

AMINO ACIDS FOR

POULTRY

Tryptophan

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Tryptophan

Overview

ESSENTIAL A.A

*Cannot be synthesized
by the body itself*

Trp.

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PHYSIOLOGICAL

Functions | Poultry

Tryptophan helps poultry increase their growth performance through increasing appetite, feed efficiency, and feed utilization.

It helps poultry synthesize protein for body demand and reduction in stress response and aggressive behavior.

Tryptophan is also a precursor for the synthesis of melatonin, a hormone that regulates the sleep-wake cycle and influences various physiological functions, including immune function and stress response, in poultry.

It is a precursor for the synthesis of serotonin, a neurotransmitter that regulates mood, appetite, and behavior in birds. Adequate levels of serotonin contribute to improved feed intake, growth performance, and overall well-being of poultry.



Signs Of Deficiency

- Lead to slower growth rates in poultry.
- Poor feather quality, including decreased feather density or abnormal feather growth.
- Decrease feed intake or changes in feeding behavior.
- Decrease egg production or poor egg quality.
- Exhibit increased aggression or stress-related behaviors.
- Can compromise the immune system in poultry, making them more susceptible to diseases and infections.

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TOLERANCE to high intake

Excessive tryptophan can cause neurological effects in poultry, similar to those seen in humans. This includes sedation, drowsiness, and even neurological disorders.

Excessive tryptophan intake can lead to hormonal imbalances, affecting poultry health and behavior.

Also High levels of tryptophan can also interfere with the absorption of other amino acids, leading to imbalances in protein synthesis and potentially affecting growth and development.

High levels of tryptophan may cause digestive upset in poultry, leading to diarrhea or other gastrointestinal issues.



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Benefits

to the bird

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Broilers

Improved Growth Rates
Enhanced Feed Efficiency
Development of lean
muscle tissue
Uniformity & Consistency
Health & Immune Support

Parent Stock

Support optimal fertility
rates, hatchability of eggs
Enhanced Egg Production
Better Egg Quality
Long-term Productivity

Laying hens

Increased Egg Production
Improved Feed Efficiency
Enhanced Egg Quality
Better Reproductive
Performance
Stress Reduction

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