

the optimal processing conditions for preparation of SBM that maximize amino acid digestibilities, six lots of high protein SBM were produced under different toasting conditions. Specifically, the bed depth in the desolventizer-toaster was varied (4.0, 4.5, 5.5, 6.0, 7.0, and 8.0 in.). All soybeans were acquired from the same producer, and the preparation and extraction conditions were held constant for all lots. The SBMs then were incorporated into semipurified diets and fed to ileally cannulated pigs in a 7 x 7 Latin Square design to determine ileal and total tract nutrient digestibility. A low-protein casein diet also was fed to estimate endogenous losses of amino acids, and to allow for an accurate determination of true amino acid digestibilities. Each experimental period was seven days, with a five-day adaptation period and a two-day ileal collection. The SBMs were also fed to cecectomized roosters in order to determine true amino acid digestibilities by poultry. When fed to pigs, there were no differences ($P>0.05$) among treatments in apparent or true ileal lysine digestibilities, with values ranging from 87.3–90.2% and 90.7–93.5%, respectively. Additionally, there were no differences ($P>0.05$) in ileal apparent or true total amino acid digestibilities, but the dietary amino acids were highly available (true average total amino acid digestibility = 92.2%). For cecectomized roosters, no differences ($P>0.05$) were observed in true lysine digestibility with values ranging from 83.2–87.0%. Alteration of the bed depth in the desolventizer-toaster had little effect on nutrient digestibilities of SBM by swine and poultry.

Key Words: Swine, Soybean Meal, Poultry

T43 Effects of altering bed depth in the desolventizer/toaster used in soybean meal preparation on nutrient digestibility by ileally cannulated pigs and cecectomized roosters. L. Pope*, K. Bruce, L. Karr-Lilienthal, C. Grieshop, N. Merchen, C. Parsons, and G. Fahey, *University of Illinois, Urbana*.

Soybean meal (SBM) has been a major contributor of dietary amino acids for the poultry, swine, and aquaculture industries for many years, and it is widely known that processing conditions used to prepare SBM have an impact on its nutrient composition. In an attempt to determine