

Probably starch in the energy feed reduced the digestibility of the hay to an extent that intake of digestible energy was not increased, and value of added energy was not realized. Some of the advantage of feeding more grain also may have been lost due to greater fill of forage-fed steers.

Typical of many stressed cattle, about half the cattle on both treatments were sick but responded well to treatments outlined in OSU RP-9104. It is possible that calves and yearlings differ in their health response to protein or energy supplementation. With the yearlings there was less sickness with the high protein diet, consistent with other observations. The response of these cattle in subsequent periods of grazing on wheat pasture and finishing in a feedlot is being followed.

Literature Cited

- Gill, D. et al. 1982. OSU MP-112
Lusby, K. et al. 1982. OSU MP-112
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The Effect of Low Level Energy vs Protein on Just-Received Stocker Steers

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Story in Brief

Ninety-nine yearling steers were fed 2 lb of a 40 percent supplement for 10 days, then either 1 lb of a 40 percent protein pellet or 3 lb of 13 percent protein energy feed. Average daily gain averaged 1.24 lb per day for the high protein treatment and 1.18 lb per day for those changed to 3 lb of energy feed. While supplemental protein intake of both groups of cattle was held constant, the energy group received 3 vs 1 lb of supplement per day but did not gain as well. Intake of free-choice hay averaged 8.50 lb per day for the high protein cattle and 8.27 lb per day for those which got the 3 lb of energy feed. The extra feed fed in the energy treatment saved 0.23 lb of hay per day and resulted in the total feed conversion of 8.08 for protein and 9.32 for energy.

If 3 lb of high energy, 13 percent protein feed had cost more than one-third the cost of 1 lb of 40 percent protein feed, however, it would not have been economical.

Introduction

A constant program for evaluating rations for just-received cattle is a part of the nutrition and health program at the Pawhuska Research Station. There is

some question as to the possible benefits of feeding more energy in receiving rations to increase gains and thus reduce both feed and overhead costs. See "Protein vs Energy in Receiving Diets for Stocker Cattle" also found in this publication.

Experimental Procedure

Ninety-nine yearling steers averaging 475 lb were assembled on the Oklahoma City market and shipped to Pawhaska on September 10, 1981. The cattle were divided into two nutritional treatments. Both groups were started on free-choice native grass hay plus 2 lb per day of a 40 percent protein pellet. After 10 days one group had the 40 percent protein pellet reduced to 1 lb per day, and the other group was changed to receive 3 lb per day of a 13 percent protein energy pellet. Pellets were fed twice daily, and cattle had access to grass hay at all times. The pellet composition is given in Table 1.

On arrival the cattle were handled as outlined in OSU Fact Sheets 9102 and 9103 and OSU RP-9104. After 25 days on test, the cattle were weighed after 12 hours without feed or water.

Table 1. Composition of experimental supplements

Ingredients, %	Supplement type	
	Protein	Energy
Soybean meal	90.80	13.00
Corn	0.00	84.96
Dicalcium phosphate	2.75	1.00
Salt	3.00	1.00
Vitamin A-30000 I.U./G	0.11	0.036
Cottonseed hulls	1.75	
Calcium carbonate	1.50	
Trace mineral	.10	
Protein, %	40.00	13.00

Table 2. Animal performance

Feed	Daily supplement			
	2# 40%	1# 40%	2# 40%	3# 13%
Days	25		25	
Number of animals	50		49	
Initial weight, lb	473		476	
Final weight, lb	504		505	
Average daily gain, lb	1.24		1.18	
Average daily hay, lb	8.50		8.27	
Average daily concentrate, lb	1.40		2.60	
Total daily feed, lb	9.90		10.87	
Feed per lb gain	7.98		9.21	
Percent sick once	60.00		54.00	
Percent sick twice	2.00		4.00	
Percent dead	0.00		2.00	

Results and Discussion

Daily gains were not improved by adding extra energy feed during the last 18 days of the receiving period. This is somewhat surprising because it is usually presumed that cattle respond in gain to extra energy (Table 2).

Since most of the sick cattle (95 percent) were detected as sick at first processing, this problem could not be attributed to nutritional treatment. The cattle responded well to the treatment procedures listed in OSU-RP-9104. The poor response of calves to extra energy added to a grass hay diet was similar to responses in other reports.

Effect of Lasalocid on Weight Gains of Stocker Steers

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Story in Brief

Seventy-one yearling steers (399 lb) were fed 2 pounds per day of a 10 percent protein pellet containing 0 or 50 mg of lasalocid per pound. Cattle were grazed on native pasture for the grazing season. Daily gain was greater for steers fed lasalocid (2.17 vs 2.34 lb) for a 7.8 percent response from the drug. No coccidiosis problems were observed in this trial.

Introduction

Lasalocid is a polyether ionophore antibiotic related to monensin which may help control coccidiosis and acidosis in cattle. In previous tests with stocker cattle at this station, benefits to coccidiostats have been observed in some studies (Rust et al., 1981). In feedlot cattle, lasalocid appears to improve efficiency while not depressing feed intake to the extent observed with monensin (Davis, 1978). Little information is available on dose level for this drug. The level selected for this test should be adequate for coccidia control with lightweight cattle.

Experimental Procedures

Seventy-one 399-pound yearling steers were assembled at the Oklahoma City market and shipped to Pawhuska in April, 1981. Processing procedures were as outlined in OSU Extension Fact Sheets 9102, 9103 and 9104. The cattle were placed in eight drylot pens for about a week before being assigned to one of two