EnzaPro®

Premium Xylanase and Multi-strain Direct-fed Microbials

Q&A

Gut health is essential when it comes to animal production, disease management and its economic impact. Gut health refers to the structure and function of the gastrointestinal (GI) tract and its relation to nutrition, immunology, microbiology, and the environment. Optimizing gut health affects many aspects in an animal's body such as effective digestion and absorption of feed, stabilizing intestinal microbiome, decreasing incidence of zoonotic pathogens and related diseases, and increasing the effectiveness of the immune system. Optimizing gut health through promoting the presence of healthy gut bacteria can be achieved by using prebiotics, probiotics, enzymes and other dietary supplements.

The combination of a premium xylanase and the carefully selected direct-fed microbials (DFM) in EnzaPro used in monogastric animals (poultry & swine) diets supports a balanced and healthy gut microbiota. It reduces the impact of moderate disease challenge and improves growth performance. EnzaPro's xylanase releases xylan bound nutrients (up to 3-4% of an animal's diet) and breaks them down into 2-5 units xylooligosaccharides (XOS), which provide a prebiotics effect once utilized by the beneficial gut bacteria in the animal's GI tract. The DFM in EnzaPro produce a probiotic effect by competing for nutrients against the pathogenic bacteria limiting their growth and colonization. The two components in EnzaPro together create a zymbiotic gut. This means the prebiotic and probiotics work in a mutually beneficial manner, to deter pathogenic bacteria and promote optimal gut health in the animals.

Q: How does stabilizing gut health help with moderate disease challenge?

A: An optimal gut microbiota creates an effective defense line allowing the animals to spend less energy on fighting diseases and creates a healthier immune system. Thus, allowing the animal to save energy on fighting off pathogens and diseases. This allows the animal to utilize the energy for growth, as reflected in increased performance, feed conversion and weight gain. In disease challenged scenarios, EnzaPro decreased pathogenic load in birds such as that of *C. Perfringens*, which is the main causative agent of necrotic enteritis (NE). EnzaPro also reduced the incidents of coccidiosis, and the pathogenic loads of *E. coli* and Salmonella. EnzaPro achieves this by limiting the growth and colonization of pathogenic microbes, when this is accomplished the impact of the disease is minimized. Coccidiosis and NE are both diseases that are amongst the most-costly diseases for the animal industry, not only because they are clinical diseases but because of the complex subclinical infections associated with these diseases. EnzaPro can significantly reduce the impact of both these diseases and improve bird performance.

Q: We are a no-antibiotic-ever production system, how can EnzaPro help me?

A: This is one of the highlights of EnzaPro. While EnzaPro is NOT an antibiotic, EnzaPro can deliver similar results when compared to an antibiotic growth promoter (AGP) in some cases. EnzaPro does not have the same mode of action as AGPs, meaning that EnzaPro achieves comparable results is a very biochemically different way than an AGP. When EnzaPro was compared in head to head trials with popular AGPs it outperformed AGPs on Key Performance Indices (KPIs), so it had benefits of the AGP, without long term resistance concerns or negative perceptions. On top of that, EnzaPro demonstrated greater reduction in mortality, intestinal lesions, *C. Perfringens*, *E. coli*, and *Salmonella spp.* load. EnzaPro is a fantastic addition to your gut health strategy, while keeping your birds antibiotic free.

Q: Gut health is not my first concern, can EnzaPro improve performance parameters?

A: We understand performance parameters like feed conversion and weight gain are vital to any producer. The xylanase in EnzaPro releases entrapped nutrients and optimizes energy found in diets. Animals fed EnzaPro consistently saw significant improvements in weight gain and feed conversion rates. We also saw up to 87% reduction in mortality under disease challenge situations. The reality is that EnzaPro is the superior choice for all these performance indicators.

BRI®

EnzaPro®

Q&A

Q: How does EnzaPro compare to other competitors?

A: EnzaPro is a unique combination of a premium xylanase and DFMs. While there are no other similar products in the market, EnzaPro still performs well against all other enzymes and probiotics feed additives. If you compare it to other leading xylanases you will see it is uniquely formulated with the animal's gut environment in mind. EnzaPro can withstand the high pelleting temperature and is most active in its class of xylanase at the gut environment found naturally in the bird. Its activity starts in the duodenum, it is maximized in the jejunum/ilium section of the small intestines where most nutrients are digested and absorbed. It is also highly active (>80%) at a bird's body temperature. This allows the animal to receive more nutrients and utilize them for production of meat or eggs.

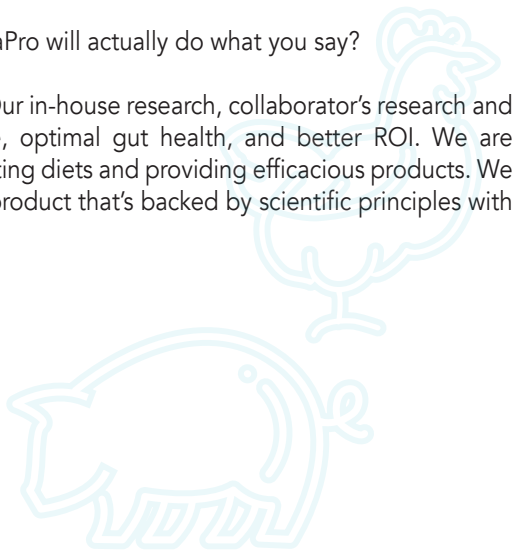
When EnzaPro was placed in head to head comparison trials with popular AGPs it outperformed them on KPIs. On top of that, EnzaPro demonstrated greater reduction in mortality, intestinal lesions, *C. Perfringens*, *E. coli*, and *Salmonella spp.* load. EnzaPro is a fantastic addition to your gut health strategy while keeping your birds antibiotic free. In all these ways EnzaPro was a superior choice for systems to use, especially when trying to reduce or more responsibly use antibiotics.

Q: Does all this make EnzaPro much more expensive than other options? Will it reduce my return on investment?

A: EnzaPro is a premium and unique feed additive product that provides benefits from enzymes, prebiotics, and probiotics. The price of any feed additive whether it be a stand-alone alternative such as prebiotics, enzymes, or probiotics, or a blend such as EnzaPro, is not the critical point for the producer, but rather the return on investment (ROI) is what defines when to use it. EnzaPro provides superior benefits when compared to multiple products all rolled into one, and it is scientifically proven to improve performance. In addition to the gut health and other related benefits achieved by EnzaPro, it also provides a high energy matrix, which allows producers to save money in energy in feed and thus using the product doesn't cost them any more money. You also see better feed conversion rate, and better flock uniformity when using EnzaPro. All of these contribute to a higher return on investment for your system.

Q: I see a lot of advertising and different products on the market, how do I know EnzaPro will actually do what you say?

A: At BioResource International our moto is "trust in the science." Data does not lie! Our in-house research, collaborator's research and feedback, or data from clients consistently show EnzaPro delivers on performance, optimal gut health, and better ROI. We are committed to working with you every step of the way including system trials, reformulating diets and providing efficacious products. We will work with you to ensure that EnzaPro is successful in your system. It is a superior product that's backed by scientific principles with proven success.



BRI®

4222 Emperor Blvd, Suite 460, Durham, NC USA 27703

+1-919-993-3389 • sales@BRIworldwide.com • www.BRIworldwide.com