

AS PET PARENTS pay closer attention to the physical and emotional wellness of their pets, they are seeking new and novel ways to keep pets healthy and thriving. As a result, postbiotics are increasingly appearing in pet foods, treats, and supplements around the globe, seeing a 583% increase in new product claims in the past three years¹. Not to be confused with more commonly known prebiotics (fuel for living microorganisms) or probiotics (living microorganisms that make metabolites for the gut), postbiotics are "the goods" that deliver the intended health benefit to the pet's gut. As a new 'biotic' option, many pet food, treat, and supplement manufacturers are still learning about what postbiotics are, how they work and how they can be used to innovate new products. Cargill has been perfecting postbiotics through fermentation research and development for more than 80 years and offers five questions that manufacturers should ask when evaluating postbiotic options



Does it qualify as a postbiotic?

In 2022, the International Scientific Association of Probiotics and Prebiotics (ISAPP) released a formal position on the definition of postbiotics. The ISAPP states that postbiotics are, "a preparation of inanimate microorganisms and/or their components that confer health benefits on the host2". This means that to align with the ISAPP definition, postbiotic ingredients should be inanimate before use and nothing within the ingredient should have been filtered out or isolated, and importantly, the health benefits should be proven in the intended pet species.



Is it backed by pet-specific data?

Manufacturers should identify postbiotic ingredients that are backed by a sound scientific foundation demonstrating their efficacy and safety in pets. Be wary of postbiotic ingredients that solely include data demonstrating efficacy in other species groups such as humans, mice, poultry, or other livestock. Non-pet data is common and critical for the advancement of the technology but should be used sparingly as the basis of on-pack claims to be confident that the ingredient is delivering the intended health benefits to pets and to align with the ISAPP postbiotic definition. Moreover, carefully analyze the quality and relevance of the research, including the design, sample size, and statistical analysis and opt for postbiotics that are backed by peer-reviewed research.

for their next innovation project.

Will it be compatible with the finished product?

When evaluating postbiotic ingredient options, be sure to ask to see data that demonstrates efficacy throughout the manufacturing process. Postbiotics are inherently stable; ask for stability testing results to ensure the postbiotic remains effective until it reaches the pet's gut, regardless of processing conditions and pet food formats. Be sure to determine the optimal inclusion level required early in the formulation process to ensure that enough of the postbiotic ingredient is present in the diet to deliver the intended health benefits. A quality postbiotic should be distributed evenly throughout the finished product to ensure consistent availability with each serving and don't forget to ask about palatability data, as some ingredient carriers can reduce finished product palatability and pet acceptance.



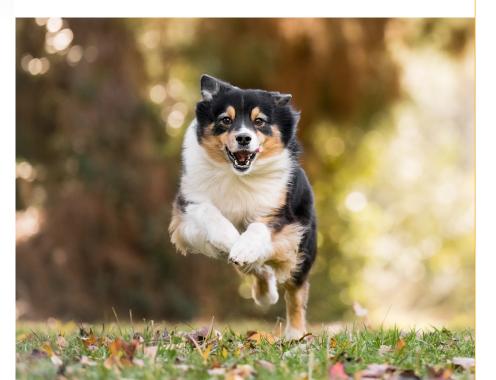
Is it safe for pets?

As new ingredients continue to make their way into pet diets, focusing on safety has never been more important. Assess the ingredient's safety data, including toxicology studies, to ensure it does not pose any risks to pets. Verify if the ingredient has received Generally Recognized as Safe (GRAS) status or has undergone regulatory approval for use in pet food, i.e. compliant with the Association of American Feed Control Officials (AAFCO) guidelines. Also, don't forget to ask the supplier for their quality control processes and documentation.



What claims are possible?

Modern pet parents are looking closer at product labels and are increasingly scrutinizing on-pack claims. To satisfy these curious consumers, be sure you understand how postbiotic ingredients work and the inclusion levels required to make a specific claim. Avoid costly product changes by working closely with a reputable postbiotic partner that thoroughly understands pet nutrition and formulation and have proactive conversations on what claims are and are not available.



Accelerate your innovation pipeline with Cargill's leading line of postbiotics.

Our postbiotics are backed by a dozen pet-specific research studies demonstrating their ability to support the gut microbiome, proper immune function, digestive health, vitality, skin and coat health, and even breath freshness. That's multiple on-trend proactive health benefits packed into each postbiotic ingredient.

Contact us to discover which postbiotic solution is best for your next innovation project.



For pet foods, treats and meal enhancers





For pet nutritional supplements



¹ Innova New Product Development Analysis, January 2020-January 2023.

² Salminen, S., et al. The International Scientific Association of Probiotics and Prebiotics (ISAPP) consensus statement on the definition and scope of postbiotics. Nat Rev Gastroenterol Hepatol (2022).