



**Bypass plant proteins  
blended to the  
highest standards.  
Yours.**



**AMINOMAX®**

# Performance-blended plant proteins for maximum bypass and bioavailability.

## University-patented process.

Only AminoMax Pro is manufactured via a Kansas State University-patented process with 400 sensor checkpoints to produce plant-based protein sources with high bypass and superior amino acid bioavailability.

## Superior consistency.

Only AminoMax Pro utilizes a unique enzyme system to provide consistent levels of highly digestible lysine, methionine and other essential amino acids to the cow.

## Unprecedented control.

Only AminoMax Pro gives you the ability to blend multiple bypass plant proteins for unique nutritional properties and specific goals.

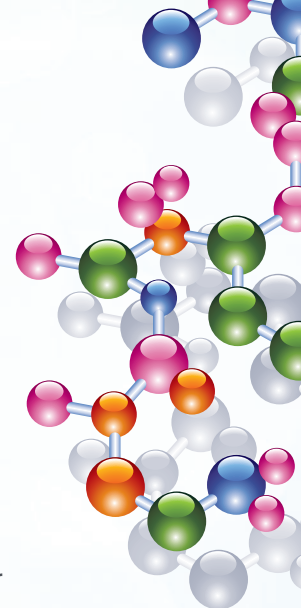
## Expected results:

- Higher milk production
- Increased milk components
- Improved herd economics
- Reduced nitrogen excretion



### **AminoMax® Pro**

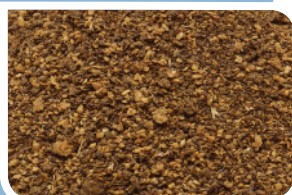
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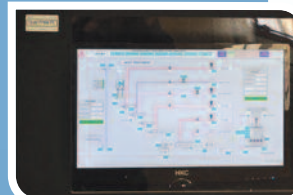


# Experience the first breakthrough in plant-based bypass protein in nearly 20 years.

AminoMax Pro utilizes a unique, enzyme-based technology patented at Kansas State University and perfected in our state-of-the-art manufacturing facility in upstate New York. More than *400 sensor checkpoints* ensure product quality and consistency – batch after batch, blend after blend.



Soybean and canola are processed for your amino acid profile.



Enzymes are added to break up complex sugars releasing reactive components. These sugars bind to protein molecules, blocking microbial enzymes that otherwise digest protein prematurely in the rumen.



Sugar and protein mixture is heated to precise temperatures using unique, computer-controlled moisture and flash heat to induce controlled reactions which promote digestibility and protect against premature rumen degradation.



Meals are allowed to cool, then blended to specifications.

**The result is AminoMax® Pro – bypass protein-rich feed, plus unique blends for distinct nutritional properties.**



**AminoMax® Pro is a PROVEN PROCESS. Not a byproduct.**

- Unlike expeller-extruded soybean meal, AminoMax Pro is based on a *controlled reaction*.
- This controlled reaction greatly reduces *variability* in bypass protein associated with many mechanical processes.
- Precision processing of soy and canola boosts bypass and bioavailability values to *unprecedented* levels.
- Unique manufacturing process results in bypass values that can only be determined via real-cow, real-time testing. See your AminoMax representative to learn more.



# How AminoMax<sup>®</sup> Pro works.



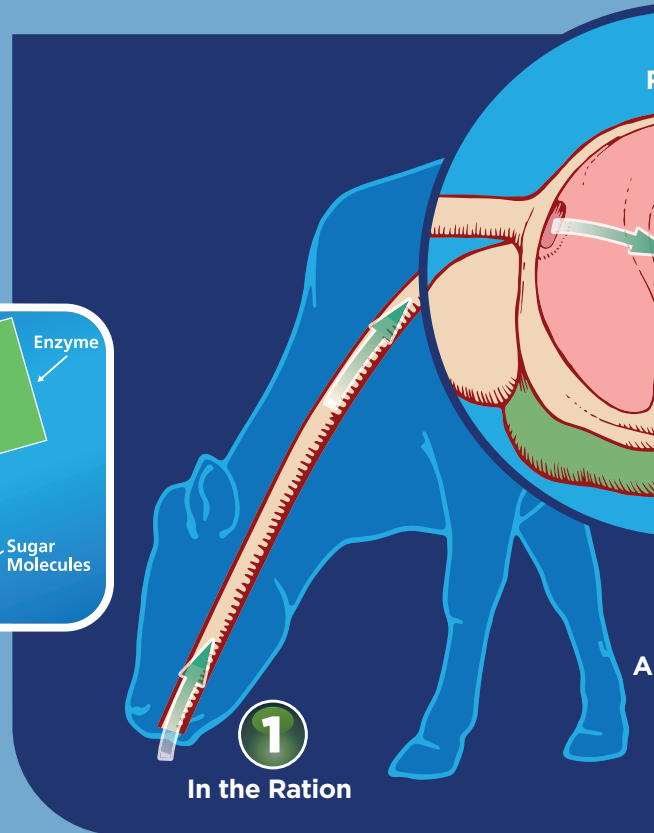
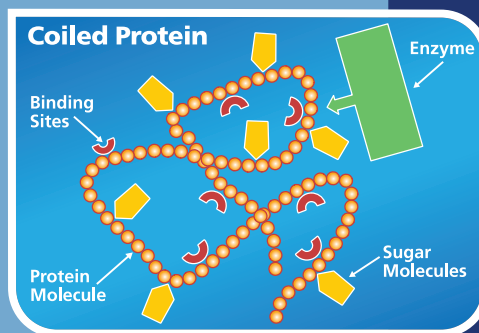
## In the Ration

AminoMax Pro allows you to custom-blend specific bypass plant proteins rich in amino acids for unique nutritional properties that meet producers' feeding goals.



