TAKE YOUR PRODUCTIVITY TO ANOTHER LEVEL.
THE QUANTUM LEVEL

- 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

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BECAUSE EVERY MOLECULE MATTERS

ABVista
www.abvista.com

OUR PHYTASE TECHNOLOGY TAKES PRODUCTIVITY TO ANOTHER LEVEL.
THE QUANTUM LEVEL

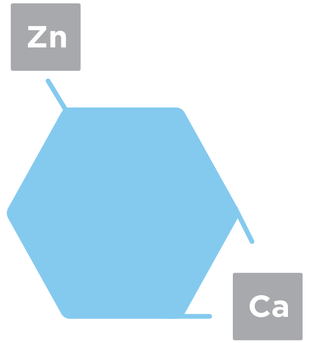
quantumblue
BECAUSE EVERY MOLECULE MATTERS

ABVista
www.abvista.com

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.



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.

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

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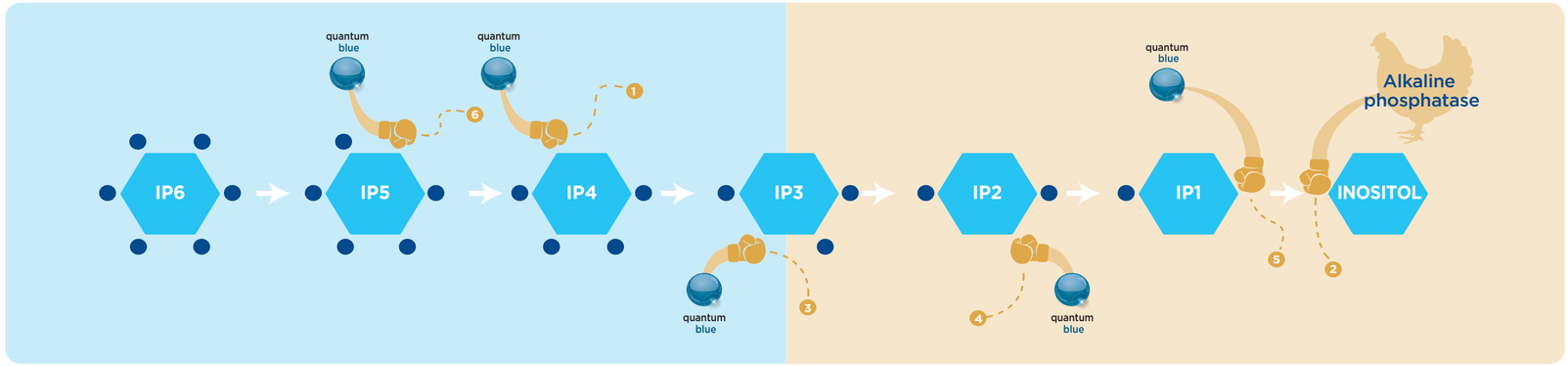
AN ENHANCED *E.COLI* PHYTASE, SPECIFICALLY DESIGNED TO UNLOCK NUTRIENT POTENTIAL FROM PHYTATE

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

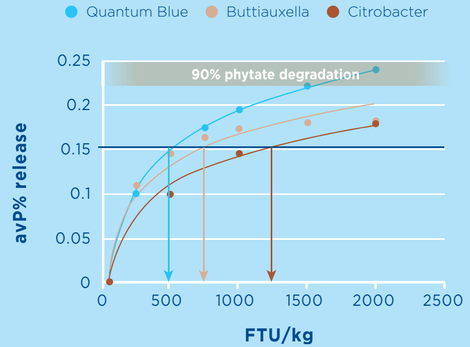
500 FTU/KG ONLY RELEASES THE FIRST TWO PHOSPHATES PROVIDING A 1.3 POINT FCR BENEFIT

MAXIMUM PHYTATE BREAKDOWN WITH QUANTUM BLUE AT 1500 FTU/KG (SUPERDOSING) PROVIDING A 3–4 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.



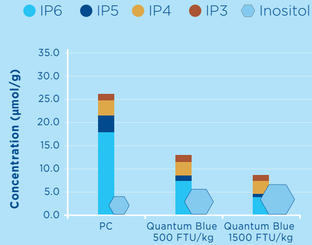
Quantum Blue is proven to deliver more available phosphorous



Suppliers' published figures

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.

