

# Recharge

**your gut health strategies.**

Enhance livestock production with synergistic blends of  $\alpha$ -monoglycerides.



Eastman **ENTERO-NOVA™**

Eastman **PROTAQ™**

## Combinations of **organic acids** and **monoglycerides** have activity all along the GIT.

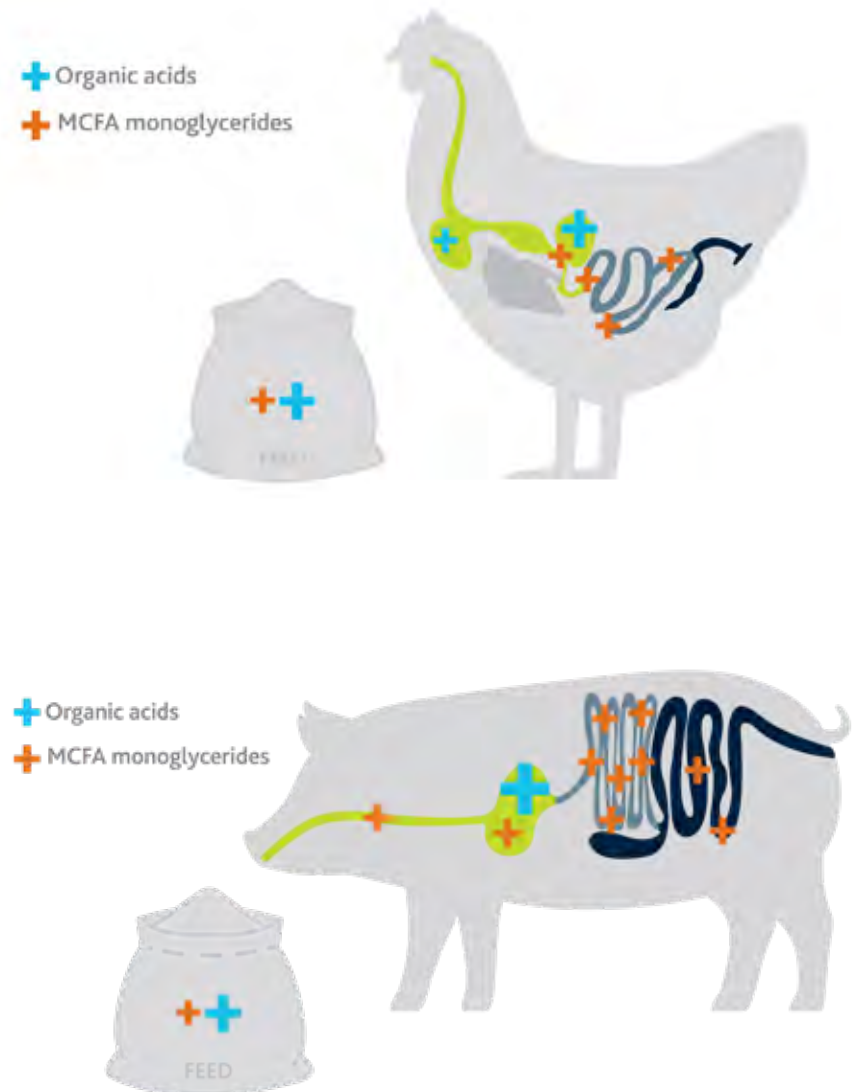
### Give your gut health strategies a boost.

For healthy and productive animals, nothing is as important as the gastrointestinal tract (GIT). Protecting it takes a robust and holistic approach—one that works throughout the entire GIT.

Known for their robust pathogen reduction properties and health benefits,  $\alpha$ -monoglycerides are an effective alternative to antibiotics and zinc oxide. Combined with organic acids, they enhance gut health in swine and poultry.

With the widest portfolio of organic acids available, Eastman can help animal nutritionists customize solutions that meet specific animal needs. Eastman Entero-Nova™ and Eastman Protaq™ include short- and medium-chain fatty acid glycerides that are productive in feed and water applications.

By incorporating Entero-Nova and Protaq into your regimen, you can develop effective and safe gut health strategies that protect your livestock and livelihood alike—targeting specific pathogens and prohibiting bad bacteria without destroying beneficial gut microbiomes.



## Benefits

- **Long-reaching efficacy**—Because synergistic monoglyceride-based solutions work independently from pH, they last longer and reach further into the GIT. Free acids, on the other hand, typically require a low pH to be optimally effective against bacteria.
- **Effective in feed and water**—Entero-Nova and Protaq advanced formulations are based on esters of short- and medium-chain fatty acids, which are effective via feed and water applications. Combined with organic acids, these  $\alpha$ -monoglycerides reduce pathological threats and are effective alternatives to unfavorable antibiotics and zinc oxide.
- **Easy handling**—Free-flowing granules, Entero-Nova solutions are easy-to-handle, low-odor formulations. They are heat stable and able to withstand thermal processes in feed production. Because of their low corrosion rates, Entero-Nova products are also safe for equipment.
- **Customization**—Monoglycerides are effective in pathogen control individually and show synergistic effects when combined. For example, monoglycerides of caprylic, capric, and lauric acids can address a wide range of pathogens, such as gram-positive and gram-negative bacteria and other threats.



Contact us to discover how our range of Entero-Nova and Protaq gut health solutions for application via feed and water can work for you.



## Better protection through better gut health

Choosing the right formulations—in the right proportions—to create synergistic blends is crucial in promoting good gut health. With your insights and our formulation expertise, we can develop customized solutions that safeguard your animals' health, enhance productivity, improve yields, protect workers, and reduce costs.

Let's talk about  $\alpha$ -monoglycerides as a part of your gut health regimen. With a keen understanding of global and regional challenges, we can develop novel and robust esterified solutions to help you optimize animal performance.

## About Eastman

Founded in 1920, Eastman is a global specialty materials company that produces a broad range of products found in items people use every day. With a commitment to safety and sustainability, our employees work with customers to deliver innovative products and solutions.

Our experience in animal nutrition began in 1951 with the production of butyric acid feed additives. Through a succession of strategic acquisitions and a focused investment in technical and regulatory know-how, we now offer the widest portfolio of organic acids available, a growing portfolio of specialty feed additives, and a rich range of complementary products.

Across the world, Eastman solutions safeguard poultry, swine, and ruminant performance and well-being. We help meet the challenges with feed preservation, hygiene, and gut health—all while delivering high-quality yields.

# EASTMAN

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