Quantum Blue is specifically designed to unlock maximum value from phytate to release all the inherent nutrition from your feed.

Quantum Blue can be flexibly applied to achieve your production goals:
- Enhance performance; proven to improve FCR by ~4 points in broilers
- Potential to reduce feed cost per tonne by up to $20/tonne depending on the market

Our phytase technology takes productivity to another level. The quantum level

UnLock Nutritional Value from Phytate in Feed

Phytate: The primary source of phosphorus in most feeds and a target for enhanced nutrient utilisation

Chickens are limited in their ability to break down phytate efficiently. The nutrients within and bound to phytate are therefore unavailable to the animal, reducing feed efficiency and increasing nutrient excretion.

Estimates suggest that wasting the nutritional power associated with phytate could be costing the global poultry industry over $1 billion every year.

Most people (approximately 90%) use a phytase to improve feed efficiency and, in general, we are seeing a trend towards higher usage per tonne treated. However, the benefits of a phytase come from not only the dose applied but also from the use of a product that is optimised for phytate breakdown. When taken together, these qualities ensure that you can make every molecule matter.

Zn
Ca

Because Every Molecule Matters

www.abvista.com
AN ENHANCED E. COLI PHYTASE, SPECIFICALLY DESIGNED TO UNLOCK NUTRIENT POTENTIAL FROM PHYTATE

Many phytases release phosphorus, but Quantum Blue is the phytase that goes further, primarily due to its high affinity for phytate.

Phytate varies with raw materials. If this is not accounted for in formulation, it leads to greater variation in dietary phytate content. AB Vista Feed Quality Service uses near infrared (NIR) technology to provide analyses of the phytate-P level in raw materials and finished feeds.

Quantum Blue is proven to deliver more available phosphorus

By breaking down phytate and lower phytate esters efficiently, Quantum Blue (1500 FTU/kg) works with the animal to release inositol and the valuable nutrients that are impaired by or bound to phytate.

Phosphorus requirements are dependent on species

Note that there needs to be enough substrate available for the enzyme to work on.

500 FTU/KG ONLY RELEASES THE FIRST TWO PHOSPHATES PROVIDING A 1.3 POINT FCR BENEFIT

You could be wasting 60% of the value within and bound to phytate by applying low levels of a sub-optimal phytase.

Quantum Blue superdosing reduces phytate and the lower esters to release valuable nutrients

Inositol plays a key role in cell survival and growth, central nervous system development and function, bone structure and formation, metabolism, and reproduction.
MAKES THE MOST OF YOUR FEED

QUANTUM BLUE REDUCES THE NEED FOR EXPENSIVE INGREDIENTS BY UTILISING EVERY NUTRITIONAL ELEMENT OF PHYTATE

Unlike other phytases, Quantum Blue efficiently unlocks all six phosphorus molecules during digestion, releasing the inherent nutrition contained within feed. By maximising phytate breakdown, Quantum Blue liberates nutrients – these can be used to increase animal performance, or for a feed cost reduction. Together, these crucial components help contribute to a sustainable farming industry.

Sustainable production

Feed cost savings

Better performance

P and Ca
Trace minerals
Amino acids
Energy

Maximum phytate breakdown

HIGH PHYTATE AFFINITY
Quantum Blue breaks down phytate faster, even at low substrate levels

Non-coated
- Ensuring rapid release in the animal

Quantum Blue works 4x faster than a coated phytase

Intrinsic thermostability
- Proven to survive high conditioning temperatures up to 90 °C

Source: Kolding Institute, 2015

Source: AB Vista Internal, 2016

Source: Internal data, 2016
Active at the correct pH where phytate is soluble

• Enabling maximum enzyme productivity

High stability in the digestive tract

• Facilitating passage through harsh conditions to reach the site of activity

Source: AB Vista Internal, 2016

Source: AB Vista Internal Data, 2016–2
Quantum Blue is proven to deliver consistent nutrient availability, maximising feed cost savings.

By applying Quantum Blue at 1500 FTU/kg on top of a standard diet, you can increase animal performance by 4 points FCR* in broilers.

1000 FTU/kg** applied with a full matrix has been shown to deliver up to $20/tonne cost savings***

* FCR: feed conversion ratio
** FTU: phytase unit – enzyme required to release 1 µmol of monocalcium phosphate (MCP) in one minute at pH 5.5 and 37°C
*** Market dependent