Are DDGS a Good Winter Supplement?

BACKGROUND

Beef producers have many options when it comes to choosing a supplementation program for their cattle. High protein forages, commodities, or commercial supplements can all effectively provide additional nutrients to cattle to support better performance. However, research now demonstrates that compared with other supplementation options, DDGS provides a more effective and lower-cost alternative to other more traditional supplementation programs.

DDGS VS BALE GRAZING VS LIQUID PROTEIN SUPPLEMENT

In order to compare some very common supplementation programs, researchers from North Dakota State University fed 64 non-lactating, pregnant beef cows a poor quality grass hay along with one of three supplements: alfalfa hay, a commercial liquid protein supplement, and DDGS. Cows had free-choice access to the grass hay and researchers provided the supplements in the following manner:

1. Provided 1 bale of alfalfa hay for every 3 bales of grass hay.
2. Poured approximately 9 gallons of liquid protein supplement on each bale of grass hay and allowed the liquid to seep into the bale.
3. Provided 4 pounds per head per day of DDGS (fed twice per week).

RESULTS

The research study occurred during the winter of 2016/2017 and unfortunately, excessive snow and cold temperatures forced the researchers to conclude the study after 70 days. However, even with this shorter duration, cows fed the DDGS performed much better than cows provided the other supplements (Figure 1, right).
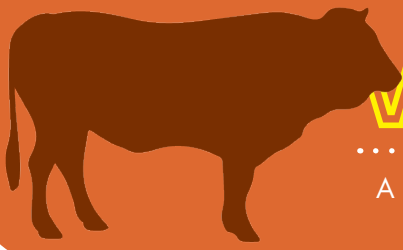
Cows fed DDGS gained weight during the study while cows on the other treatments actually lost weight during the study.

(Figure 1) - Body weight and average daily gain of cows fed different winter supplements
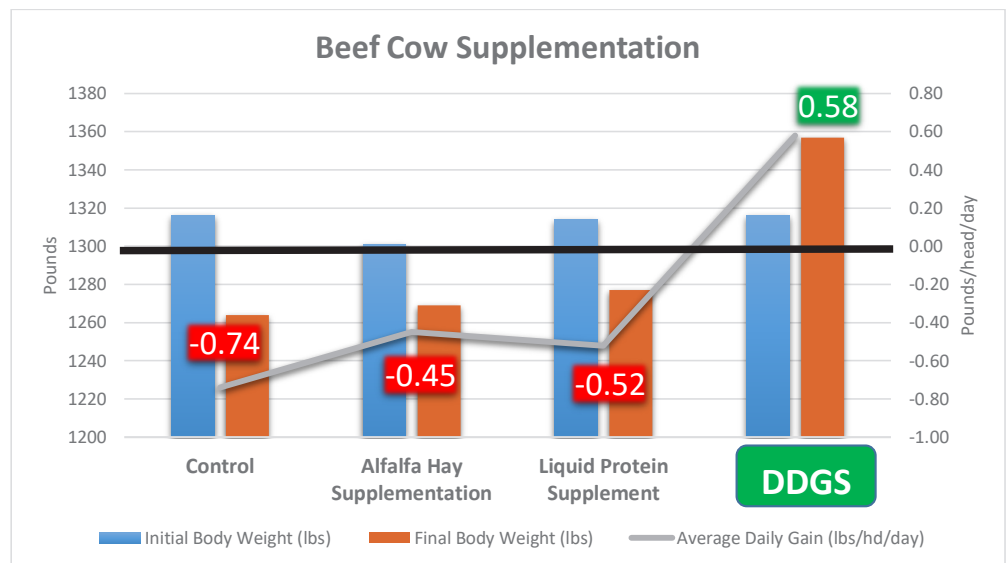
As with any supplementation program, optimal cattle performance depends on accurate diet formulation. However, this study demonstrates that DDGS provides an effective option to more expensive supplementation options.

*These results are not a guarantee of nutritional value, as laboratory results are influenced by factors beyond the control of POET Nutrition.

DDGS VS LICK TUB

Molasses-based lick tubs are another common supplementation option for beef producers. These tubs provide a convenient way to supplement cattle because producers can simply set the tubs in the pasture and cattle will consume the tubs for several days. In order to compare cattle performance and cost of lick-tub supplementation, researchers at the University of Nebraska conducted a research study with steers fed a commercial lick tub vs. DDGS.

