



Axtra[®] XAP

THE ULTIMATE SOLUTION FOR FLEXIBLE
POULTRY DIET FORMULATION

Danisco Animal Nutrition

Axtra® XAP

A unique, high performance enzyme combination to improve the performance of modern diets

Increased profitability

- Radical reduction of net feed cost ~\$9/tonne through optimized nutrient availability, offering flexibility in feed formulation
- Improved feed utilization can save ~\$80,000 - \$100,000 per million birds produced

Innovative solutions

- Established heritage of producing innovative, bioefficient xylanase, amylase and protease combinations that deliver excellent return-on-investment (ROI)
- Superior product characteristics – thermostable up to temperatures of 95°C/203°F, free flowing and dust free

The challenge

Profitability of poultry production is tied closely to controlling feed costs. In markets where easily available, the use of high fibre feed ingredients can substantially reduce feed costs. However, adding these ingredients makes the diet more nutritionally complex, increasing fibre and protein anti-nutrients, as well as providing more indigestible protein and amino acids, which in turn can lead to reduced animal performance and increased environmental pollution.

Grain by-products have a higher concentration of anti-nutrients than their original grains. For example, a 10% inclusion of rice bran or corn distillers dried grains with solubles (DDGS) into a corn-soy poultry diet equates to a 20% rise in crude fibre and an 11-25% rise in arabinoxylans. The inclusion of these by-products also reduces the inherent digestibility of dietary protein and amino acids, and reduces starch levels and its digestibility in the diet. The bird tries to compensate for these challenges by increasing endogenous secretions and thereby maintenance energy and protein requirements are increased. These detrimental factors can more than offset the economic gain achieved by the inclusion of low cost by-products in feed formulations.

Our solution

An optimized combination of xylanase, amylase and protease, Axtra® XAP meets the current market need for cutting feed costs by increasing energy efficiency and improving bird performance in both corn-based and more complex diets.

Xylanase

- Targets soluble and insoluble arabinoxylans in dietary fibre - releasing encapsulated nutrients
- Particularly suitable for corn-based complex diets



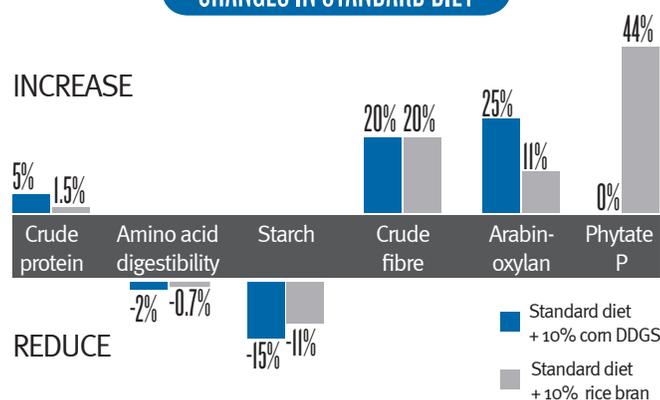
Amylase

- High bio-efficacy to maximize starch digestibility, providing energy to fuel growth

Protease

- Targets storage proteins improving amino acid digestibility and starch accessibility
- Reduces anti-nutrients e.g. trypsin inhibitors and lectins to limit endogenous losses

CHANGES IN STANDARD DIET



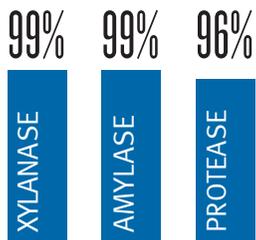


The evidence

Robust testing across a variety of corn-based and more complex diets proves that Axtra® XAP can achieve radical feed cost savings without compromising bird performance. Expect an average FCR improvement of 5% overall or 9 points = ~\$80,000 per million birds produced. Based on a meta-analysis of six Axtra® XAP broiler trials, all containing phytase dosed at 500 FTU/kg feed.