## In the Rumen

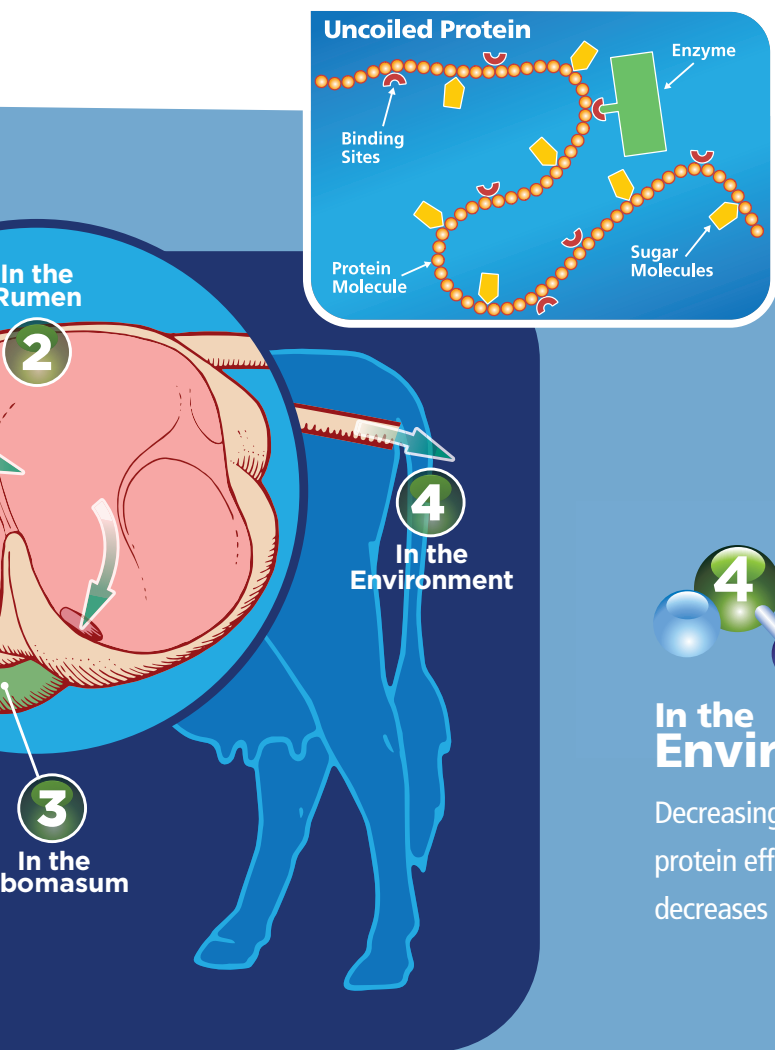
AminoMax Pro protects against rumen degradation by physically blocking enzyme binding sites on protein molecules.



## Whatever the goal, AminoMax<sup>®</sup> Pro delivers.

By increasing metabolizable protein yield, AminoMax Pro gives you greater flexibility to formulate rations for individual feeding goals. You can use AminoMax Pro to:

- ✓ Reduce the amount of crude protein in the diet.
- ✓ Reduce nitrogen excretion.
- ✓ Feed more on-farm forage to reduce costs.
- ✓ Feed more rapidly-digested starches to optimize milk production.
- ✓ Feed more fermentable forage to enhance rumen health and improve milk components.
- ✓ Feed more fermentable carbohydrates to offset short and/or poor-quality forage.
- ✓ Feed more high-fiber feeds to conserve forage.



## In the Abomasum

Low pH (2.2) in the abomasum causes the protein molecule to “unwind,” making the protease binding sites available again and enabling full digestion of essential amino acids.



## In the Environment

Decreasing dietary crude protein helps to improve protein efficiency and energy status of the cow. It also decreases excess nitrogen excretion in the environment.



## Can Your Plant Based Bypass Protein Pass This Test?

- ☐ Is it manufactured using more than 400 checkpoint sensors?
- ☐ Is it based on a controlled reaction, not a mechanical by-product?
- ☐ Is it the first advancement in bypass plant proteins in nearly 20 years?
- ☐ Is it 100% animal protein-free?
- ☐ Can it be performance-blended?
- ☐ Does it boost bypass values and maintain bioavailability for plant-based amino acids like lysine and methionine?
- ☐ Is it manufactured locally in the northeast US?



**AminoMax Pro does all of this AND MORE.**



## Discover the global phenomenon known as AminoMax®.

This breakthrough bypass protein source has been fueling milk production worldwide since 2006. Following the European ban on animal-derived protein source in ruminant diets, researchers at Kansas State University began developing technology to allow production of plant protein sources with high ruminal bypass and superior amino acid availability. Development eventually went global, and today, AminoMax is fed in leading dairy operations on four continents.



For more information on AminoMax performance-blended bypass amino acids, please contact your AFGRI Animal Feeds representative today!