# THE MOST HEAT RESISTANT XYLANASE GENERATES THE MOST ENERGY





## MAXIMISE NSP UTILISATION TO IMPROVE FCR AND REDUCE COSTS

- Energy is the most expensive nutrient in the diet 100 Kcal/Kg currently costs approximately US\$10/tonne
- Using NSPases creates an opportunity for nutritionists and feed producers to maximise energy utilisation from the diet

### WHY CHOOSE XYLANASE?

- Approximately 45% of the NSP composition of corn and wheat-based diets consists of arabinoxylans, making them the largest NSP component in raw materials
- Xylanase is the NSPase that breaks down arabinoxylans into beneficial arabinoxylan oligosaccharides (AXOS), helping to improve animal performance



NSP content in broiler wheat-soy diets





### **ECONASE XT - THE XYLANASE THAT DELIVERS OPTIMAL** NSP BREAKDOWN FOR IMPROVED ENERGY UTILISATION

A beta 1-4 endo-xylanase that optimises the breakdown of NSP, reducing its anti-nutritive effects and improving the energy utilisation of monogastric diets

\* Wheat and barley diets

# ECONASE XT INFLUENCES NUTRIENT DIGESTION TO INCREASE USABLE ENERGY

#### In broilers, Econase XT:

 Reduces digesta viscosity Improves nutrient digestibility

### THE PREBIOTIC EFFECT OF ARABINOXYLAN OLIGOSACCHARIDES (AXOS)

- Econase XT influences intestinal fermentation by producing favourable prebiotic xylo-oligomers in the lower GI
- These xylo-oligomers can increase volatile fatty acid production, shift the microbial profile and provide valuable energy for intestinal cells



 Influences intestinal fermentation

Fermented by gut microbiota. Growth of lactate and butyrate - producing bacteria

## WHY DOES AXOS MATTER?

### XYLANASES DIFFER IN THEIR ABILITY TO BREAK DOWN ARABINOXYLANS

- Different xylanases produce different AXOS profiles
- Xylose (X1) can have a negative effect on animal performance and energy utilisation[Shuttle et al 1991] while X3-X7 can have a positive effect



### Econase XT has been shown to produce beneficial types of AXOS for optimal performance

## THE ONLY XYLANASE THAT IS INTRINSICALLY THERMOSTABLE

### ECONASE XT SURVIVES THE RIGOURS OF THE FEED CONDITIONING PROCESS

- Pelleting conditions vary dramatically between feed mills and within the same feed mill
- Selecting a xylanase that can withstand the rigors of the feed conditioning process is critical to ensure consistent performance improvements





Econase XT was shown to give the largest benefit in FCR vs competitor products



surviving enzymatic breakdown in the proventriculus and gizzard

Source: AB Vista



Source: AB Vista Trial Report 208

## ECONASE XT IS PROVEN TO BOOST POULTRY PERFORMANCE

Econase XT is the optimal xylanase for maximising feed utilisation.

### **FIVE PROVEN BENEFITS IN POULTRY**



Source: AB Vista Trial Report 406 Numbers represent absolute values for performance variables

16000

FCR

(g:g)

Source: AB Vista

# ECONASE XT IS SIMPLE TO MEASURE AND DETECT

Analysis of Econase XT is easy and can be measured across a range of feeds. This helps to ensure that the full benefits of using Econase XT are realised.

### QUICKSTIX

- A qualitative test that detects the presence of Econase XT in feed
- Reliable confirmation in the feed mill within 5 minutes
- No lab expertise required
- Only the active enzyme is detected



### QUANTIPLATE

- A quantitative test that measures the activity of Econase XT in feed
- Quick and easy to conduct, reliable results within 4 hours
- Lab equipment required
- Only the active enzyme is detected



#### Optimal NSP breakdown to deliver FCR and cost reduction



The only intrinsically thermostable xylanase up to 95°C

MAXIMISE DIETARY ENERGY UTILISATION WITH ECONASE XT

Effective across a wide range of feed ingredients

Easily detected and measured in feed

Proven results in poultry and swine

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