An experiment was conducted to determine the effects of including 0, 15, or 30% wheat bran in a corn-soybean meal based diet fed to growing pigs. Eighteen barrows (initial BW: 54.4 ± 4.3 kg) were individually housed in metabolism cages and randomly allotted to 1 of 3 dietary treatments in a completely randomized design. The experiment had 3 periods and 6 replicate pigs per diet. The control diet contained corn, soybean meal, and no wheat bran, and 2 additional diets were formulated by mixing 15 or 30% wheat bran with 85 or 70% of the control diet, respectively. Each period lasted 15 d. During the initial 7 d, pigs were adapted to their experimental diets and housed in metabolism crates in an environmentally controlled room and fed 573 kcal/kg BW^{0.6} per d. On d 8, metabolism crates with the pigs were moved into open-circuit respiration chambers for measurement of O\textsubscript{2} consumption and CO\textsubscript{2} and CH\textsubscript{4} production. The feeding level was the same as in the adaptation period and feces and urine were also collected during this period. On d 13 and 14, pigs were fed 225 kcal/kg BW^{0.6} per day, and pigs were then fasted for 24 h to obtain fasting heat production. The apparent total tract digestibility of DM, GE, crude fiber, ADF, and NDF linearly decreased (P < 0.01) as wheat bran inclusion increased in the diets. The DE (3454, 3257, and 3161 kcal/kg), ME (3400, 3209, and 3091 kcal/kg), and NE (1808, 1575, and 1458 kcal/kg) of diets linearly decreased (P < 0.01) as wheat bran inclusion increased. The daily O\textsubscript{2} consumption and CO\textsubscript{2} and CH\textsubscript{4} production by pigs fed increasing concentrations of wheat bran linearly decreased (P < 0.01). However, there was no effect of wheat bran on daily heat production per kg BW^{0.6}. In conclusion, increasing inclusion of wheat bran decreased DE, ME, and NE in diets, but did not change daily heat production if expressed as kg BW^{0.6}.

**Key Words:** dietary fiber, energy concentration, heat production