

Reduce Feed & Production Costs Through
Optimized Amino Acid Availability

CIBENZA[®] DP100

NOVUS[®]

SOLUTIONS SERVICE SUSTAINABILITY™

WHAT IS CIBENZA[®] DP100?

CIBENZA[®] DP100 protease enzyme from Novus is an intrinsically heat stable, potent protease enzyme feed additive that optimizes the digestibility of proteins in poultry feed ingredients.

Benefits in

..... Broiler and Layer Diets



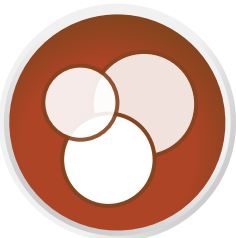
Reduced feed cost by:

- *Lowering inclusion level* of costly protein sources
- Optimizing use of *lower digestibility feed ingredients*
- Optimizes amino acid digestibility and *increased metabolizable energy*



Better gut integrity:

- *Improved* protein digestibility
- Improved *energy digestibility*
- Reduction in hindgut fermentation and *reducing nitrogen waste*




Ingredient risk management through:

- *Minimizing effects of anti-nutritional factors (ANF)* in feed ingredients by directly degrading them or by increasing their exposure to endogenous enzymes

CIBENZA® DP100

Characteristics

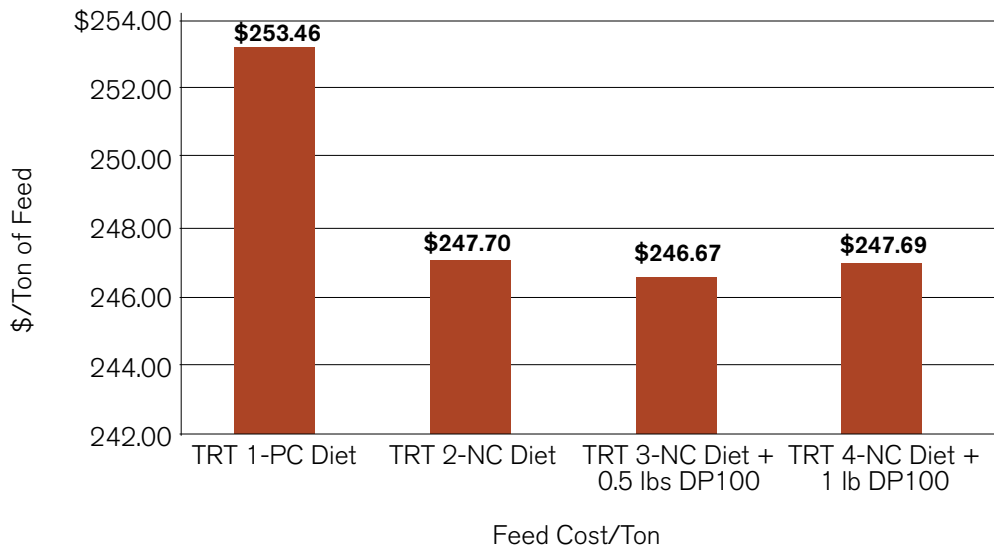


- Improves digestibility of all feed protein sources
- Protease activity: 600,000 units/gram (Novus standard procedures)
- Intrinsically heat stable
- Does not affect phytase activity