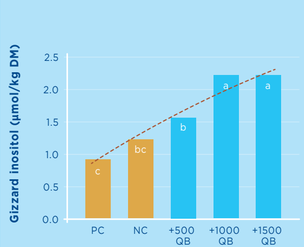
Quantum Blue superdosing reduces phytate and the lower esters to release valuable nutrients



Point in time measure of gizzard phytate of 21-day-old broilers

Inositol plays a key role in cell survival and growth, central nervous system development and function, bone structure and formation, metabolism and reproduction.

Quantum Blue increases gizzard inositol which is correlated to improved broiler performance



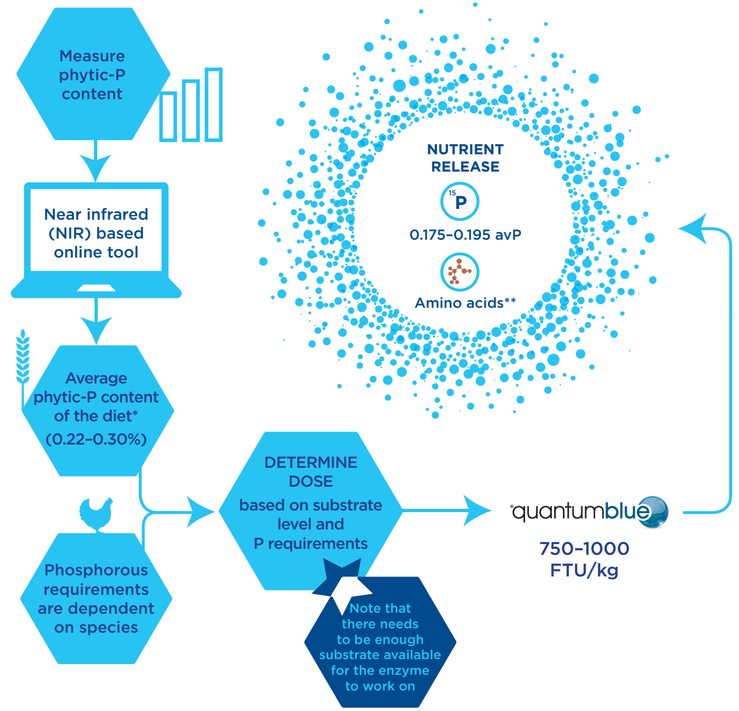
Walk *et al.*, 2014

SHED LIGHT ON YOUR PHYTATE CONTENT USING NEAR INFRARED (NIR) TECHNOLOGY

Phytate varies within 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 analysis of the phytate-P level in raw materials and finished feeds.

This allows for application of the maximum dose of phytase dependent on dietary phytate-P level to provide the greatest financial return, whilst ensuring this is achieved without risking performance or welfare problems due to phosphorus deficiency.



*Based on average from AB Vista global database with over 16,000 samples
**Amino acid recommendations may vary by phytase dose

