dog owners and five years for cat owners to care for their aging pets.

With pets living longer, age-related health issues are on the rise. In fact, 25% of pet parents agree that they are spending more on their pets compared to a year ago because their pets have new health issues.⁶ This trend is creating opportunities to help pet consumers manage age-related health issues. Among the top interests of pet consumers with older pets is cognitive function.

70%

70% of pet consumers are interested in food that helps aging pets maintain cognitive function.

Antioxidants are a common solution known to help support dog and cat cognitive function. Antioxidants are components that reduce the number of oxidants and free radicals found in body tissues.

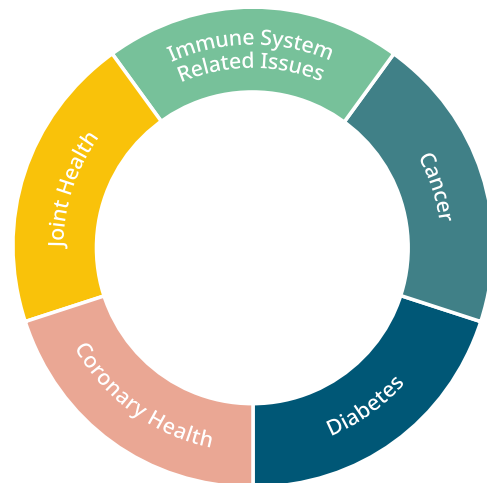
Common nutrients high in antioxidants include:

- > Vitamin E
- > Vitamin C
- > Selenium
- > L-carnitine
- > Alpha-lipoic acid
- > Flavonoids
- > Carotenoids

Omega-3 fatty acids using marine sources of docosahexaenoic acid (DHA) such as oily fish and algae have also been shown to play a critical neuroprotective and anti-inflammatory role in the brain with dogs, specifically.

Other leading age-related health issues for pets include joint health, immune-system-related issues, cancer, coronary health, and diabetes.

LEADING AGE-RELATED HEALTH ISSUES



5 Ways to add value through functional nutrition *continued*

Help fight pet obesity

As the bond between pets and people continues to tighten, new and novel treats and snacks are hitting the market at an increasing rate. While treats can be a fun and rewarding way to bond with a pet, they can also add something else – calories.

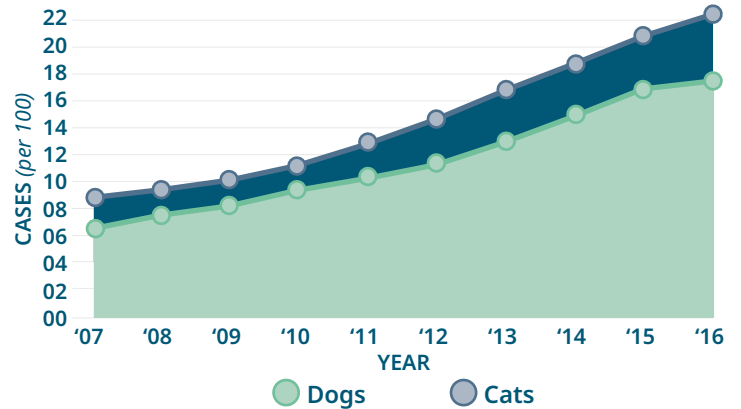
While intentions may be in the right place, many pet consumers are over-indulging their pets through excessive caloric consumption. In fact, in the past decade, cats have seen a 169% increase in obesity and dog obesity has risen 158%. Interestingly, the rise in pet obesity in the U.S. is similar to the rise in obesity among men and women.

+168%
INCREASE OF
OVERWEIGHT CATS

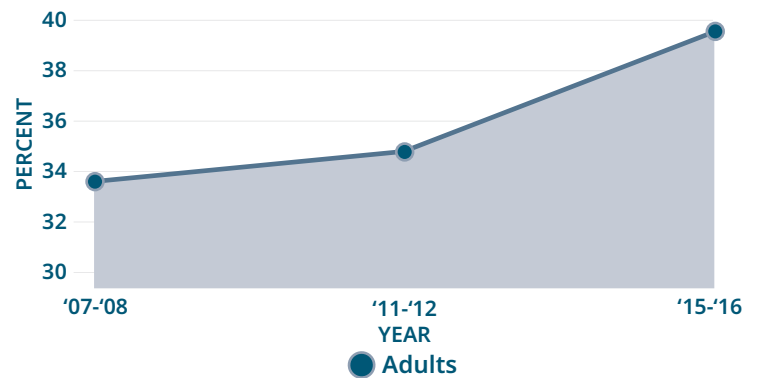
+158%
INCREASE OF
OVERWEIGHT DOGS

Owners of overweight dogs spend 17% more on health care and nearly 25% more on medications – all leading to an estimated \$2,026 per year for dogs is spent on obesity-related conditions. And, cat owners spend 36% more on diagnostic procedures and an estimated \$1,178 per year on obesity-related conditions.

PET OVERWEIGHT & OBESITY CASES (2007-2016)



OBESITY RATES AMONG ADULTS (2007-2016)



5 Ways to add value through functional nutrition *continued*

As pet obesity continues to rise, pet consumers are beginning to take notice, with 11% of U.S. consumers noting obesity as a health concern for their pet. This percentage will likely rise, as will the desire to seek solutions to resolve obesity-related issues. This opens opportunities for pet food and treat manufacturers to develop solutions to help pets healthfully lose weight and maintain an optimal body condition.

For people and pets alike, a key to maintaining a healthy weight is satiety. Developing solutions such as adding fiber that help pets feel full are effective ways to add weight control solutions to your portfolio. Dietary fiber can be added within a complete and balanced diet or incorporated into treats.

Beyond adding additional fiber to the diet, other weight control ingredient considerations include:

- > Reduced sugar food and treats
- > L-carnitine to help increase fat burning
- > Higher protein levels to help maintain lean body mass while burning additional fat



About Kerry Taste & Nutrition

Kerry, the Taste & Nutrition company, offers solutions that nourish lives all over the world.

Kerry, the Taste & Nutrition company, offers solutions that nourish lives all over the world. From humble beginnings as an Irish dairy co-operative, Kerry has grown into a large international food industry leader, with

- offices in 32 countries
- 151 manufacturing facilities
- employer to 26,000 people globally
- 1,000 food scientists.

We bring to the table our strong food heritage, coupled with over 40 years of experience, global insights and market knowledge, culinary and applications expertise, as well as a range of unique solutions that anticipate and address our customers' needs.

For more information, visit [Kerry.com](https://www.kerry.com).

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Pet Food with a Purpose

How to Win with Functional Pet Nutrition

Are you introducing one of the more than 7,000 new pet food and treat products to the global marketplace this year? To break through the cluttered pet food and treat market, brands must differentiate themselves by providing additional value to pet consumers. Adding functional ingredients offers endless opportunities for brands to offer unique and novel products to pet consumers who are placing a higher value on the ingredients found inside their pet's diets.

This e-book is filled with consumer insights and product innovation considerations to help you win with functional pet nutrition.



KERRY