

Effect of level of wet distillers grains on feedlot performance of finishing cattle and energy value relative to corn. K. Vander Pol*, G. Erickson, T. Klopfenstein, and M. Greenquist, *University of Nebraska*.

Two hundred eighty-eight crossbred yearling steers (BW = 351 ± 11 kg) were utilized in a completely randomized design to evaluate the effect of level of wet distillers grains plus solubles (WDGS) on feedlot performance and carcass characteristics. Dietary treatments consisted of 0, 10, 20, 30, 40, and 50% dietary inclusion (DM basis) of WDGS, replacing corn. Basal ingredients consisted of high-moisture and dry-rolled corn, fed at a constant 1:1 ratio (DM basis), plus ground alfalfa hay and dry supplement each fed at 5% of diet (DM basis). Steers were stratified by weight and assigned randomly to pen. Pen, serving as the experimental unit, included eight steers, was assigned randomly to treatment, and was replicated six times. Steers were fed for 125 d, and were slaughtered on d 126 at a commercial abattoir. Results indicate a significant quadratic response ($P < 0.0001$) for DMI, final BW, ADG, and G:F, as level of WDGS in the diet increased. However, with the exception of HCW, there were no significant differences ($P > 0.05$) for carcass characteristics (i.e. liver score, REA, 12th rib fat, marbling, and yield grade). Further, utilizing G:F, an improvement above the 0% WDGS diet was calculated for each pen/treatment, considering the inclusion rate of WDGS. Results from these calculations generated a significant quartic response ($P = 0.0003$). These data clearly demonstrate the performance improvements achievable when WDGS are utilized in finishing diets. In conclusion, feeding WDGS in this trial up to 50% of the diet in place of corn resulted in improved performance compared to feeding high-moisture/dry-rolled corn.

WDGS Level:	0	10	20	30	40	50	SE
Final BW, Kg ^a	561	584	587	597	597	576	5
DMI, Kg	10.9	11.2	11.4	11.3	11.1	10.6	0.1
ADG, Kg	1.66	1.85	1.87	1.96	1.94	1.78	0.04
G:F, Kg/Kg	0.153	0.165	0.164	0.173	0.176	0.169	0.003
Energy, %		178	138	143	137	121	8

^a Calculated from HCW divided by a common dress of 63%.

^b Value relative to corn, calculated by difference of G:F, divided by WDGS inclusion.

Key Words: Corn, Distillers grains, Finishing cattle

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