Wet sorghum distiller's grains with solubles in flaked corn finishing diets for heifers.
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A finishing trial was conducted using 637 yearling heifers (initial BW = 385 kg) to identify the optimum level of wet sorghum distiller's grains with solubles (WDGS) in finishing diets containing steam-flaked corn. Treatments consisted of diets containing 0, 8, 16, 24, 32, or 40% WDGS (DM basis). Heifers were placed into dirt-surfaced feedlot pens (25 to 30 heifers per, 4 pens per treatment) and fed once daily for 58 days. Average daily gains during the 58-d finishing period were 1.27, 1.41, 1.38, 1.31, 1.22, and 1.16 kg/day for cattle fed 0, 8, 16, 24, 32, and 40% WDGS, respectively (quadratic effect, $P < 0.01$). Dry matter intake decreased linearly ($P < 0.01$) as the level of WDGS was increased. Gain efficiency responded quadratically ($P < 0.01$) to WDGS addition (0.147, 0.154, 0.162, 0.151, 0.144, 0.139 for cattle fed 0, 8, 16, 24, 32, 40% WDGS, respectively). Animal performance data were used to compute net energy gain (NEg) values for each diet, yielding estimates of 1.54, 1.58, 1.67, 1.57, 1.52, and 1.49 Mcal/kg for diets containing 0, 8, 16, 24, 32, and 40% WDGS, respectively (quadratic effect, $P < 0.03$). Rib eye area and the percentage of USDA Yield Grade 1 carcasses decreased, and the percentage of Yield Grade 3 carcasses increased as the proportion of WDGS in the diet increased (linear effect, $P< 0.05$). Average USDA yield grade increased linearly ($P < 0.02$) in response to increasing concentrations of WDGS, but grid-based carcass values were not significantly different across dietary treatments. Based on these data, the optimum concentration of WDGS in flaked corn finishing diets is between 8 and 16% of the ration DM. Flaked corn finishing diets containing as much as 24% WDGS yielded efficiencies equal or superior to diets containing no distiller's byproducts.

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