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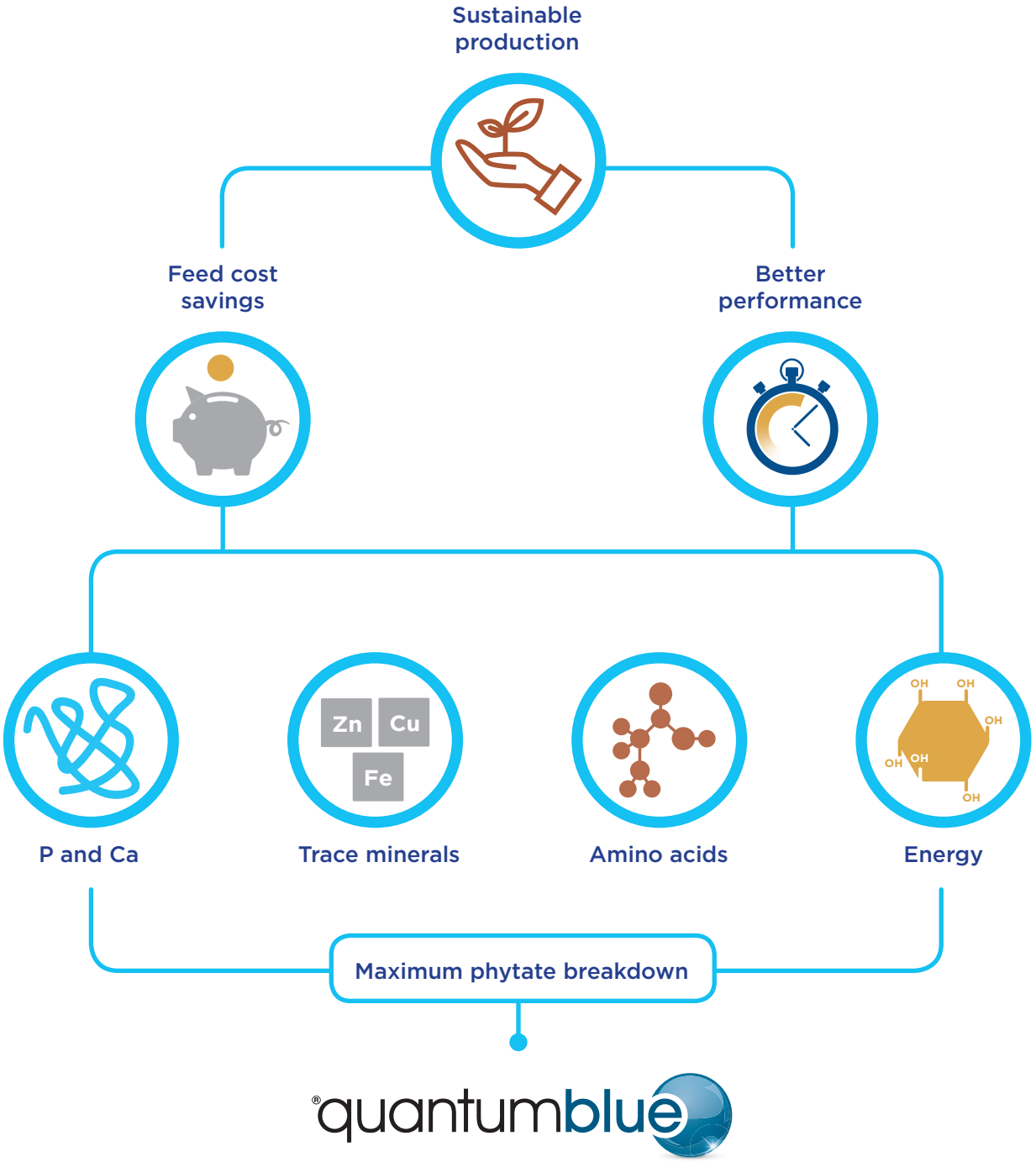
MAKES THE MOST OF YOUR FEED

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.



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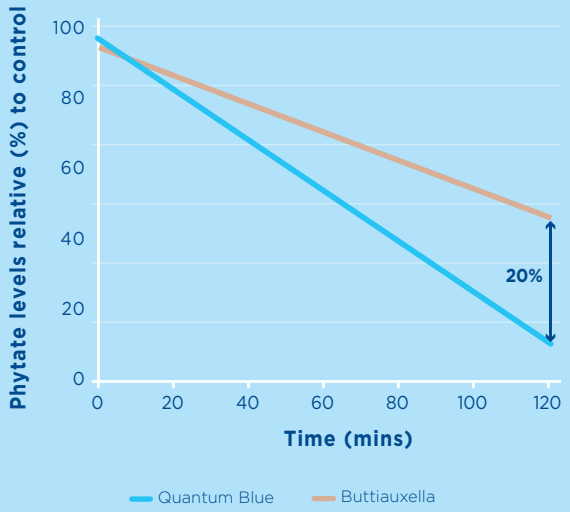
HIGH PHYTATE AFFINITY

