

Nonruminant Nutrition: Feed Ingredients and Additives

randomly allotted to the 4 diets. After a 5 d adaptation period, feces and urine were collected for the next 5 d. The DE and ME in each source of FFSB were calculated using the difference procedure. The concentrations of DE and ME in FFSB-CV, FFSB-HP, and FFSB-LO were 4,495 and 4,192; 4,765 and 4,447; and 4,694 and 4,349 kcal/kg DM, respectively, but no differences among the 3 sources of FFSB were observed. Results indicate that the SID of most AA in FFSB-LO, but not in FFSB-HP, is similar to values in FFSB-CV, but significant differences in DE and ME among the 3 sources of FFSB were not observed.

Table 1. Standardized ileal digestibility of AA

Item	FFSB-CV	FFSB-HP	FFSB-LO	SEM	<i>P</i> -value
Ile	84 ^a	77 ^b	81 ^{ab}	3.6	0.04
Leu	85 ^a	78 ^b	82 ^{ab}	3.4	0.03
Lys	86 ^a	80 ^b	84 ^{ab}	3.2	0.04
Met	84	79	83	3.4	0.06
Phe	86 ^a	79 ^b	82 ^{ab}	3.5	0.04
Thr	83 ^a	76 ^b	80 ^a	3.4	0.01
Trp	85	81	85	2.6	0.09
Val	83 ^a	76 ^b	79 ^{ab}	3.9	0.04

Key Words: amino acids, energy, full fat soybeans, pigs

124 Amino acid digestibility and energy concentration in conventional, high protein, and low oligosaccharide varieties of full fat soybeans fed to growing pigs. J. Yoon* and H. H. Stein, *University of Illinois, Urbana.*

Two experiments were conducted to determine AA and energy digestibility in full fat soybeans (FFSB). Conventional (FFSB-CV; 43.5% CP and 24.1% crude fat), high protein (FFSB-HP; 50.2% CP and 20.5% crude fat), and low oligosaccharide (FFSB-LO; 46.8% CP and 21.1% crude fat) varieties of FFSB were used. In Exp. 1, the standardized ileal digestibility (SID) of CP and AA in the 3 ingredients was determined using 8 growing barrows (initial BW: 20.6 ± 1.1 kg) that were equipped with a T-cannula in the distal ileum. All diets contained FFSB as the sole source of AA. An N-free diet was used to determine basal endogenous losses of AA. The pigs were allotted to a replicated 4 × 4 Latin square design with 4 periods and 4 diets. The SID of most AA in FFSB-CV and FFSB-LO is greater (*P* < 0.05) than in FFSB-HP (Table 1). In Exp. 2, the DE and ME in the 3 sources of FFSB were determined using 24 growing barrows (initial BW: 28.3 ± 3.7 kg). A corn-based basal diet and 3 diets containing corn and 1 source of FFSB were formulated. Pigs were placed in metabolism cages and