Corn dried distillers grains with solubles in sow lactation diets.

G. M. Hill[1], J. E. Link[1], M. J. Rincker[1], K. D. Roberson[1], D. L. Kirkpatrick*[1], and M. L. Gibson[2], [1]Michigan State University, [2]Dakota Gold Research Association.

High concentrations of protein, lysine, fiber and P in corn dried distillers grains with solubles (DDG) make it a good potential feedstuff for lactation diets. Previous reports indicated that P in DDGS was 85% available in grower pig diets and diets containing up to 15% DDGS did not decrease grow/finish pig feed consumption. Our objective was to determine if lactating sows could utilize dietary DDGS to maintain body weight and lactation performance while decreasing P excretion. Sows were assigned to treatment based on expected farrowing date and parity. Diets met or exceeded NRC and contained 1.2% lysine, 0.9% Ca and 0.84% P. Treatments were: (1) 15% DDGS supplying 17% of P, or (2) 5% beet pulp (BP) with P supplied by monocalcium phosphate. Sows were gradually adapted from a common gestation diet to their respective treatment lactation diets fed ad libitum post-farrowing. Each treatment included 9 primiparous and 21 (BP) or 22 (DDGS) multiparous sows. Litters were balanced with a minimum of 11 pigs by d 2 post-farrowing and sows and litters were weighted on d 2 and 18. Fecal grab samples were collected on d 7, 14, and 18 and analyzed for P concentration. Treatment did not influence lactation performance. Sows weaned 10.9 and 10.8 pigs with pig gain of 3.82 and 3.91 kg for BP and DDGS, respectively. Sows lost 6.18 (BP) and 8.04 (DDGS). Liter weight on d 18 was less within BP treatment for primiparous vs multiparous sows (P=0.008). There was no parity effect with the DDGS treatment. Fecal P concentration did not differ on d 7 or 18. However, on d 14 BP sows had greater fecal P concentration than DDGS sows (33.02 vs. 28.13 mg/kg DM, $P < 0.02$). Over the lactation period BP sows exhibited a quadratic increase ($P = 0.07$) while DDGS sows exhibited a linear

decrease (P = 0.05) in fecal P concentration. Inclusion of 15% DDGS in a lactation diet will support sow performance while maintaining and perhaps reducing P excretion.

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