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- 416 **Effects of diet form and distillers dried grains with solubles (DDGS) on growth performance, carcass characteristics, and visceral weights of growing-finishing pigs.** M. F. Overholt*, J. E. Lowell, I. M. Grossman, H. H. Stein, A. C. Dilger, D. D. Boler, *University of Illinois, Urbana-Champaign, Urbana.*

Objectives were to determine growth performance, carcass characteristics, and visceral weights of barrows and gilts fed a pelleted or mash diet, without or with 30% DDGS. A total of 192 pigs were used in 2 blocks, each block consisted of 96 pigs. Pigs were randomly allotted to 1 of 4 dietary treatments, with 12 replicate pens per diet and 2 barrows and 2 gilts per pen. Data were analyzed as a 2×2 factorial arrangement with main effects of diet form (pellet or mash) and DDGS inclusion (0 or 30%) in a randomized complete block design. Pellet-fed pigs were heavier (114.34 kg vs. 111.40 kg; $P < 0.01$) and gained 0.03 kg/day more BW ($P = 0.001$) than mash-fed pigs after a 91 d feeding period. Pigs fed a mash diet with DDGS were 2.72% less efficient ($P < 0.03$) than pigs fed a mash diet with no DDGS, efficiency differences were not present when diets were pelleted ($P > 0.42$). Feed intake did not differ among treatment groups, but mash-fed pigs with DDGS

consumed at least 0.81 kg/d more ($P < 0.05$) feed than pigs fed all other diets (interaction $P < 0.01$). There were no differences ($P = 0.41$) in intestinal mass as a percentage of BW between pelleted and mash-fed pigs. Pelleted-fed pigs had 0.92 kg less ($P < 0.001$) gut-fill than mash-fed pigs. The difference in gut fill can be attributed to pelleted-fed pigs losing 1.54 percentage units more ($P = 0.02$) BW during lairage than mash-fed pigs. Pelleted-fed pigs produced carcasses that were 2.5 kg heavier ($P < 0.001$) and 1.6 mm fatter ($P < 0.001$) at the 10th rib than mash-fed pigs. There were no differences ($P = 0.84$) in LEA between pelleted and mash-fed pigs. Therefore, pelleted-fed pigs had estimated carcass lean values that were 1.79 percentage units less ($P = 0.04$) than mash-fed pigs. Inclusion of DDGS increased ($P < 0.01$) intestinal mass and gut fill ($P < 0.01$), and decreased ($P = 0.01$) HCW by 2.11 kg and dressing percentage ($P < 0.001$) by 0.66 percentage units, regardless of diet form. There were no differences in fresh loin color, marbling, firmness, ultimate pH, or drip loss among any dietary treatments ($P > 0.15$). Overall, pelleted-fed pigs grew faster, were more efficient, and were heavier than mash-fed pigs. There were no differences, in meat quality between pellet-fed pigs and mash-fed pigs.

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