

**166 Digestibility of AA in canola-, cotton-, and sunflower-products fed to finishing pigs.** J. C. Gonzalez\* and H. H. Stein, *University of Illinois, Urbana.*

The objective of this experiment was to determine the standardized ileal digestibility (SID) of CP and AA in canola-, cotton-, and sunflower- products fed to finishing pigs and to compare these values to

the AID and SID of AA in soybean meal (SBM). Eight pigs (average initial BW:  $106.6 \pm 5.5$  kg) that were fitted with a T-cannula in the distal ileum were used in the experiment. Pigs were allotted to an  $8 \times 8$  Latin square design with 8 diets and 8 periods. Seven ingredients were used: canola seeds (CS), canola meal (CM), cottonseed meal (CSM), sunflower seeds (SFS), sunflower meal (SFM), dehulled sunflower meal (SFM-DH), and SBM. Seven diets each contained 1 of the ingredients as the sole source of AA. An N-free diet was used to estimate basal endogenous losses of AA. Results indicated that among all ingredients, SBM had the greatest ( $P < 0.05$ ) SID of Lys and CS had the least ( $P < 0.05$ ) SID of Phe, Thr, and Tyr. The SID of all indispensable AA except Trp was less in CS than in SBM and CM had a greater ( $P < 0.05$ ) SID of all indispensable AA except Arg, His, Lys, and Trp compared with CS. However, the SID of all indispensable AA except Arg and Trp were less ( $P < 0.05$ ) in CM than in SBM. The SID of all indispensable AA except Arg and Trp were also less ( $P < 0.05$ ) in CSM than in SBM, and the SID of Met was less ( $P < 0.05$ ) in CSM than in all other ingredients. Among sunflower-products, the SID of His, Leu, Phe, and Thr were less ( $P < 0.05$ ) in SFM-DH than in SFS and SFM, and the SID of Ile, Met, and Val were less ( $P < 0.05$ ) in SFM-DH than in SFS, but for CP, Arg, Lys, and Trp, no differences among SFS, SFM, and SFM-DH were observed. The SID of all indispensable AA except Trp were less ( $P < 0.05$ ) in SFM-DH than in SBM, and the SID of His, Ile, Lys, Thr, and Val in SFM were also less ( $P < 0.05$ ) than in SBM. However, except for Lys, no differences between SBM and SFS were observed. In conclusion, the SID of most AA in CS, CM, CSM, SFM, and SFM-DH is less than in SBM.

**Key Words:** canola, cotten seed meal, soybean meal, sunflower