



Supplant™ D hits three targets to support broiler production

Supplant™ D phytogenic feed additive for broilers targets gut homeostasis by addressing issues caused by inflammation or oxidative stress. It supports digestive enzyme production for optimal broiler performance and ROI potential.

PMI research shows Supplant™ D supported broiler weight gain and feed conversion. When compared to the control diets, the results of two 42-day PMI trials showed that Supplant™ D supported:^{1,2}

- **An average of 3.6% improvement in body weight**
- **Average of 2.5% improvement in feed conversion rate (FCR)**

Another trial showed that, compared to control broilers, broilers fed Supplant™ D had:³

- **Similar day 35 body weights compared to the negative control**
- **Significant improvement in FCR compared to the negative control**

¹ Evaluation of Supplant in a used litter challenge study

² Blue et al 2020

³ PMI-20-1, Evaluation efficacy of Supplant with or without anticoccidial chemicals mitigation

Selecting the right target

Plant compounds, or phytochemicals, lead to physiological responses in animals; birds have receptors along the gut and throughout the body that interact with these phytochemicals. Targeting a specific physiological response in the animals, called a host-mediated response, supports product efficacy and consistency of results. Supplant™ phytochemicals are selected based on the target receptors to enhance specific responses such as digestive enzyme secretion or gut antioxidant status to support consistent performance results.

Supplant™ D supports three functions to optimize broiler performance: anti-inflammation, anti-oxidation and digestive enzyme production. An activated immune system in the birds will require as much as 30% more energy. This increased energy need steals from performance potential. Supplant™ D was designed to work in the gut through an anti-inflammatory response at the cellular level, which supports gut homeostasis. A balanced gut environment positively impacts broiler performance with better energy utilization for growth.

Free radicals in the gut can cause cellular damage and drag down digestive efficiency. Supplant™ D supports the production of antioxidant enzymes to optimize the balance between free radicals and antioxidants and minimize the risk of cellular damage.

Supplant™ D supports the production of enzymes that break down dietary components to optimize nutrient availability and feed efficiency.

Supplant™ D harnesses the connection between plants and animals to deliver performance benefits from phytochemicals:

- Receptors interact with phytochemical plant compounds.
- Targeted receptors are different by species as well as production stage.
- Each receptor elicits a specific metabolic action.
- Targeting a specific action improves product efficacy and consistency.

Reaching the target

Supplant™ D is encapsulated to maintain the integrity of the phytochemical compounds and ensure they reach the targeted site in the gut. Encapsulation ensures the phytochemicals are not damaged by time, heat or digestion to deliver high-quality, consistent performance results.

Look closer at PMI's unique approach to phytochemicals at pmiadditives.com/supplant