quantumblue®

HAS THE CHARACTERISTICS TO ACHIEVE MAXIMUM PHYTATE BREAKDOWN

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



Source: AB Vista Internal, 2016

Non-coated

- Ensuring rapid release in the animal

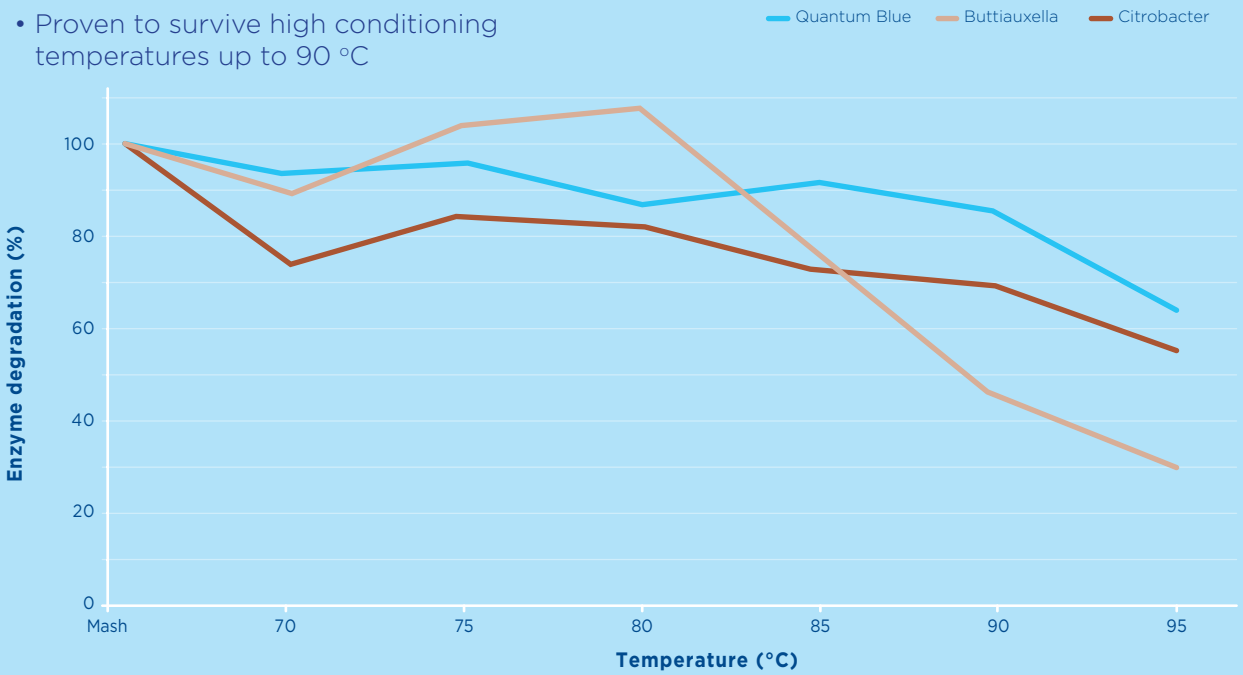
Quantum Blue works

than a coated phytase

Source: Internal data, 2016

Intrinsic thermostability

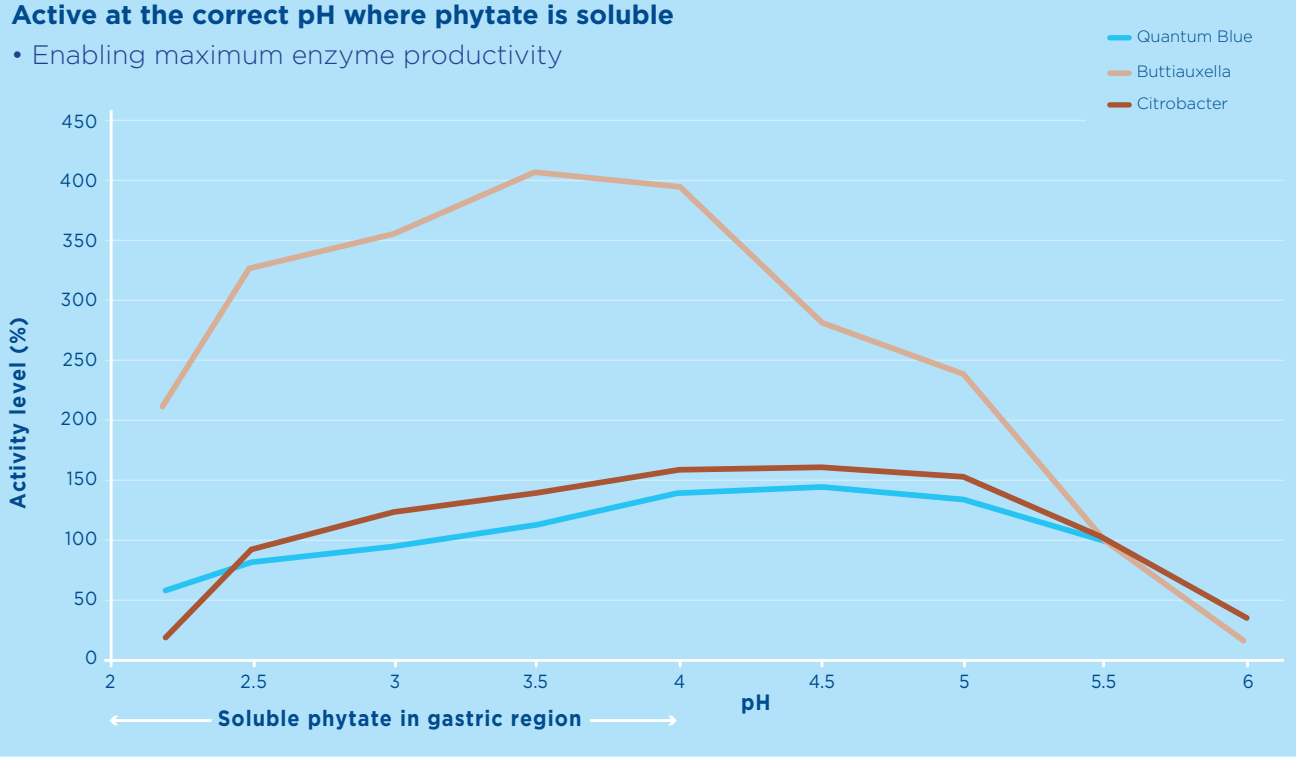
- Proven to survive high conditioning temperatures up to 90 °C



