Eastman Entero-Nova™ 400 to support poultry health





**Eastman Entero-Nova**<sup>m</sup> **400** is a concentrate of  $\alpha$ -monoglycerides of short- and medium-chain fatty acids. It contains a wide range of monoesters working synergistically, providing beneficial effects to support the healthy growth of animals.

The product can be used to control many major pathogenic bacteria in poultry (*Salmonella, E. coli, Clostridium*) and has been shown to have no inhibitory effects against *Lactobacillus*.

Compared to free fatty acids, the  $\alpha$ -monoglycerides exert a greater pathogen inhibition effect and the activity is pH independent—meaning the activity is not limited to the acidic regions of the gastrointestinal tract.

Entero-Nova 400 is designed for use in feed in liquid (400L) or solid (400C) form. It is user friendly and has excellent handling properties with low odor, no corrosivity, good thermostability, and good flowability. It does not need any withdrawal period.



#### Proven effect in trials

Trial in University of Trás-os-Montes and Alto Douro, Portugal:

- The main objective was to investigate the effect of Entero-Nova 400C with an addition of organic acids (OA) on the performance of broilers.
- Treatments consisted of a control with no product added and the Entero-Nova 400C + OAs (Entero-Nova 400C added at 3.2 kg/MT from days 0–23 and 2 kg/MT from days 23–42).
- Eight replicates per treatment; 10 birds per replicate
- Feed was a typical European diet fed across five feeding phases as pellets available ad libitum.

### **Key findings**

- Liveweight was significantly increased in birds receiving the Entero-Nova 400C product in all phases compared to the control treatments and was 15% higher overall.
- Compared to the control, the feed conversion ratio (FCR) was significantly reduced across all feeding phases in birds receiving the Entero-Nova 400C product in all phases.
- No differences were seen between the treatments in terms of mortality; therefore, it is hypothesized that there was some subclinical dysbacteriosis in the control treatment that was not present in the treated groups.



Figure 1. Liveweight gain progression over the 42-day trial

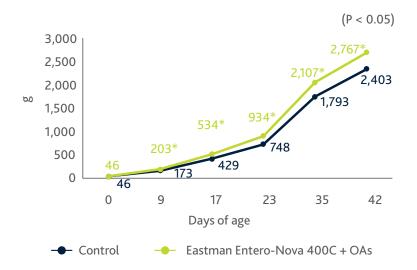
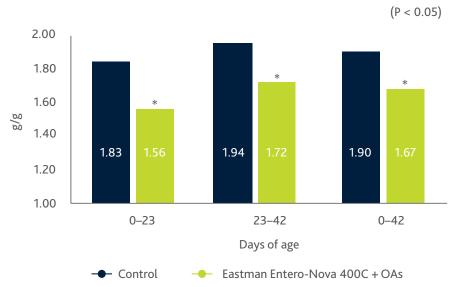


Figure 2. Feed conversion ratio by phase



#### **Technical product characteristics**

- Selection of  $\alpha$ -monoglycerides of short- and medium-chain fatty acids (C1, C3, C4, C6, C8, C10)
- Microflora modulation and regulation
- pH-independent activity, efficient in the whole gastrointestinal tract
- Synergistic effect between monoglycerides and other compounds (especially organic acids)
- · Neutral taste and odor
- Good technical properties
- Heat stable and noncorrosive

#### Benefits for poultry

- Modulates the microflora to reduce the risk of dysbacteriosis
- Helps to control E. coli, Salmonella, and Clostridium
- Optimizes intestinal morphology and physiology
- Supports health, welfare, and performance

## **Product types**

Liquid form: Eastman Entero-Nova 400L
Solid form: Eastman Entero-Nova 400C

#### **Application rates**

Feed class	Broilers,	Broilers,	Broilers,	Broilers,	Laying
	starter	grower I	grower II	finisher	hens
Eastman Entero-Nova 400C (kg/T)	0.5–2.0	0.5–2.0	0.5–1.0	0.5–1.0	0.5–2.0

Feed class	Turkeys,	Turkeys,	Turkeys,	Turkeys,
	0–3 wks	3–6 wks	6–9 wks	9–12 wks
Eastman Entero-Nova 400C (kg/T)	1.0–3.0	1.0–3.0	1.0–2.0	1.0–2.0

The specific inclusion rate will depend on the objective of the product application and product type (liquid or solid). Discuss with your Eastman representative.

Certain statements may not be applicable in all geographical regions. Product labeling and associated claims may differ based on government requirements.

# **EASTMAN**

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