

**O081 Concentration of metabolizable energy and digestibility of amino acids in chicken meal, poultry by-product meal, Ultrapro, AV-E Digest, and conventional soybean meal fed to pigs.** O. J. Rojas Martinez\*, H. H. Stein, *Animal Sciences, University of Illinois, Urbana.*

Two experiments were conducted to determine the ME and the standardized ileal digestibility (SID) of AA in chicken meal (CM), poultry by-product meal (PBM), Ultrapro, AV-E Digest, and soybean meal (SBM) fed to growing pigs. In Exp. 1, 48 barrows (BW: 14.6 ± 2.2 kg) were placed in metabolism cages and allotted to a randomized complete block design with 6 diets and 8 pigs per diet. The basal diet contained 98.1% corn and 5 diets contained corn and each of the experimental ingredients. The ME was 3,957, 3,816, 4,586, 4,298, 4,255, and 4,091 kcal/kg DM for corn, CM, PBM, Ultrapro, AV-E Digest, and SBM, respectively. The ME in PBM was greater ( $P < 0.01$ ) than in corn, CM, AV-E Digest, and SBM, and the ME in Ultrapro and AV-E Digest was greater ( $P < 0.01$ ) than in corn and CM, but there was no difference ( $P > 0.05$ ) among Ultrapro, AV-E Digest, and SBM. In Exp. 2, 12 barrows (BW: 12.2 ± 1.5 kg) were equipped with a T-cannula in the distal ileum and randomly allotted to a replicated 6 × 6 Latin square design with 6 diets and 6 periods in each square. A cornstarch-SBM based diet and 4 diets that contained SBM and CM, PBM, Ultrapro, or AV-E Digest as the only sources of AA in each diet were formulated. A N-free diet was used to determine endogenous losses of CP and AA. The SID of CP and all AA except Trp and Pro was greater ( $P < 0.01$ ) in SBM than in all other ingredients. The SID of CP and all indispensable AA in AV-E Digest was also greater ( $P < 0.01$ ) than in CM and Ultrapro, and with the exception of CP, Arg, and Val, SID values of all indispensable AA in AV-E Digest were also greater than in PBM. With the exception of Val and Lys, there were, however, no differences between CM and PBM in the SID of CP and AA. In conclusion, the ME in Ultrapro and AV-E Digest is greater than in CM, but not different from the ME of SBM, but PBM contains more ME than SBM, CM, and AV-E Digest. The SID of most indispensable AA is greater in AV-E Digest than in CM, PBM, and Ultrapro, but less than in SBM.

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