An Economic

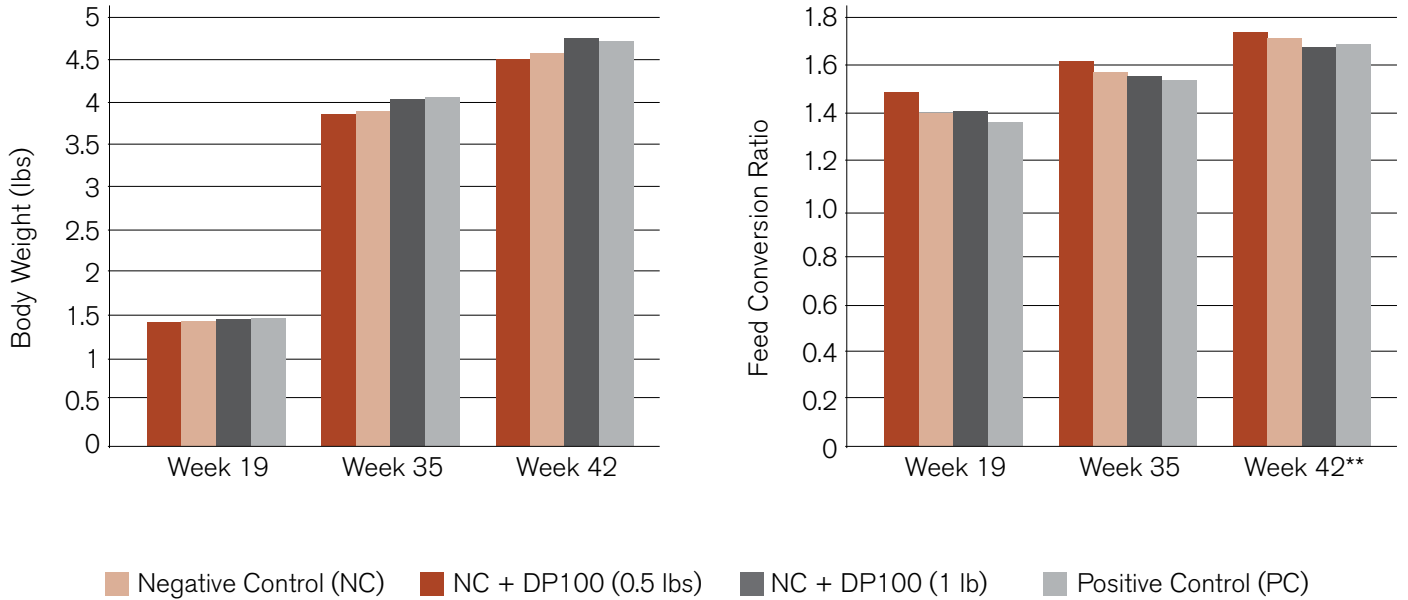
Advantage

Figure 1. Effect of CIBENZA DP100 on Feedcost



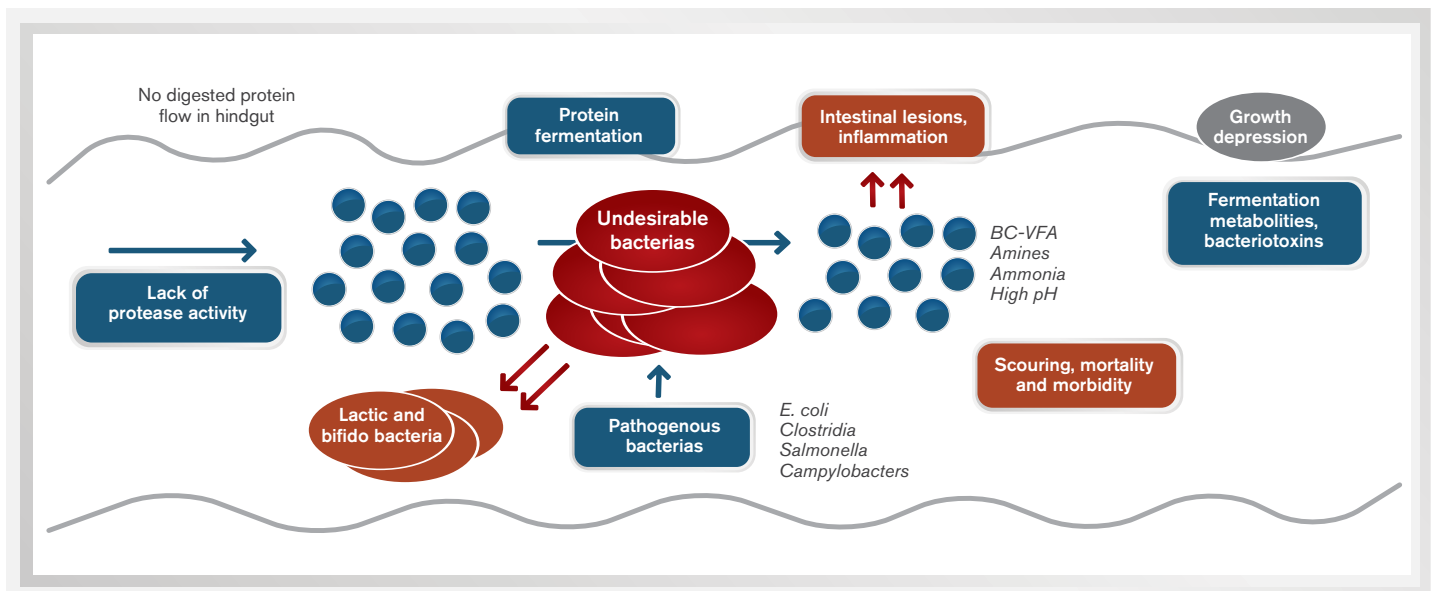
With the feed cost savings achieved through CIBENZA DP100, a typical million bird complex can **achieve savings of between \$220,000 to \$250,000 per year** without sacrificing performance of the bird.

Figures 2 and 3: The Effect of CIBENZA® DP100 on Bird Performance



..... A Healthier Gut

By improving the digestion of proteins and amino acids, CIBENZA® DP100 helps make valuable nutrients more available to the animals for growth and performance, while minimizing negative effects of undigested protein in the hind gut (Figures 2-3). By doing so, CIBENZA® DP100 reduces negative impact of ANF on gut brush border and increases available nutrients to the villi, therefore improving overall gut health and morphology.

