

tain 6.6 and 5.2 g true ileal digestible (TID) Lys/kg during the finisher 1 (F1) and finisher-2 (F2) phases, respectively. Corn-FM negative control (NEG) diets were formulated to be iso-N to the POS diets, and 2 diets were formulated by supplementing the NEG diets with AA based on the 1998 NRC TID (NRC) or determined standardized ileal digestible AA values (SID) in FM to alleviate AA deficiencies. When pigs weighed  $50.0 \pm 2.9$  kg, 32 gilts and 32 barrows (2 gilts or 2 barrows/pen) were randomly assigned to 1 of 4 F1 diets, and they were switched to F2 diets at  $79.0 \pm 2.0$  kg. Pigs had ad libitum access to feed. At  $107.7 \pm 3.3$  kg, blood samples were collected and pigs were slaughtered. Pigs fed the POS diets had greater overall ADFI ( $P = 0.083$ ) and total Lys intake ( $P = 0.029$ ) than those fed the SID diets, which resulted in a slightly greater ADG ( $P = 0.094$ ) in pigs fed the POS diets, but there was no difference in the efficiency of feed or Lys utilization. Pigs fed the SID diets had greater G:F ( $P = 0.057$ ) and gain:total Lys intake ( $P < 0.001$ ) than those fed the NRC diets. Pigs fed the POS diets had greater fat-free lean accretion ( $P = 0.020$ ) than those fed the SID diets, but similar LM area, fat-free carcass %, and the efficiency of lean gain. Serum glucose was not affected by dietary treatments. Pigs fed the POS diets had greater urea-N ( $P = 0.003$ ) and lower cholesterol ( $P = 0.002$ ) than those fed the SID diets. As expected, pigs fed the NEG diet had reduced total protein ( $P < 0.001$ ) and increased urea-N ( $P = 0.001$ ), triglyceride ( $P < 0.001$ ), and cholesterol ( $P < 0.001$ ) compared with those fed the POS diets. The results indicate that pigs fed the SID diets utilized feed and Lys as efficiently as those fed the POS diets, but they had slightly reduced BW and lean gain, perhaps, because of slightly reduced feed and Lys intake.

**Key Words:** hydrolyzed feather meal, standardized ileal digestible amino acids, pigs

**TH323 Complete replacement of soybean meal in pig diets with hydrolyzed feather meal with blood by amino acid supplementation based on standardized ileal digestibility.** S. D. Brotzge\*<sup>1</sup>, L. I. Chiba<sup>1</sup>, C. K. Adhikari<sup>1</sup>, H. H. Stein<sup>2</sup>, S. P. Rodning<sup>1</sup>, and E. G. Welles<sup>1</sup>, <sup>1</sup>Auburn University, Auburn, AL, <sup>2</sup>University of Illinois, Urbana.

The possibility of replacing soybean meal (SBM) in finisher pig diets completely with hydrolyzed feather meal with blood (FM) was evaluated. Corn-SBM, positive control (POS) diets were formulated to con-