198 Net energy of soybean hulls and wheat middlings in diets fed to growing or finishing pigs. L. L. Stewart*[1], D. Y. Kil[1], F. Ji[1], R. B Hinson[2], A. D. Beaulieu[3], G. L. Allee[2], J. F. Patience[3], J. E. Pettigrew[1], and H. H. Stein[1], [1]*University of Illinois, Urbana*, [2]*University of Missouri, Colombia*, [3]*Prarie Swine Centre, Saskatoon, SK, Canada*.

The objective of this experiment was to measure the NE of soybean hulls (SBH) and wheat middlings (WM) by growing and finishing pigs and to determine if finishing pigs utilize the energy in SBH and WM more efficiently than growing pigs. Forty growing and finishing barrows (initial BW: 25 and 85 kg, respctively) were randomly allotted to 5 treatment groups within each stage of growth. Two treatment groups at each

stage of growth served as the initial slaughter group and were harvested at the start of the experiment. Pigs on the remaining 3 treatment groups were randomly allotted to 3 dietary treatments (basal diet, SBH, or WM), housed individually, and harvested after 28 (growing pigs) or 35 days (finishing pigs). The basal diet contained corn and soybean meal and the SBH and WM diets were formulated by mixing 70% of the basal diet and 30% of SBH or 30% of WM. The retention of energy in each pig was calculated using the comparative slaughter procedure. The NE of SBH and WM were subsequently calculated using the difference procedure. In growing pigs, the NE of the basal diet (1,872 kcal/kg) was greater ($P \leq 0.01$) than the NE of the diets containing SBH (1,355 kcal/kg) or WM (1,516 kcal/kg), but the NE of SBH (149 kcal/kg) was not different from the NE of WM (684 kcal/kg). In finishing pigs, the NE of the basal diet (2,425 kcal/kg) was greater ($P \leq 0.05$) than the NE of the diets containing SBH (1,998 kcal/kg) or WM (2,068 kcal/kg). The NE of SBH (1,000 kcal/kg) was similar to the NE of WM (1,233 kcal/kg). The NE of diets (2,033 vs. 1,435 kcal/kg) and of ingredients (1,116 vs. 416 kcal/kg) were greater ($P \leq 0.05$) for finishing than for growing pigs. In conclusion, the NE of diets decreases with the inclusion of SBH or WM. The NE of SBH is similar to the NE of WM for both growing and finishing pigs, but the NE of SBH and WM for finishing pigs is greater than for growing pigs.

Key Words: net energy, soy hulls, wheat middlings