- Trials against other multi-enzyme products also showed that Axtra® XAP improved the cost per kg gain by 3% versus a mixed control, while the competitor products were unable to show any cost per kg improvement.
- In addition to its performance and digestibility benefits, Axtra® XAP:
 - ♦ is free flowing and dust free, making it safe and convenient to handle
 - ♦ can be added via premix in a concentrated form or added directly to the feed via a dilute product premixture
 - ♦ incorporates Thermo Protection Technology (TPT) from Danisco Animal Nutrition, which ensures enzyme recovery and heat resistance during the pelleting process at temperatures of up to 95°C (203°F)

PELLET STABILITY



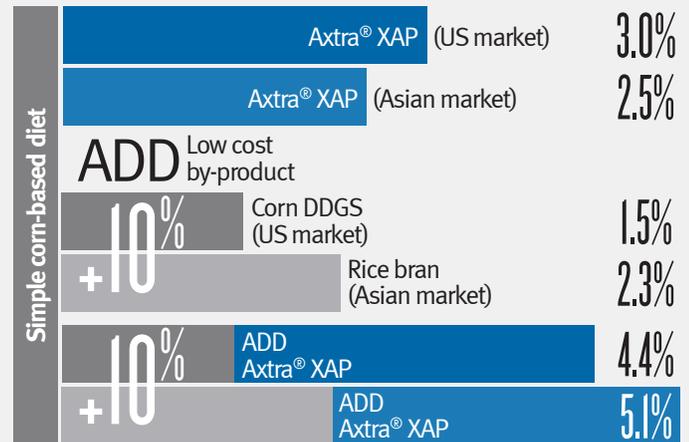
XAP.DK.STAB.10

EXCELLENT

96%+
recovery (% of mash activity)

95°C (203°F) pelleting

FEED COST SAVINGS



Average additional feed cost saving with Axtra® XAP **+2.8%**

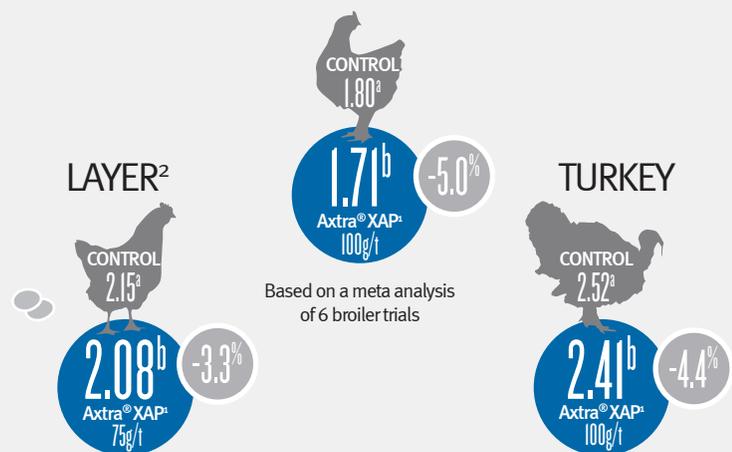
ENERGY IMPROVEMENTS



XAP.NZ.B.11

FEED EFFICIENCY

BROILER



Based on a meta analysis of 6 broiler trials

XAP.SPL.21

XAP.UK.T.19

^{ab} values without a common superscript are significantly different (P<0.05)

¹ Axtra® XAP 101

² Feed intake/egg mass

How best to use

Axtra® XAP has been extensively researched to fit a wide range of corn-based and more complex diets for broilers, turkeys and laying hens. Please contact us if you require more information on how to get the best value from your particular formulation.

Higher feed cost savings are achievable by using Axtra® XAP in combination with our phytase products to maximize nutrient release.

For more information speak to your Danisco Animal Nutrition representative to uncover the true potential for feed cost savings in your diets.

Product form

Axtra® XAP 101 TPT

A light tan, fine granular product.

Packed in 25 kg multi-wall polyethylene lined paper bags, or 1000 kg bulk (tote) bags.

Recommended usage rate of 0.05-0.1 kg/tonne (0.005-0.01%) of finished feed.

Axtra® XAP 102 TPT

A light tan, fine granular product.

Packed in 25 kg multi-wall polyethylene lined paper bags, or 1000 kg bulk (tote) bags.

Recommended usage rate of 0.25-0.5 kg/tonne (0.025-0.05%) of finished feed.

Axtra® XAP 103 TPT

A light tan, fine granular product.

Packed in 25 kg multi-wall polyethylene lined paper bags, or 1000 kg bulk (tote) bags.

Recommended usage rate of 0.1-0.2 kg/tonne (0.01-0.02%) of finished feed.



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