

## EXCELLENT HANDLING AND MIXING PROPERTIES

AVIMATRIX has a highly efficient way of supporting intestinal flora balance, due to a proprietary embedding that allows gradual release of active ingredients throughout the entire intestinal tract.

The embedding technology ensures a dustless, free flowing and non-corrosive product that is stable during feed manufacturing processes, easy to handle and store. Most importantly, AVIMATRIX delivers proven benefits in broiler performance backed by quality science from Novus and proven in scientific trials following strict EFSA guidelines.

## TARGETED MICROFLORA FOR HIGH PRODUCTION EFFICIENCY

AVIMATRIX is specifically designed to support and to optimize digestive processes in broilers, thanks to a combination of the Novus Premium Blend Technology and a blend of nature identical flavoring compounds including benzoic acid.

Supplementing broiler feeds with AVIMATRIX consistently contributes to improved production efficiency in a sustainable way.



# AVIMATRIX®

*Targets the Microflora for High Production Efficiency*

At Novus, our vision is to help feed the world affordable, wholesome food. To do that, the company focuses on the areas of performance, food safety, animal welfare and environment. And with world-class research facilities and headquarters in St. Charles, Missouri, USA, Novus creates animal health and nutrition solutions based on science.

Novus International's roots trace back more than four decades with basic and applied research, development and manufacturing expertise. Since becoming an independent company in 1991, Novus has built upon its understanding of animal nutrition to develop multiple lines of products and services to the livestock, pet and industrial markets.

## THE NOVUS COMMITMENT

Novus is backed by a dedicated team of employees and researchers that are committed to making poultry production more efficient and profitable for you. To do this, the company offers technical services and training to improve animal health and performance. Through partnerships with scientists and universities on a global scale, Novus invents custom solutions for enhancing animal health.

## THE NOVUS DIFFERENCE

The Novus staff includes more than 50 PhDs and DVMs who are dedicated to helping poultry producers realize greater efficiency and profitability. Let Novus show you how its custom poultry solutions can make a difference in your operation.

[www.novusint.com/avimatrix](http://www.novusint.com/avimatrix)

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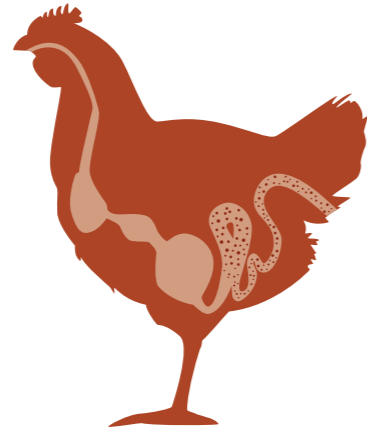
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## CONTROLLING THE BALANCE OF THE INTESTINAL MICROBIOTA IS FOUNDATIONAL FOR A SUCCESSFUL BROILER OPERATION.

Not only does it contribute to better, more efficient use of nutrients for increased performance, but it also impacts food safety and animal welfare.

With a long history of providing in-feed nutritional solutions that help increase productivity, Novus now introduces AVIMATRIX®, a protected blend of flavoring compounds, including benzoic acid.



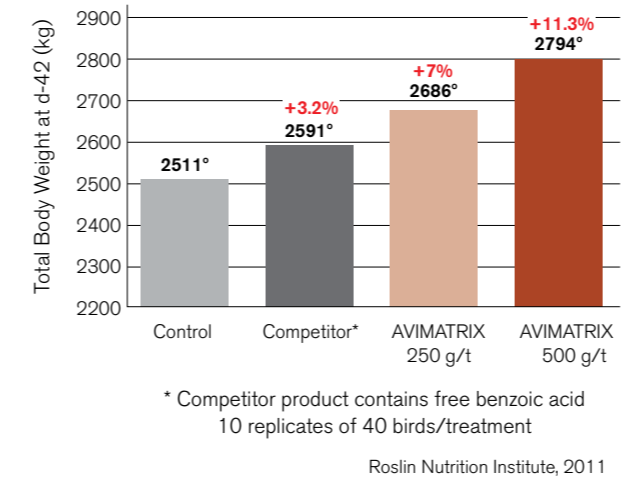
**AVIMATRIX is a unique solution manufactured with a state-of-the-art production process, the Novus Premium Blend Technology (NPB). It is designed to support optimal nutrition in poultry houses facing intestinal health challenges, for greater productivity and profitability.**

## INCREASES BIRD PRODUCTION EFFICIENCY, PARTICULARLY IN CHALLENGED POULTRY OPERATIONS

Broilers fed diets containing AVIMATRIX, had a significantly higher live weight at 42 days when compared to the birds fed only the basal diet with no additive and the birds fed diet containing equivalent amounts of free benzoic acid ( $P < 0.05$ , Figure 3).

Only the birds fed AVIMATRIX showed a significantly improved body weight at d42 and matched their genetic potential.

Figure 3. Effect of dietary treatment on body weight (kg) at 42 days.

