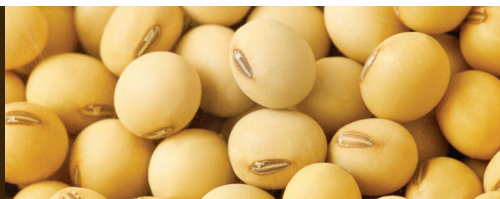


# SOY INSIGHTS

The nutritional value of U.S. soybean meal



## U.S. SOYBEAN PRODUCTION

The United States soybean industry enjoys high soil fertility, proper climate, excellent plant genetics, and outstanding crop management from farm to port allowing production of the highest quality soybeans and soybean meal in the world. Analyses show that soybeans grown in the U.S., compared to other origins, contain a higher concentration of the essential amino acids needed by animals.

## SUPPORT BY GLOBAL EXTENSIVE RESEARCH

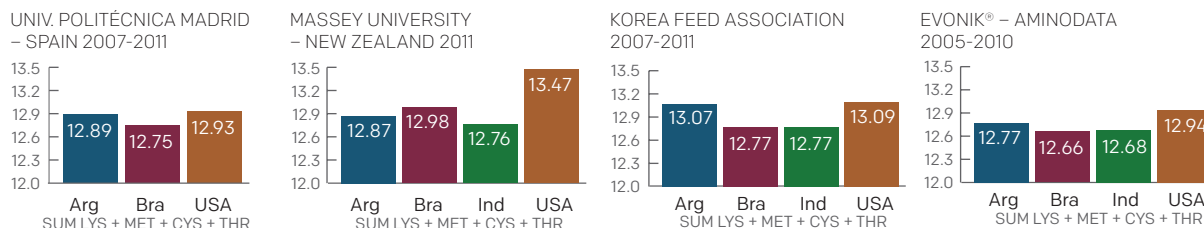
U.S. soybean and soybean meal products contain more nutrients than soybean meal of other origins:

- Superior amino acid content and amino acid profile
- Increased metabolizable energy content due to higher sugar levels, lower fiber content and improved amino acid digestibility
- Higher total phosphorus content
- Greater uniformity among batches, per test results
- Maximized use of the essential amino acids will reduce production costs, while increasing animal production profitability.

## THE NUTRITIONAL VALUE OF U.S. SOYBEAN MEAL

Nutritionists look for ingredients with the highest nutritive composition, consistency and value, considering composition, availability, uniformity and price/value when making formulation decisions.

Figure 1. Amino Acid Profile of Soybean Meals of Different Origins (%CP)



U.S. soybean meal has higher content of essential amino acids allowing higher density diets at lower inclusion rate, with savings in cost per kilogram of feed. European tests demonstrated that U.S. soybean meal samples are significantly higher ( $P < 0.001$ ) in lysine than the Argentinian and Brazilian sources.

Figure 2. Lysine : Crude Protein Ratio of Soybean Meal of Different Origins (n=403)

Universidad Politécnica de Madrid - Spain 2011

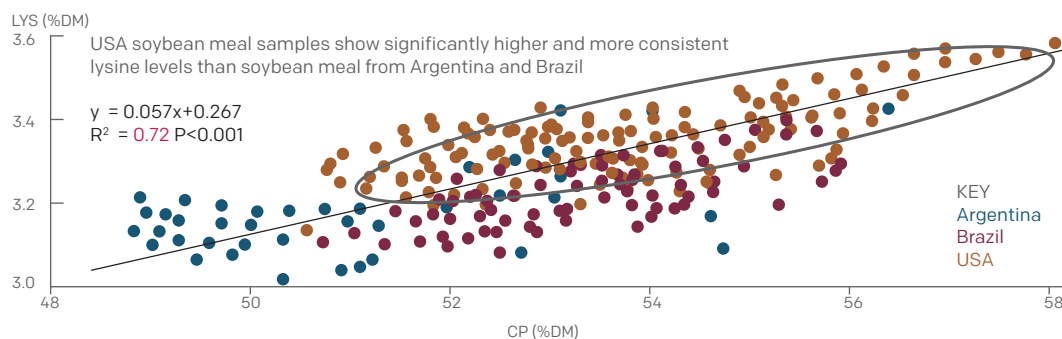
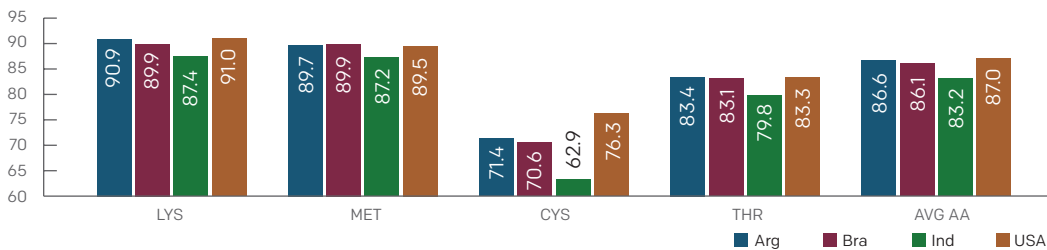


Figure 3. Standardized Ileal Digestibility of Amino Acids - Broilers - Soybean Meals of Different Origins % Massey University – New Zealand 2011



### MAXIMIZING THE VALUE OF U.S. SOYBEAN MEAL

- **Purchasing managers** should source the highest value products with value measured in terms of nutrient density and feeding value.
- **Production managers** should be offering animals rations that meet animal nutrient requirements to deliver efficient performance.
- **Nutritionists should** formulate with accurate ingredient nutrient profiles and precise nutrient specifications to properly utilize the superior value of U.S. soybean meal.
- **Ownership** should understand increased profit will occur if U.S. soybean meal is used.

### CAPTURING THE REAL VALUE OF U.S. SOYBEAN MEAL

Formulators should use current and accurate nutrient profiles for the ingredients under consideration, or the rations will not be accurate and the desired animal performance will not be realized. The superior nutrient profile for U.S. soybean meal drives the premium value of U.S. soybean meal obtained in least cost ration formulation, but more importantly, U.S. soybean meal reduces ration costs and improves animal performance when compared to soybean meals of other origins.

### FEEDING STUDIES CONFIRM U.S. SOY ADVANTAGE

An 8-year series of 29 feeding studies in swine and poultry around the world demonstrated the economic value of U.S. dehulled soybean meal from higher protein, better amino acid profile, and enhanced amino acids digestibility. Results show that producers can significantly lower feeding costs as well as increase nutrient density of diets by using U.S. dehulled soybean meal.

### REALIZING THE VALUE OF U.S. SOYBEAN MEAL

U.S. soybean meal will reduce feed cost because it has higher concentration of nutrients per kilogram of meal. Depending on the diet requirements, this value will result in significant feed savings.

**Traders and buyers of soybean meal should realize that crude protein is not a good indicator of soybean meal value. Amino acid profile, amino acid digestibility, metabolizable energy and uniformity among batches should be the focus of value in the buying and selling of soybean meal.**



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