152 Fat digestibility in enzymatically treated soybean meal without and with choice white grease and vegetable oil. K. P. Goebel* and H. H. Stein, *University of Illinois*, *Urbana*.

An experiment was conducted to measure the digestibility of fat by weanling pigs fed enzymatically treated soybean meal and either soybean oil or choice white grease. Two sources of enzymatically treated soybean meals were used (HP-300 and HP-350). These meals are similar with the exception that an emulsifier, lecithin, is included in HP-350, but not in HP-300. The HP-300 meal contained 57.07% CP, 1.44% acid-hydrolyzed ether extract (AEE), and 2.30 trypsin inhibitor units (TIU) per mg, and HP-350 contained 53.60% CP, 3.73% AEE, and 1.50 TIU per mg. Two diets were formulated by mixing cornstarch, sugar, and each source of soybean meal. Two additional diets that were similar to the initial 2 diets with the exception that 6% choice white grease or 6% soybean oil was added to these diets were also formulated. Thirty-two weanling barrows (initial BW: 13.3 ± 0.8 kg) were randomly allotted to the 4 diets with 8 replicate pigs per diet in a 2 × 2 factorial design. Pigs were housed in metabolism cages. Pigs were fed experimental diets for 14 d with total collections of feces during the final 5 d. Feed intake and DM output were not different among treatments. The apparent total tract digestibility (ATTD) of DM and GE were not different among treatments regardless of soybean meal and fat source. The ATTD of AEE in HP-300 and HP-350 mixed with soybean oil was not differ-

ent (80.4 and 75.7%, respectively). The ATTD of AEE in HP-300 and HP-350 mixed with choice white grease was also not different (80.2% and 79.3%, respectively). Results indicated that the added lecithin in HP-350 did not increase fat digestibility in pigs fed diets supplemented with soybean oil or choice white grease.

Key Words: fat digestibility, lecithin, soybean meal