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200 Using beet pulp to adapt cattle to finishing diets compared to traditional grain adaptation with alfalfa hay. C. J. Schneider*, M. K. Luebbe, K. H. Jenkins, S. A. Furman, G. E. Erickson, and T. J. Klopfenstein, *University of Nebraska, Lincoln.*

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A study was conducted to compare grain adaptation programs using beet pulp (BP) to traditional grain adaptation with alfalfa hay (AH). Yearling crossbred steers ($n = 232$; $BW = 326 \pm 14.5$ kg) were separated into 3 weight blocks, stratified by BW, and assigned randomly, within strata, to 18 feedlot pens, with 12 or 13 steers per pen. Treatments were imposed during grain adaptation (21 d) using 3 grain adaptation programs. Within each grain adaptation program, 4 step rations were fed for 3, 4, 7, and 7 d. Each program increased dry-rolled corn inclusion while roughage inclusion decreased. In the control treatment (CON), AH inclusion decreased from 46 to 6% and pressed BP (24% DM) was held constant at 6% in all step rations. Beet pulp adaptation programs included a low BP treatment (LOBP) where BP was decreased from 18 to 6% and AH from 34 to 6% or a high BP treatment (HIBP) in which both BP and AH were decreased from 26 to 6%. On d 22 through the remainder of the finishing period cattle were fed a common diet (62% dry rolled corn, 20% wet distillers grains with solubles, 6% AH, 6% BP, 0.25% urea, and 5.75% liquid supplement DM basis). During grain adaptation, cattle fed CON tended ($P = 0.07$ for overall F test, $P = 0.02$ for mean comparison) to have greater DMI than HIBP and LOBP was intermediate (9.9, 9.5, and 9.7 kg, respectively). Gain and G:F were not different ($P > 0.19$) among treatments during the grain adaptation period. However, based off of carcass adjusted final BW, steers adapted using HIBP and LOBP tended ($P = 0.07$ for overall F-test, $P = 0.04$ for mean comparison) to have greater ADG compared with CON (1.65, 1.72, and 1.73 kg, respectively). Overall G:F was not different ($P = 0.11$) among treatments. Dry matter intakes were not different across all treatments ($P = 0.58$). Carcass characteristics were not affected by adaptation method ($P > 0.31$). Replacing up to 50% of AH with BP during grain adaptation increased ADG and may be used as an alternative to conventional adaptation programs.

Key Words: beet pulp, feedlot, grain adaptation