

and ME values and apparent total tract digestibility (ATTD) of energy and nutrients in diets and feed ingredients. Eleven feed ingredients were used. Three ingredients were cereal grains (corn, sorghum, and wheat), 4 were common protein sources (soybean meal, canola meal, distillers dried grains with solubles [DDGS], and low-fat DDGS), and 4 were high-fiber ingredients (corn germ meal, corn bran, wheat middlings, and soybean hulls). Eleven diets were formulated. Three diets were based on corn, wheat, or sorghum, and 8 diets were based on a combination of corn and each of the remaining 8 ingredients. A total of 88 gestating sows (parity 2 to 6) and 88 growing barrows (40.1 ± 4.69 kg BW) were randomly allotted to the 11 diets, with 8 replicate animals per diet. Fecal and urine samples were collected for 4 d following a 5-d adaptation period. The DE, ME, and ATTD of ADF, NDF, and CP in corn, wheat, and sorghum were calculated using the direct procedure, and the DE, ME, and ATTD of ADF, NDF, and CP in the other ingredients were calculated using the difference procedure. No differences were observed in DE and ME (as-fed and DM basis) or in the ATTD of GE, NDF, and CP between gestating sows and growing pigs for any of the ingredients. Gestating sows had less ($P < 0.05$) ATTD of ADF for soybean meal and greater ($P < 0.05$) ATTD of NDF for soybean hulls compared with growing pigs, but for the average of all ingredients, gestating sows had reduced ($P < 0.05$) ATTD of ADF compared with growing pigs. These results indicate that, under the conditions of this experiment, the ATTD of CP, NDF, and GE and values for DE and ME in growing pigs are not different from values obtained in gestating sows. However, the ATTD of ADF obtained in growing pigs is not always representative of the ATTD of ADF in gestating sows.

Key Words: digestibility, gestating sows, growing pigs

0453 Comparative digestibility of energy and nutrients in feed ingredients fed to sows and growing pigs.

J. E. Lowell*, Y. Liu, and H. H. Stein, *University of Illinois at Urbana-Champaign, Urbana.*

The objective of this experiment was to determine if there is a difference between growing pigs and gestating sows in DE