

## New Information on Use of Distillers Grains in Goat Rations

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One hundred sixty crossbred feeder kids were used to characterize the effects of replacing soybean meal (SBM) and whole corn (WC) protein and energy with dried distiller's grains with solubles (DDGS) on growth and carcass characteristics. Crossbred feeder kids were randomly assigned to 4 dietary treatments. All kids were given ad libitum access to water and a control diet (0%) containing WC, SBM, soybean hulls (SBH) and Kentucky 31 tall fescue hay (KY-31), or energy and protein replaced with DDGS at 10, 15 and 25% of total diet. These 4 diets were balanced for similar nitrogenous levels and energy levels. All kids were fed concentrates at 3% of live body weight. Each treatment had 2 replications with 20 kids per replication. Kids were allowed 14 d to acclimate to the diets prior to beginning of the trial. Kids in each treatment group were weighed at 0, 14, 28, 42, and 56 d. Feed concentrates were increased accordingly following each weight measurement in order to maintain the 3% of body weight feeding rate. A stratified random sample of 3 was taken from each pen for carcass evaluation. The average feeder kid starting weight was 46.3 lb and the average finishing weight was 65.7 lbs. DDGS supplementation of 0, 10, 15, and 25% of the total ration resulted in total gains of (16.4, 18.9, 18.3, and 19.5 lbs respectively). The differences between treatments for pounds gained was not statistically significant however there was an overall trend ( $p=0.13$ ) for increased gain with higher levels of DDGS supplementation. The best gains were seen at 25% DDGS resulting in 19.5 lb of gain and the lowest gain was 16.4 lb resulting from no DDGS supplementation. Likewise, average daily gain (ADG) was impacted similarly by DDGS supplementation resulting in ADG of (0.29, 0.34, 0.33, and 0.35 lb of gain per day). The best ADG were seen with higher levels of DDGS supplementation and the lowest ADG was seen in the control ( $p=0.13$ ). Protein and energy replaced at 15% DDGS showed the highest average live weight value at 56 d (68.4 lb) as compared to energy replaced at 0%, 10% and 25% DDGS (61.4, 64.9 and 68.0 lb respectively). Additionally, there was no difference ( $p=0.41$ ) for hot carcass weight across all treatments in the harvest group. These results indicate that DDGS can be substituted for soybean meal and corn as an energy and protein source with no detrimental effects on live animal weight gain or carcass weight.

**HANDOUTS WERE NOT AVAILABLE IN TIME TO INCLUDE.**

**PLEASE CONTACT TERRY HUTCHES DIRECTLY TO REQUEST A COPY OF HIS PRESENTATION.**

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