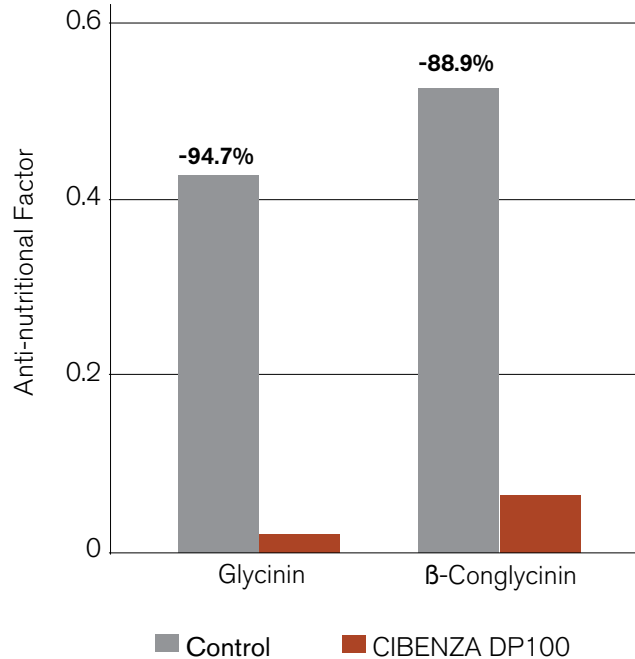


Managing Risks Posed by

Anti-Nutritional Factors

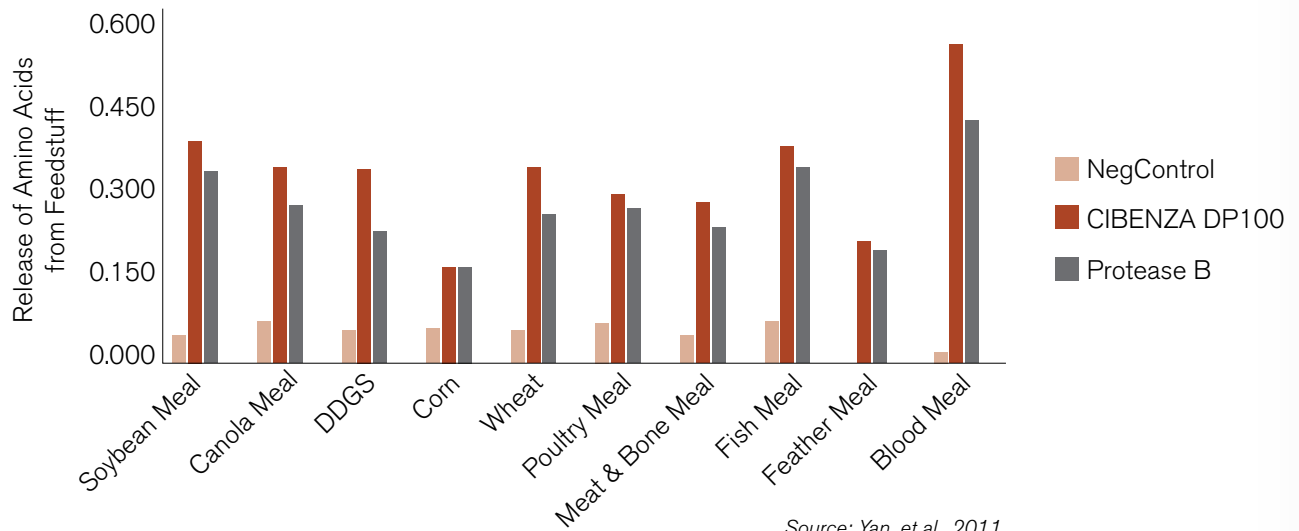
Many anti-nutritional factors such as Glycinin and β -Conglycinin, are proteins, and can adversely affect ingredient quality and animal performance. CIBENZA[®] DP100 degrades these factors and minimizes their presence, ensuring high quality feed (Figure 4).

Figure 4. Hydrolyzing Ability of CIBENZA DP100 on Soybean Allergenic Proteins



Source: Wang, et al., 2011a

Figure 5. CIBENZA DP100 Improves *In vitro* Protein Digestibility of All Feed Ingredients Tested



Source: Yan, et al., 2011



CIBENZA DP100 Description

Appearance: Light brown dry powder

Odor: Neutral

Packaging: 25kg bag

Shelf Life: Minimum 24 months

Dose: 250-500 g/ton of feed OR as directed by a poultry nutritionist

Ordering Information

Novus has dedicated sales and technical services professionals ready to assist you. Please contact your Novus Sales Representative or contact Novus Customer Service at +1.314.576.8886.

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Product not available in all countries.

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