

Probiotics for pets



Introduction

The claim, “supports a healthy digestive tract” is seen on many pet food products for both cats and dogs. But what does it mean? The purpose of this document is to:

- Explain what is required by pet food manufacturers to make digestive claims
- Provide details on why a healthy microbiome is critical to a pet’s health
- Explain the benefits of adding probiotics to a pet’s diet

Digestive health in pets

To support a healthy digestive tract, a food must have certain ingredients that have been shown to help the digestive tract, mainly the colon or small intestine. The small intestine is directly below the stomach, where most nutrients are absorbed and transported throughout the body to where they are needed.

Absorption of all the nutrients in foods can be impaired, depending on the health of the gut microbiome ⁽¹⁾.

The gut microbiome refers to the population of bacteria in the small intestine and throughout the digestive tract. A healthy population of bacteria in the digestive tract is critical as it impacts functions in the entire body, including the immune system, the skin, and all organs ^(1,2). When the population of bacteria is primarily comprised of healthy bacteria, the gut is healthy and able to absorb nutrients at all the various absorption sites located in the digestive tract. When the bacteria population is more pathogenic, the absorption of

nutrients is negatively impacted, and it's harder for nutrients to make their way to absorption sites and be transported throughout the body.

Many factors that can affect the health of the gut microbiome in our pets; stress, a poor-quality diet that offers minimal nutrition and/or is high in nutrient-void carbohydrates, environmental factors, and medications, such as antibiotics. These factors can create an easy path for harmful pathogenic bacteria, such as e.coli, campylobacter, and clostridium to grow. In the short term, an overgrowth of pathogenic bacteria can lead to stomach upset, loose stools and diarrhea; however, the long-term effects are more severe. An unhealthy microbiome can lead to malabsorption of nutrients^(1,2,3) and health issues such as nutrient deficiencies, inflammation, and reduced immunity.

Just as there are factors that can lead to an unhealthy gut microbiome, there are also ingredients that can support gut health. The addition of healthy bacteria, known as probiotics, can positively impact gut health. Probiotics are a group of bacteria known as "friendly bacteria". When probiotics are added to foods, they enter the digestive tract and proliferate, crowding out the bad or harmful bacteria so they cannot survive⁽¹⁾. Certain probiotics, such as the Bacillus subtilus family, can survive in adverse environments and can multiply to fight off harmful bacteria from proliferating. Additionally, they compete directly with pathogenic bacteria to populate the digestive tract, so harmful bacteria have no chance to grow, and the gut remains healthy and can absorb more of the nutritional goodness from foods.

Studies have shown that a diet supplemented with probiotics can positively impact the digestibility of macronutrients, such as protein and fat. When digestibility is improved, benefits include not just improved stool quality. With food broken down effectively into nutrients for efficient distribution throughout the body, there is also an improvement in overall health and wellbeing. Additionally, pathogenic bacteria have no room to proliferate and cause digestive upset⁽¹⁾.

The addition of select powerful strains of probiotics helps support the health and wellbeing of all our pets. Even if your pet doesn't exhibit any digestive issues, probiotics can still provide a healthy boost to the digestive system and benefits will resonate throughout their body, improving skin condition, immunity, and the anti-inflammatory response⁽³⁾.

ZIWI® Peak's booster recipes feature 100 million CFU/lb. of Bacillus subtilus.

Selenium is another abundant nutrient found in goat milk and is also a vital micromineral that supports overall immunity⁽⁵⁾. Selenium, like vitamin A, also affects our pet's immune systems. The immune response is a vast system that requires many different types of cells and nutrients to stimulate these cells. Selenium supports antibody formation and the activity of helper T cells, natural killer cells and another form of T cells involved in the immune response, cytotoxic T cells⁽⁶⁾.

ZIWI® Peak Gut & Immune recipe contains goat milk, a natural source of vitamin A and selenium. The guaranteed levels of vitamin A are 125,000 IU/kg and 1mg/kg of selenium.

Conclusion

ZIWI Peak's booster recipes support a healthy microbiome. Adding it to your pet's meal daily will help support not only your pet's digestive health but will have a positive impact on nutrient absorption, everyday functions of the body, and the overall immunity of your dog or cat.

References:

1. Schauf, S., Nakamura, N., Castrillo, C. (2019) Effect of Calsporin (Bacillus subtilis C-3102) addition to the diet on faecal quality and nutrient digestibility in healthy adult dogs. *Journal of Applied Animal Nutrition*, Vol. 7; e3, page 1-8
2. W. Vahjen & K. Männer (2003) The effect of a probiotic enterococcus faecium product in diets of healthy dogs on bacteriological counts of salmonella spp., campylobacter spp. and clostridium spp. in faeces, *Archives of Animal Nutrition*, 57:3, 229-233, DOI: 10.1080/0003942031000136657
3. Grzeskowiak, L, Endo, A., Beasley, S., Salminen, S. (2015). Microbiota and probiotics in canine and feline welfare. *Anaerobe* 34 14-23.