Antibiotic Alternatives at a Glance

The World Health Organization promotes a proactive approach to reduce the need and use of antibiotic growth promoters in animals, especially within the classes of antibiotics used in human medicine. Many organic poultry producers are also investing in antibiotic alternatives. So how do the leading antibiotic alternatives work when it comes to safeguarding bird health?

**BOOSTING BENEFICIAL MICROBES**

- **Effectively control pathogen levels in the gut, increasing digestibility, minerals and vitamins absorbability, and more.**
  - **How They Work:** May improve metabolism and growth.
  - **How They Work:** Provides a more balanced microbiota by excluding pathogenic microbes.
  - **How They Work:** Shown to improve body weight gain and feed conversion ratio.

**PROMISING ADDITIVES**

- **Improves efficiency in the digestive system. Examples include Phytase, β-glucanase, and xylanase**
  - **How They Work:** May improve nutrient digestibility and performance.
  - **How They Work:** Helps poultry maintain intestinal health, improving livability, feed conversion ratios, weight gain.

- **Suppresses microbial activity by blocking the function of crucial microbial enzymes. Examples include Carboxylic acids such as lactic acid, propionic acid, acetic acid, and formic acid**
PLANT POWER

- Cinnamon
- Anise Seed
- Thyme
- Sage
- Pepper
- Turmeric

- Thyme Oil
- Cinnamon Bark Oil
- Caefric Acid

- Mannose
- Galactose
- Derivatives from plants such as conifers.

Reduces pathogenic microbe and parasite populations due to the bioactive components such as tannic acid and saponins. Reduce gut inflammation.

PFA
Increasing PFA levels is shown to improve nutrient digestibility.

SOURCES & INFORMATION

This research comes from a 2022 paper published in Poultry Science®


Lab 2 Farm is an infographic series highlighting the latest scientific research from the Poultry Science Association’s two peer-reviewed journals, Poultry Science® and The Journal of Applied Poultry Research. This series serves to break down the science, providing insight to all individuals working in the poultry industry and poultry sciences.