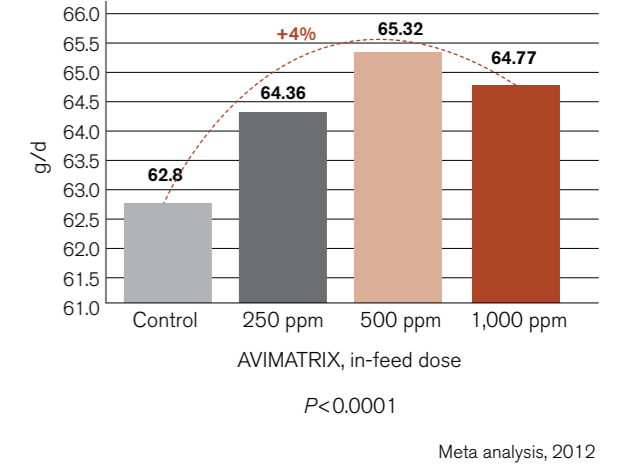


## PROVEN FROM A RIGOROUS SCIENTIFIC APPROACH

Trials to analyze broiler response to AVIMATRIX were conducted in four independent research facilities across Europe, using a total of 5,055 birds fed mash or pelleted diets based on industry standard. Birds were fed three dosage rates of AVIMATRIX in comparison with a non supplemented control group.

The use of AVIMATRIX at 500 g/t allowed greater growth with a 4 percent improvement over the control groups results (Figure 6).

Figure 6. Effect of AVIMATRIX on Average Daily Gain Across Four Research Studies



The active compounds in AVIMATRIX are homogeneously embedded in a protecting matrix using Novus Premium Blend Technology. This allows their progressive release in the gut up to the distal part, in order to influence the microflora balance in the entire digestive tract. In comparison, free acids are expected to be active only in the crop and the gizzard (Figures 1, 2).

Figure 1. Release Profile of Active Ingredients (AI) in Feed and Digesta. (on dry matter basis)

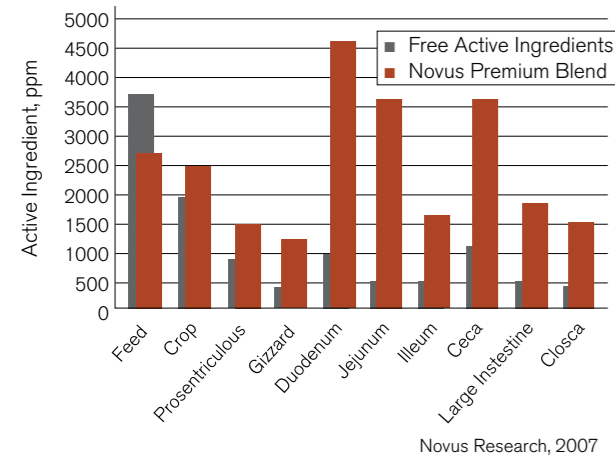
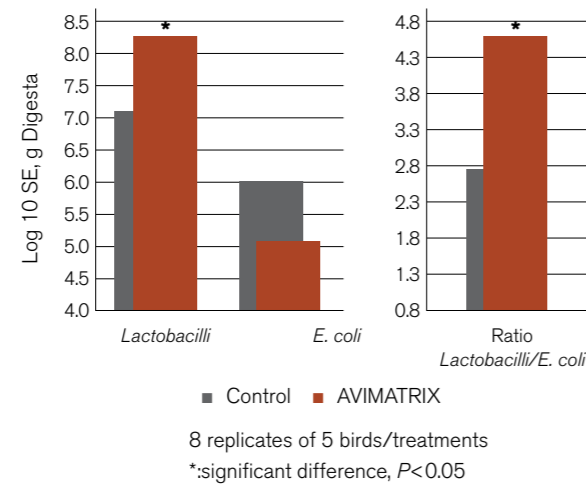


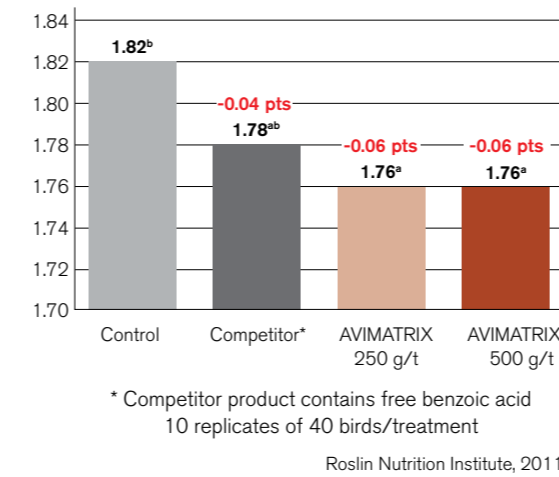
Figure 2. Positive effect of AVIMATRIX on the ileal microbiota balance of broilers.



Better feed conversion ratio, particularly in challenged environments, is critical. In comparative trials against competitive products, Novus Premium Blend Technology demonstrated a clear improvement in feed conversion ratio when compared to the other treatments ( $P < 0.05$ , Figure 4).

Only AVIMATRIX resulted in a significant improved feed efficiency when compared to non supplemented birds.

Figure 4. Effect of dietary treatment on FCR (0-42 days).



## KEY BENEFITS:

Targets the microflora up to the distal part of the gut to support a better performance

Better bird production efficiency, particularly in challenged poultry operations

Proven from a rigorous scientific approach

Excellent handling and mixing properties

Trials demonstrated a reduction in litter moisture in AVIMATRIX groups versus the control. This improved litter quality showed a direct impact on the scoring of foot lesions with 49 percent of birds tested showing no lesions, and 48 percent showing only mild lesions (Figure 5).

Figure 5. Effect of AVIMATRIX on Litter Quality and Foot Pad Lesion Score

