

The Phosphate Opportunity



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It is no secret that poultry feed costs are on the rise and presenting challenges to feed formulation. Among the many ingredients needed to fuel bird performance, one is especially expensive: phosphate. Due to global conflict and shipping challenges, the cost of rock phosphate is rising. This ingredient is a driving component of the high feed costs globally across the industry. However, phosphate is a necessary nutrient for bird performance and for preventing skeleton developmental abnormalities. Because of this, it cannot be cut out to lower diet costs. Can record high phosphate prices present an opportunity for innovation in poultry diets? Yes, the solution can alleviate soaring prices and improve productivity and animal wellbeing.

Phytase is the Key to Performance

The need to drive down costs while still providing essential nutrients to birds has opened the door for an innovative feeding strategy: the phytase exogenous enzyme. To capitalize on this strategy and lower bird production costs, we need to:

- Understand and maximize the availability of calcium (Ca) and phosphorus (P) from feed ingredients
- Feed calcium and phosphorous closer to the requirements of today's modern genetics for optimal performance and skeletal mineralization

The most economical dose of phytase for your flock will depend on the price of phytase, inorganic phosphate and the digestible calcium and phosphorous released from phytase. Considering the current economic challenges, the optimum dose is greater than 2000 FTU.

Feeding phytase at this higher level equips the bird to hydrolyze phytate at a quicker rate while having more minerals, amino acids and energy available. When in the diet, phytase at higher levels buys more space requiring fewer high-quality raw materials for the same level of performance. With fewer inputs for the same output, feed cost decreases.

Modern broilers' growth and performance have changed from broilers in the past. We can also hypothesize that the mineral requirements of the modern broiler have also evolved. Re-evaluating the Ca and P levels in the diet is another key strategy to reduce the dependence on rock phosphates. In turn, this helps improve the sustainability of broiler production.

Including higher levels of phytase and optimal levels of Ca and P in the diet helps improve animal wellbeing. Birds have more free energy and minerals to devote to bone mineralization and skeleton growth. This increase in energy is critical because a healthy skeleton is the foundation for performance. When the skeleton develops correctly and keeps pace with growth, the bird can avoid lameness and exhibit better muscle production. Additionally, phytase and reduced levels of Ca and P in the diet, especially in the latter phases, can be used to reduce the inclusion of minerals, which improves water utilization. When birds require less water, this reduces wet litter, a more suitable environment for paw pad health and less foot pododermatitis.

You Can Feed Phytase to Improve Health and Reduce Cost



Feeding elevated levels of phytase lowers costs and improves animal performance, and producers embracing this strategy will see tangible benefits. This method allows for more savings with a better margin of safety and reduced animal wellbeing concerns. The phosphate opportunity can help you navigate the feed formulation dilemma, feed higher levels of phytase to drive down your feed costs and enhance animal productivity.

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