Source: Kolding Institute, 2015

Active at the correct pH where phytate is soluble

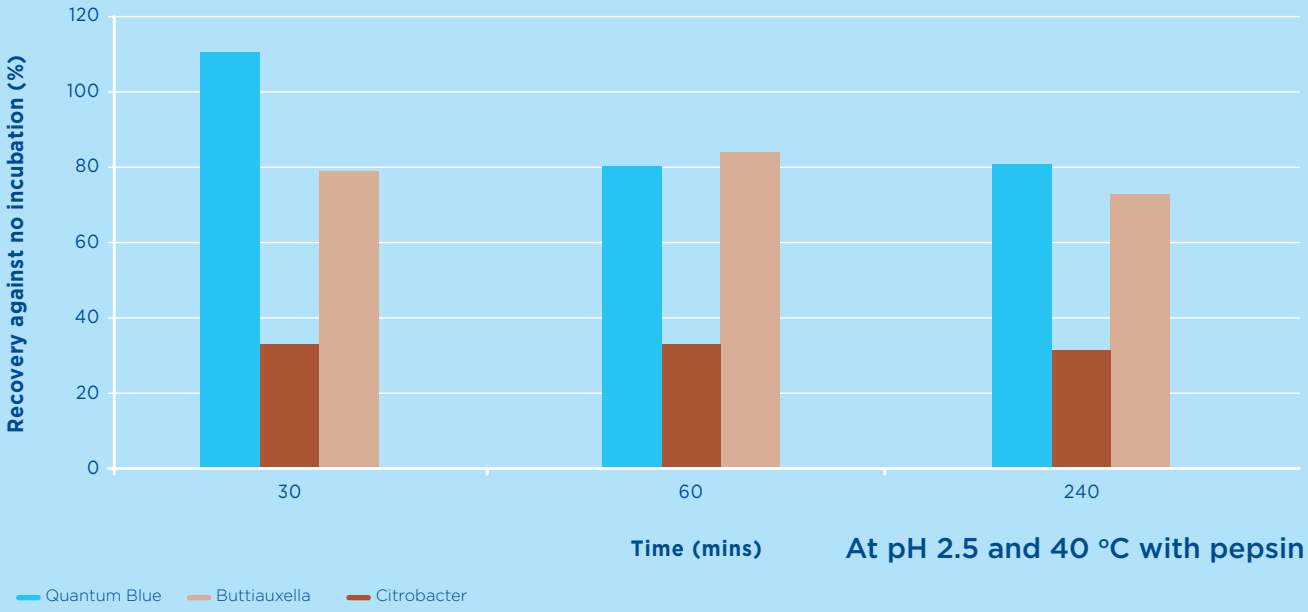
• Enabling maximum enzyme productivity



Source: AB Vista Internal, 2016

High stability in the digestive tract

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

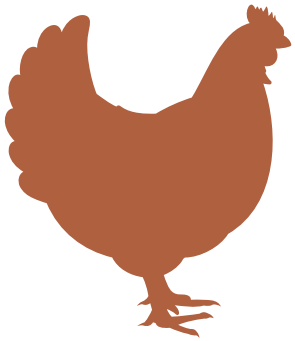


Source: AB Vista Internal Data, 2016–2

quantumblue® CAN BE FLEXIBLY APPLIED TO ACHIEVE YOUR PRODUCTION GOALS

PERFORMANCE BENEFITS

By applying Quantum Blue at 1500 FTU/kg on top of a standard diet, you can increase animal performance



4 points FCR* in broilers

COST SAVINGS

Quantum Blue is proven to deliver consistent nutrient availability, maximising feed cost savings

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 37ºC

*** Market dependent