



**The Future of Amino Acid Nutrition.**

**Spring 2015**

By Les Berghorn, National Sales Manager

## AminoMax Updates.

### Updated AminoMax® Website Features Resources for Nutritionists and Researchers.

We're pleased to announce we've updated the AminoMax Bypass Protein Website to better meet the needs of dairy nutritionist-consultants, researchers, and of course current AminoMax customers.

What does this mean for you? It means you now have a variety of tools and information available in one location for quick, easy reference. For example, you can now use AminoMax.com to access:

- AminoMax Pro Nutrition Models and CPM files, downloadable in a variety of file formats
- Articles by Dr. Essi Evans on everything from the evaluation of AminoMax in mid-lactation diets to a comparison between AminoMax and commercial soybean meal blend



- Cornell University Department of Animal Science studies on intestinal protein digestion (more on that in the second article in this issue)
- Links to numerous 3rd-party industry sources, including testing laboratories, universities, associations and research institutes.

Other changes include an easier-to-navigate design, new information on canola meal straight from the Canola Council of Canada, and an updated gallery that shows off some of the facility improvements we made in 2013-2014.

Check out the new website yourself at [www.AminoMax.com](http://www.AminoMax.com)!

### What's new with canola meal?

As you know, canola meal has a unique amino acid profile (histidine, methionine, cysteine and threonine) that helps optimize milk production very efficiently. Now the industry is quantifying the benefits of canola meal in the ration.



At last year's American Dairy Science Association Meeting, university researchers showed that Holsteins fed an increasing forage-to-concentrate ratio in conjunction with CM as the main protein source did not alter milk yield while decreasing DMI. Recently, the Canola Council of Canada released a summary of 24 research trials showing CM in dairy diets increased milk production by 2.2 pounds per day.

A product like AminoMax Pro, which processes both canola meal and soybean meal to obtain the highest bioavailability of key amino acids, is clearly a valuable tool for improving feed efficiency, reducing nitrogen, optimizing milk production and increasing components. If you'd like to know more, please feel free to call me at (855) 785-3625.



# RUP Digestibility.

## Cornell research shows AminoMax process increases RUP digestibility values for both canola and soybean meal.



Because of its unique manufacturing process, AminoMax Pro cannot be tested for rumen undegradable protein (RUP) using conventional methods. Fortunately, researchers at Cornell University's Department of Animal Science have been developing repeatable assays to help

nutritionist-consultants measure bypass protein levels in products like AminoMax Pro.

### AminoMax Update

Recently, Cornell researchers found that the AminoMax manufacturing process increases RUP as a percent of total protein of canola meal, from 60.4% to 80%. Additionally, the process improved soybean meal RUP from 55.2% to 81.1%.

Based on Cornell testing, the following program adjustments should be made when feeding AminoMax Pro:

**For B2 digestibility**, AminoMax should be set at 90%. Nutritionist-consultants using the CPM program should set the digestibility for the AminoMax B3 fraction to 90% (the default is 80%). This will result in a significant difference in post-ruminal availability of metabolizable protein and amino acids.

**For indigestible NDF**, models using 2.4 lignin to generate indigestible NDF show a much lower potentially digestible NDF value than has been realized. Representatives from some commercial labs are saying they find a poor correlation between and lignin and NDF digestibility. Based on research by the Canola Council of Canada, the lignin value for AminoMax should be 3.0% – a more accurate digestibility value which lines up findings from animal studies.

### Some closing thoughts:

The AminoMax Pro blend of canola and soy meets the amino acid profile for milk for methionine, arginine, threonine, histidine, cysteine and phenylalanine.

Although soybean provides more metabolizable lysine than canola, the difference is extremely small. In addition, microbial protein makes an excellent contribution.

Canola feeds different than the old models predict. Just like corn hybrids, canola has changed over the years, but the values have not been updated.

In summary, nutritionist-consultants looking to maximize the value in AminoMax should adjust RUP digestibility to 85% and lignin value to 3.0%.

## Want to know more?

**Call (855) 785-3625**

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