



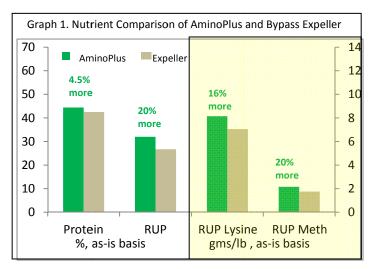
# AminoPlus – All Natural, High Bypass Soybean Meal

The AminoPlus process increases the quantity of RUP while maintaining the intestinal digestibility and amino acid quality of soybean meal. As part of a balanced ration this palatable, high quality ingredient helps to ensure superior performance and milk yield for the dairy producer.

### AminoPlus provides More (Graph 1):

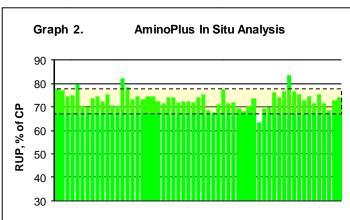
- Protein
- RUP
- RUP Lysine
- RUP Methionine

More nutrients mean inclusion rates can be reduced.



#### **RUP:**

- AminoPlus is analyzed using in situ (in animal) methods, the "gold standard" of RUP procedures.
- Laboratory RUP procedures have problems with accuracy, repeatability and ability to predict the RUP realized by the animal.
- AminoPlus conducts multiple analyses each month which consistently are within the industry recognized variability of the procedure (Graph 2: average RUP 73.3% of CP).



### **Intestinal RUP Digestibility**

- RUP must be digestible in the small intestine to be of value to the animal
  - Mobile Bag Technique data (European and independent laboratory studies) indicates high digestibility of AminoPlus RUP fraction (Table 1).
  - An independent comparison using the Modified 3-Step Procedure found AminoPlus to be highly digestible with numerically greater RUP, RUP lysine and RUP methionine digestibility than expeller bypass SBM (Table 2).

Table 1. Intestinal RUP Digestibility			
Europe	Independent	Laboratory	
<u>AminoPlus</u>	<u>AminoPlus</u>	<u>Expeller</u>	
99.0	96.4	94.2	
91.8	98.0	96.3	
	94.4	92.5	

Table 2. Intestinal Digestibility*				
	<u>AminoPlus</u>	<u>Expeller</u>		
RUP Protein	97.46	96.91		
RUP Lysine	90.33	89.39		
RUP Methionine	97.45	96.56		
		* FeedAC		

## AminoPlus advantages over competitive bypass SBM:

- Multiple productions sites, minimizing freight costs and product shortage concerns
- Higher nutrient density, reducing the inclusion rate over expeller bypass SBM

**AminoPlus** provides good value to dairymen in the form of consistent, palatable soybean protein that is high in RUP content and intestinal digestibility of protein and amino acids at a reasonable cost. As a result, dairymen have made **AminoPlus the number 1 volume** RUP soybean meal product.