Steers on the DDGS treatment received approximately 3 pounds of DDGS per head per day in a bunk while researchers placed the lick tubs in the pasture and allowed free-choice consumption for the other group of steers.
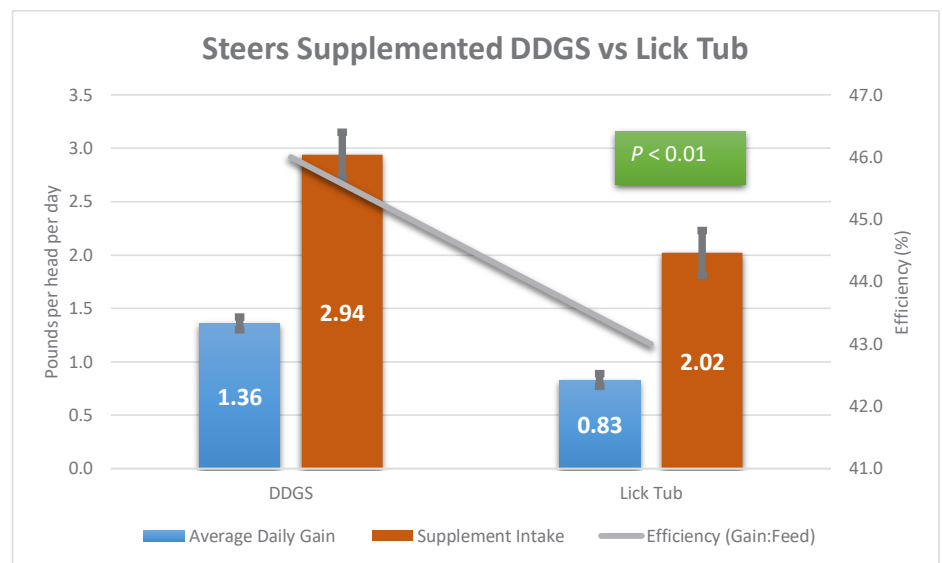
RESULTS

Steers supplemented with DDGS gained more and had better efficiency than steers fed the commercial tubs (Figure 2, right.)
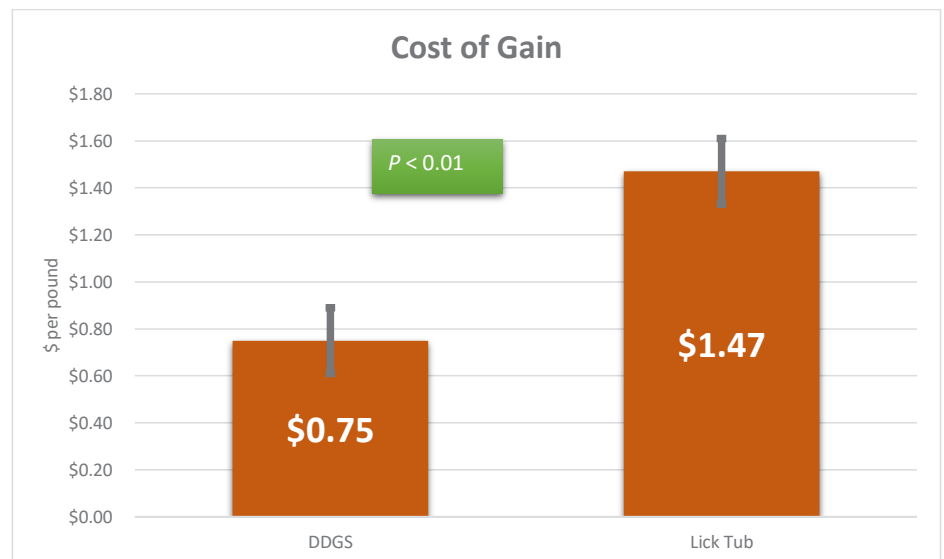
The researchers also included an economic evaluation. They assumed a price of $171 per ton for the DDGS and $80 per tub for the lick tub and included costs related to yardage, grazing, purchasing, etc. in their model. Cattle fed the DDGS had a lower cost of gain than steers fed the lick tubs (Figure 3, below right).

These results demonstrate how DDGS can effectively replace more expensive supplementation options such as commercial lick tubs. This supplementation strategy reduces feed costs and improves profitability.

(Figure 2) - Body weight and efficiency of steers fed either a lick tub or DDGS

Steers Supplemented DDGS vs Lick Tub — Pounds per head per day / Efficiency (%). DDGS: Average Daily Gain 1.36, Supplement Intake 2.94; Lick Tub: Average Daily Gain 0.83, Supplement Intake 2.02. $P < 0.01$. Legend: Average Daily Gain, Supplement Intake, Efficiency (Gain:Feed).

(Figure 3) - Cost of gain for cattle fed either a lick tub or DDGS

Cost of Gain — $ per pound. DDGS: $0.75, Lick Tub: $1.47. $P < 0.01$.

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