

M182 Effects of feeding soybean meal from high protein or low oligosaccharide varieties of soybeans to weanling pigs. K. M. Baker*, B. G. Kim, and H. H. Stein, *University of Illinois, Urbana*.

An experiment was conducted to determine the effect of using 5 different sources of soybean meal (SBM) on growth performance of weanling pigs. The 5 sources included hexane extracted SBM produced from high protein (SBM-HP) or conventional soybeans (SBM-CV), and mechanically extruded-expelled SBM produced from high protein soybeans (EE-SBM-HP), low oligosaccharide soybeans (EE-SBM-LO), or conventional soybeans (EE-SBM-CV). A total of 200 pigs were weaned at approximately 20 d of age and randomly allotted to treatment diets. Five phase 1 diets containing each source of SBM were fed during the initial 14 d post-weaning and 5 phase 2 diets were fed during the following 17 d. All diets within each phase were formulated to contain similar quantities of ME and standardized ileal digestible AA. Digestibility values for AA and ME in the 5 SBM were measured in previous experiments. The ADG, ADFI, and G/F were determined for each phase and for the entire experimental period. There were no differences observed for ADG, ADFI, and G/F, for phase 1, phase 2, or for the entire period. These data confirm that the values for ME and digestible AA that were previously measured in SBM produced from high protein or low oligosaccharide varieties of soybeans can be used to formulate diets for weanling pigs without compromising pig performance.

Table 1. Performance during a 31-d post-weaning period of weanling pigs fed diets containing soybean meal (SBM) from high protein (HP), low oligosaccharide (LO), or conventional (CV) varieties of soybeans that were hexane extracted (HE) or extruded-expelled (EE)

Item	HE-SBM-HP	HE-SBM-CV	EE-SBM-HP	EE-SBM-LO	EE-SBM-CV	SEM	P-value
Initial BW, kg	5.37	5.32	5.33	5.33	5.35	0.32	0.681
ADFI, g	373	387	378	403	378	20	0.644
ADG, g	258	264	248	273	256	12	0.532
G:F	0.695	0.687	0.656	0.679	0.678	0.01	0.067
Final BW, kg	13.37	13.52	13.02	13.78	13.28	0.60	0.55

N=9.

Key Words: high protein soybean meal, low oligosaccharide soybean meal, weanling pigs