

## Evaluation of Rumen Undegradable Protein Sources on Lactational Performance of Holstein Dairy Cows

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This study was conducted at the Miner Institute in Chazy, New York to compare the AminoMax blend of treated canola meal and soybean meal with AminoPlus, a popular heat treated brand of soybean meal. The compositions of the two products, as analyzed by the researchers at the time of the trial are given below on a dry matter basis.

Item	AminoMax	AminoPlus
Crude Protein, %	41.6	50.8
NDF, %	26.1	14.5
Fat, %	2.4	1.3
Calculated NE-L	1.51	1.84

The trial was conducted using cows in mid-lactation, producing over 40 kg (88 lb) of milk, and ran for 8 weeks. The test proteins were both added at 7.7% of the diet- meaning that AminoMax was substituted for AminoPlus on a 1 to 1 basis. The AminoPlus diet provided 15.8% crude protein, while the AminoMax diet contained 15.6% crude protein.

There were no differences in performance for the two groups of cows.

Item	AminoMax	AminoPlus
Milk, kg	43.3	44.7
Fat, %	4.02	4.03
Protein, %	3.21	3.18
Lactose, %	4.73	4.77

There were however, advantages in protein efficiency and reduced milk urea nitrogen (MUN) with the AminoMax diet, as the table below shows:

Item	AminoMax	AminoPlus
Protein efficiency, %	32.4	32.1
MUN, mg/dL	9.6	11.4

AminoMax can be substituted for high bypass soybean meal products on a 1-1 basis, lowering costs and reducing MUN!