

Amlan has answered the call for the best solution to naturally support the production efficiency of poultry. NeutraPath® is a proprietary blend of essential oils, medium-chain fatty acids and a thermally processed mineral. The synergistic formula was designed to have multiple modes of action that enhance intestinal health, improve feed efficiency and reduce mortality of necrotic enteritis challenged birds.

# SUMMARY RESULTS FROM CHALLENGE STUDIES 0-28 DAYS

Detailed results on following page

BMD	N	eutraPath	
16%	MORTALITY	13%	
1.71	FCR	1.70	
0.78	WEIGHT GAIN	0.80	
131	EPEF*	146	

\*EPEF or "European Performance Efficiency Factor" is an index used in many countries to standardize and compare broiler results from different flocks or regions by taking into account Feed Conversion, Mortality and Daily Gain.

## **KEY BENEFITS OF NEUTRAPATH**

#### **Helps Maintain Gut Health & Structural Integrity**

- · Binds toxins that break down enterocyte tight junctions, reduces the incidence of "Leaky Gut"
- Supports tight junction integrity, prevents pathogens, toxins, and other antigens from entering host circulatory system
- Reduces pathogen and toxin entry into circulatory system, supports overall good health and productivity

#### **Bactericidal & Bacteriostatic Effect**

- · Impairs bacterial cell functions
- · Compromises bacterial cell integrity
- Prevents bacteria from replicating
- · Specific binding of pathogenic bacteria

### **Virulence Factor Neutralizer**

- · Binds toxins produced by pathogenic bacteria
- Binds quorum-sensing (bacteria communication) molecules
- Downregulates pathogenic bacteria gene expression



LOAD & COLONIZATION



IMPROVES
PERFORMANCE OF
NECROTIC ENTERITIS
CHALLENGED
BROILERS

3



IMPROVES
INTESTINAL
HEALTH & REDUCES
MORTALITY

Independent trials exhibit NeutraPath's ability to improve performance in an antibiotic free environment. Four trials with similar designs were conducted at Southern Poultry Research; average results across the trials are shown below. Birds were challenged with *Clostridium perfringens* at 2 weeks of age and grown to day 28.

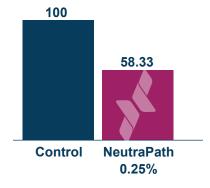
	NE MORTALITY	FEED CONVERSION	GAIN (KG)	EPEF*
		D0-28	D28	
Unchallenged Control	0.25	1.57	0.913	189.88
Challenged Control	34.95	1.97	0.603	66.73
BMD	15.64	1.71	0.823	131.25
NeutraPath	13.22	1.70	0.803	145.83

<sup>\*</sup>EPEF or "European Performance Efficiency Factor" is an index used in many countries to standardize and compare broiler results from different flocks or regions by taking into account Feed Conversion, Mortality and Daily Gain.

#### **REDUCED BACTERIAL LOAD IN CECA**

# REDUCED GUT PERMEABILITY

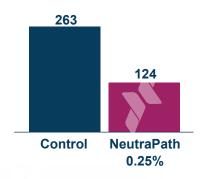




S. Typhimurium Bacterial Load Log<sub>10</sub> cfu/g







University of Arkansas (2019)



Use alone or with other Amlan products in synergistic combinations for optimal health and performance results.







