

O082 **Amino acid digestibility in canola meal, 00-rapeseed meal, and 00-rapeseed expellers fed to growing pigs.** T. Maison*, H. Stein, *Animal Science, University of Illinois, Urbana.*

The objective of this experiment was to determine the standardized ileal digestibility (SID) of CP and AA in canola meal, 00-rapeseed meal, and 00-rapeseed expellers fed to growing pigs. Twenty-three barrows (initial BW: 28.8 ± 2.64 kg) had a T-cannula installed in the distal ileum and were allotted to a 9×23 Youden square design with 9 periods and 23 animals. Twenty-three diets were prepared; 7 diets were based on 7 samples of canola meal from solvent-extraction crushing plants in North America; 10 diets were based on 10 samples of 00-rapeseed meal from solvent-extraction crushing plants in Europe; and 5 diets were based on 5 samples of 00-rapeseed expellers from mechanical-press crushing plants in Europe. A N-free diet was also used. Each source of canola meal, 00-rapeseed meal, or 00-rapeseed expellers contributed all CP and AA in the diets they were used in. Chromic oxide (0.5%) was included in all diets as an inert marker. Pigs were fed at 3 times their estimated energy requirement for maintenance. Each period lasted 7 d, and digesta were collected during the final 2 d of each period. Results of the experiment indicated that the SID of CP and all AA except Val, Cys, and Glu were not different between canola meal and 00-rapeseed meal, but 00-rapeseed expellers had greater ($P < 0.01$) SID of CP and all AA except Thr, Trp, and Gly compared with 00-rapeseed meal. For Lys, Met, Thr, and Trp, SID values of 70.6, 84.5, 73.0, and 82.6%, and 71.9, 84.6, 72.6 and 82.6% were obtained in canola meal, and 00-rapeseed meal, respectively, whereas values for 00-rapeseed expellers were 74.7, 87.1, 74.0, and 83.4%, respectively. It is possible that the reason for the reduced SID of most AA in 00-rapeseed meal compared with 00-rapeseed expellers is that 00-rapeseed meal may be slightly heat damaged during the desolventizing process. In conclusion, AA digestibility is not different between canola meal and 00-rapeseed meal, but 00-rapeseed expellers have greater digestibility of most AA than 00-rapeseed meal.

Key Words: canola meal, rapeseed expellers, rapeseed meal