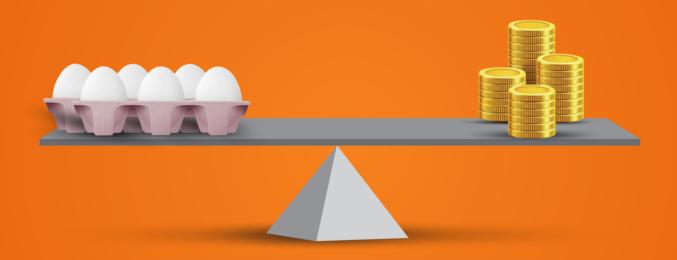
BALANCING PERFORMANCE MAXIMIZING PROFITABILITY



NUTRIKEM™XLP Plus



A Layer diet is combination of conventional raw materials like Maize, Bajra & Soybean meal. Several alternate feedstuffs like DDGS, MDOC, Ground nut cake, Broken rice & Rice polish are used depending on the material availability in the region.

Factors influencing quality of layer diet

Protein



More than 20% of the protein in raw materials can not be utilized by bird

Carbohydrate



Energy contributing raw materials contain 8-15% NSP

Fat



Egg size variation results due to variation the quality of Fat

Efficient utilization of carbohydrates, protein & fat is for sustainable layer production







PROTEIN DIGESTION

Exogenous Proteases can improve bird's ability to digest complex protein raw materials. Protease enzymes not only improves bird performance but also optimize feed cost.

NSP UTILISATION

Chickens do not produce enzymes for digesting NSP. Antinutritional factors (ANF) in NSP cage nutrients & increase the viscosity of digesta. Exogenous NSP supplementation removes ANF to increase the digestibility of feedstuffs.

FAT UTILISATION

Egg size cannot be maximized if the amount of linoleic acid available is not adequate to support the rate of lipoproteins synthesis. Lysophospholipids can promote better absorption of linoleic acid and facilitate to maximize the lipoprotein synthesis.





NUTRIKEM™XLP Plus | Comprehensive Solution

NUTRIKEM™ XLP Plus - A comprehensive solution maximizing the efficiency of Feed

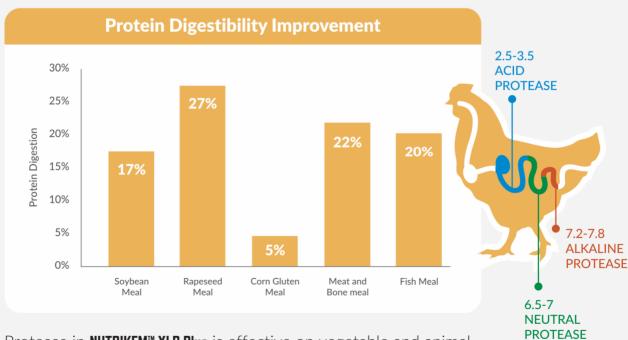
Protein Digestion	NSP Utilization	Fat Digetion
Patented Multiprotease	Xylanase, β glucanase, mannanase, Cellulase, Alpha amylase	Lipase and Lysophospholipids

NUTRIKEM™ XLP Plus - Cutting the clutter

KEMIN'S MULTI PROTEASE TECHNOLOGY



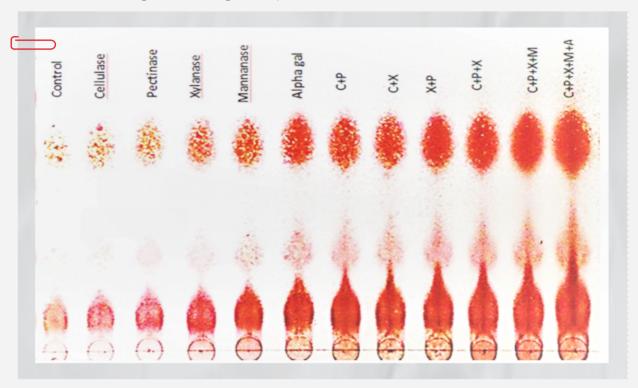
NUTRIKEM™ XLP Plus contains patented acid, alkaline and neutral protease which gets activated according to pH condition of intestine



Protease in **NUTRIKEM™ XLP Plus** is effective on vegetable and animal protein sources

Multiple NSP Enzymes for Sugar release

Thin-layer chromatography studies shows combination of different NSP enzymes releases more sugar than single enzyme



(Kemin internal data- 15-00025)

NUTRIKEM™ XLP Plus contains multiple enzyme for better sugar release

Lysophospholipids for Fat Digestion



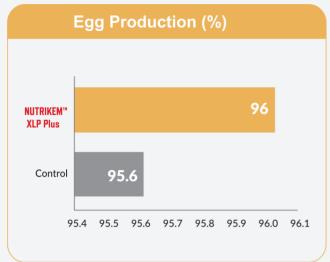
Lysophospholipids in $\textbf{NUTRIKEM}^{\texttt{m}} \textbf{XLP Plus}$ boost overall fat metabolism

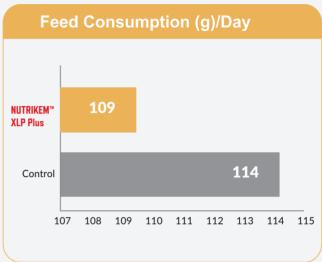
(Kemin internal data- 20-18070)



NUTRIKEM™ XLP Plus effect on economic parameters

NUTRIKEM™ XLP Plus enables replacement of 25 kg soybean meal with DORB in commercial layer





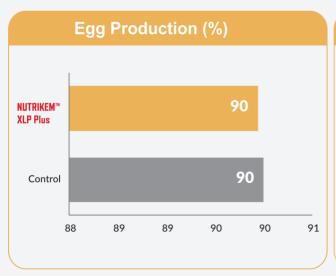
(Kemin internal data- 19-17750)

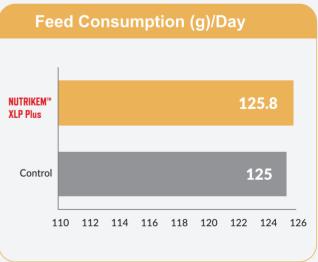
NUTRIKEM™ XLP Plus treated group gives 40 more eggs /MT of feed at the same time reduced feed cost by soybean meal replacement



NUTRIKEM™ XLP Plus performance in Older birds

NUTRIKEM™ XLP Plus diet is reformulated with 100 kcal/kg metabolizable energy and 0.6% crude protein in comparison with normal diet in 72 week birds





(Kemin internal data- 16-00053)

NUTRIKEM™ XLP Plus saves feed cost by Energy and Crude Protein reduction without any effect on production performance in older layer

NUTRIKEM™XLP Plus

Comprehensive Solution



Replacement up to **100-125 Kcal**Metabolizable Energy and **1 %** Crude Protein/Kg of Feed

Flexibility to use more alternative protein & energy sources

Inclusion rate
Reformulation: 500 g/MT of feed
On-top application: 250 g/MT of feed

Note: *Kemin technical / product specialists will be assisting for a suitable matrix to deliver optimal performance and maximum profitability.





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