

mean BW of 9.6 kg (SD = 0.89) were surgically fitted with a T-cannula in the distal ileum. Animals were allocated to 3 dietary treatments with 5 pigs per treatment in a completely randomized design. Dietary treatments included: 1) a basal diet based on corn and soybean meal, 2) a basal diet plus 27.5 mg/kg carbadox, and 3) a basal diet plus 55 mg/kg carbadox. Ileal digesta were collected during 6 periods. Treatment diets were provided during period 2, 3, and 4; the basal diet was fed to all pigs during period 1, 6, and 7. Ileal samples were collected on d 6 and 7 of each period. In pigs fed the basal diet throughout the experiment, the AID of CP and many AA was greater by 3.0 to 9.3 percentage units during period 2, 3, and 4 than during period 1 ($P < 0.05$). This indicates that the AID of CP and AA was affected by period during the first few wk of the experiment. Data were standardized by extracting the AID of period 1 from that of period 2, 3, and 4. The AID changes from period 1 to period 2, 3, and 4 for Ile (8.0 vs. 3.7%), Leu (6.6 vs. 2.9%), Met (7.5 vs. 3.1%), Phe (6.5 vs. 3.1%), Val (8.7 vs. 4.1%), Ala (10.7 vs. 5.5), and Asp (5.9 vs. 1.5%) were greater for pigs fed diets supplemented with 55 mg/kg carbadox during period 2, 3, and 4 than in pigs fed the basal diet ($P < 0.05$). The AID for AA (Ile, Met, Ala, and Pro for 27.5 mg/kg carbadox; Ile, Met, Phe, Thr, Val, Ala, and Cys for 55 mg/kg carbadox) was less during period 5 and 6 compared with period 2, 3, and 4 in pigs fed diets supplemented with carbadox ($P < 0.05$). This observation suggests that the positive effect of carbadox on AID of AA is lost after carbadox is removed from the diet. Overall, the inclusion of carbadox at 55 mg/kg in diets fed to weanling pigs increases the AID of AA.

Key Words: amino acids, carbadox, ileal digestibility

222 Effect of carbadox on apparent ileal digestibility of amino acids by nursery pigs. L. L. Stewart¹, B. G. Kim*¹, B. R. Gramm², R. D. Nimmo², and H. H. Stein¹, ¹University of Illinois, Urbana, IL, ²Phibro Animal Health Co., Ridgefield Park, NJ.

We investigated the effects of dietary carbadox on apparent ileal digestibility (AID) of AA by nursery pigs. Fifteen weanling barrows with a