



Mineral Supplements

Mineral Supplements Do Not Produce Equal Responses

Based on the evidence supporting mineral supplementation, it's easy to conclude that cattle can be more productive when provided with a supplemental source of minerals. Determining the best mineral product to use is not always so obvious. Product labels can provide some insight as to the source of various minerals used in the product. Experimental studies show the source of a mineral can impact mineral availability to rumen microbes and the animal. Another factor that impacts availability, yet cannot always be determined from the label, is mineral interaction. Too much or too little of one mineral can impact availability of another mineral; hence, the importance of proper product formulation. Weatherizing of mineral products also impacts mineral availability by reducing losses due to wind, rain, and snow. Manufacturing expertise in the form of processing can minimize separation of the various minerals in the feeder, resulting in more balanced mineral intake. For optimum production responses, choosing the best mineral product should go beyond a quick glance at the label.

Research

A study involving 611 steers grazing wheat pasture illustrates the production responses to different mineral supplements (Table 1). Steers were split into three groups and provided a mineral supplement (No. 646 MoorMan's® Range A Minerals with WeatherMaster®, Brand X, or Brand Y). Every six days, steers were rotated among the three pastures with mineral feeders being moved with the steers. After 92 days on wheat pasture, steers were weighed and placed in a feedlot in the same treatment groups so that finishing performance could be obtained. Steers supplemented with No. 646 MoorMan's Special Range A Minerals weighed at least 18 lb/hd more than steers fed Brand X or Y, and gained approximately 0.2 lb/hd/day more during the grazing phase of the study. During the finishing phase, ADG was highest for steers supplemented with No. 646 MoorMan's Special Range A Minerals while on pasture. Feed efficiency and treatment cost did not differ among treatments during the finishing phase. Combined performance resulted in a 40 lb/hd weight

advantage for No. 646 MoorMan's Special Range A Minerals, which resulted in an increased value for finished steers.

Conclusion

Mineral supplements are not all the same. Real differences among mineral products do exist. High-quality mineral products provide an economic advantage that carries over into the finishing phase. MoorMan's Range Minerals with WeatherMaster Minerals are designed to minimize losses associated with weather and are formulated to meet cattle requirements for optimum production while minimizing the effects of mineral interactions.

Table 1 Effects of Commercial Mineral Supplements on Grazing and Feedlot Performance

	No. 646 MoorMan's Range A	Brand X	Brand Y
Wheat Pasture Phase (92 days)			
Head Count	203	204	204
Initial Wt., lb	578	570	584
Final Wt., lb	791	762	773
Weight Gain on Pasture, lb	213	192	189
ADG, lb	2.31	2.09	2.05
Feedlot Phase (133 days)			
Initial Wt., lb	791	762	773
Final Wt., lb	1264	1216	1229
Weight Gain in Feedlot, lb	473	454	456
ADG, lb	3.56	3.41	3.43
F/G, DM lb	5.89	5.91	5.93
Treatment, \$/hd	36.21	47.56	36.20
Combined (225 days)			
Initial Wt., lb	578	570	584
Final Wt., lb	1264	1216	1229
Total Weight Gain, lb	686	646	645
ADG, lb	3.05	2.87	2.87
Increase Gain, lb	40	—	—