FEED FOR

News For Cattlemen From Suga-Lik® A Product Of U.S. Sugar Corp.

FEEDING THE COW HERD

Pat Whidden, PAS and Chet Fields, Ph.D. PAS

Estimating feed intake is the single most important task in developing a sound feeding program. Doing this for grazing cattle can be arduous. Factors which affect forage intake include: cow size (intake is a function of body weight), milk production ability (higher milking ability increases intake), cow body condition (thin cows eat more on a per body weight basis than do cows in good condition), forage quality (poor quality forage depresses intake), availability of forage (if pickin' is slim, intake is low), quantity and characteristics of the supplement fed (liquid supplement can increase forage intake), and environmental factors (hot weather depresses intake). Assuming no nutrient deficiencies, daily dry matter intake for a 1,000-lb cow, capable of weaning a 500-lb calf, will vary from about 18 pounds, when she is dry, to about 23 pounds at peak of her lactation curve (Nutrient Requirements of Beef Cattle, National Research Council, 1996).

If you're working with harvested forages, such as hay, nutrient composition can be determined by laboratory analysis from core samples. However, we must admit that it's difficult to get accurate samples of standing forage - even though we must still try. The sample needs to represent what the cattle are consuming. Cattle are selective grazers and tend to consume the most nutritious plants and plant parts. Clipped grass samples can be misleading and provide erroneous information on nutritive quality. We would wager that cows consume better forage than what our clipped samples generally show.

Since cows are managed such that strict control of the feeding program is difficult, the following general guidelines may help you develop your cow feeding program:

Energy Nutrition. Not all energy sources are created equal. For example, fats typically contain more than twice as much energy as carbohydrates. In addition, some fat sources have been shown to improve reproductive performance above and beyond their energy benefit. Similarly, supplemental sugars (found in molasses) have been shown to improve forage fiber digestibility about 6% more than supplemental starch (found in grain and grain by-products). This improvement from supplemental sugars equates to improved body condition score and/or improved pasture carrying capacity.

Regardless of which Suga-Lik® supplement you choose, you can be assured of significant sugar levels. If you choose to supplement fat, also be assured that Suga-Lik® supplements are available that contain significant quantities of the "right kind" of fat to support good reproductive efficiency. The next time you're comparing feed labels, ask yourself, "How much sugar? How much fat? What kind of fat?"

Protein Nutrition. Supplementing low quality forages with supplemental rumen degradable protein, such as found in Suga-Lik® products containing NPN, can improve both the cow's protein and energy nutrition. Supplemental rumen degradable protein can increase both the intake and digestibility of low quality forages, thereby increasing the cow's overall nutrient intake.

Mineral Nutrition. Most forages are low in phosphorus. All Suga-Lik® supplements contain suitable amounts of supplemental phosphorus. (Excessive amounts are not

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used so that environmental concerns are alleviated.) Research shows that some trace minerals are always needed in Florida. Therefore, Suga-Lik® products are fully fortified with the appropriate sources and levels of highly bioavailable minerals. We recommend that free choice salt always be available to your cattle.

Vitamin Nutrition. Vitamins A, D and E are routinely needed by the cow herd, especially when harvested and/or poor quality forage is being fed. All Suga-Lik® products contain ample amounts of these vitamins and meet or exceed the requirements of your cattle.

Value of "Fully Fortified" in Dollars/Ton. When using Suga-Lik® fully fortified supplements, the only additional supplement you need to feed is salt. This feature has substantial value to you. We recently compiled a survey of 26 different "free choice range minerals" offered for sale to Florida cattlemen. None of these range mineral products, when fed at label recommendations, met all of the essential vitamin and mineral requirements of beef cows grazing Bahia grass pastures. The cost per head per day of these various products, when fed at the recommended rate, varied from a low of 2.2 cents up to 28 cents, with an average cost of 9.2 cents per head per day. Assuming a late-fall to early-spring feeding period of 180 days, we can calculate the added value per ton of "fully fortified" Suga-Lik® supplements:

> 9.2 cents x 180 = $16.56 savings per cow since you don't have to put out range mineral while feeding Suga-Lik®.

Average intake of Suga-Lik® Grass Mate HD/16 (#500) is 5 pounds per head per day, or 900 lbs. over 180 days. The added value of Suga-Lik® #500 is (16.56 ÷ 900) x 2000 = $36.80 per ton.

If you feed Suga-Lik® Pasture Supplement HD/32 with an average intake of 2.5 pounds per head per day, the added value calculates to $73.60 per ton.

Value of "Fully Fortified" Compared to Feeding Commodities or Poorly Fortified Supplements. Higher expectations for cattle performance over the years has resulted in increased nutritional demands for immune response, milk production and subsequent growth of the calf. For example, one manifestation of less than optimal immune response is the occurrence of mastitis. The following research conducted with beef cows at Oklahoma State University demonstrates how mastitis impacts calf weaning weights.

Effect of Mastitis on Calf Weaning Weights a,b

No. of Quarters Infected	0	1	2	3	4
Weaning Weight, lbs	495	473	475	458	447
Difference in Weaning Wt.	—-	-22	-20	-37	-48
Difference in Value c	—-	-$15.40	-$14.00	-$25.90	-$33.60

a. Duenas et al, J. Ani Sci. 2001 79:1996-2005
b. Results are significant
c. Market price $70 cwt.

Commodity feedstuffs are generally devoid of the essential vitamins A, D and E and usually do not adequately meet the essential mineral requirements of cattle. The optimal levels of the essential vitamins A, D and E along with essential minerals such as zinc, selenium and others contained in Suga-Lik® supplements provide assurance of good immune response, thereby minimizing the occurrence of immunity problems such as mastitis.

Finally, again, the next time you're comparing feed labels, ask yourself, "How much dry matter? How much sugar? Is it fully fortified? Is the lower-priced product really cheaper after all?"