# Ruminal Degradability and Intestinal Digestibility of Protein and Amino Acids in Treated Soybean Meal Products

A recent study at McGill University, Quebec, Canada (Castro, et al, JDS 90:810) evaluated the impact of various soybean meal (SBM) processing methods on ruminal protein degradability and intestinal digestibility of ruminally bypassed protein and amino acids. Soybean products compared were SBM, expeller SBM (EP), lignosulfonate-treated SBM (LS) and AminoPlus (AP).

Nutrient composition of the soybean products as determined in their laboratory is listed in Table 1. Reported nutrient values for SBM are reasonably consistent with the CNCPS data base. The NPN, Sol CP, and fiber fractions reported in this study are generally higher than previously observed values for the treated soybean products, particularly for EP and AP. The amino acid values for the treated soybean products are lower than other published data or values obtained through internal analysis however the degree of deviation appears similar across all products.

Two measures of degradability were conducted to estimate protein degradation within the rumen using lactating dairy cows equipped with rumen and duodenal cannulas. The first estimate utilized

bags containing the test material into the intestine through a cannula which is located at the entrance to the small intestine and then collected from a second cannula located at the end of the small intestine or