Consistency Is Key in Trace Mineral Supplementation for Grazing Cattle

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Trace mineral supplementation is easily one of the most confusing, misunderstood and controversial practices across the beef industry. We know that minerals are not only important, but necessary for daily function and optimal performance. This is generally accepted and understood through both research and anecdote.

The benefits of minerals are particularly apparent in situations where diets are intentionally formulated for confinement, such as in feedlots and dairies. In those cases where we are feeding cattle every bite they get, consumption of nutrients is known, not just estimated.

What is more difficult is to discern mineral consumption or deficiencies in grazing cattle. Diet selection in the pasture is largely anyone's guess, especially in a diverse system; so is the consumption of free-choice supplements like minerals.

ARE YOUR COWS MAULING THE MINERAL TUB?
I often hear that some producers don't consistently keep mineral available, because when they do, their cattle almost inhale it, consumption is more than five times what it should be, and it's not worth the cost. If your cattle are mauling the mineral tub, you might have blamed poor mineral formulation, bemoaned the price, or cursed your cattle for not knowing what's good for them, or all of the above. However, in most cases, this feeding behavior can be attributed to delivery management of the supplement rather than to a poor formula.

You may have heard that it is important to just keep mineral available — whether cattle are really consuming it at the time or not. While cattle should be consuming mineral on some level year-round, there are certain times of year when they “fall off,” or consume far less than normal. These times often coincide with the start of fortified winter feeding and with naturally occurring fluctuations in mineral availability of forages throughout the year.

These changes in consumption are normal and are representative of the mineral concentration in the diet and of changing animal requirements. But...
when mineral is not consistently available, consumption becomes unpredictable and extreme. These dramatic swings are not beneficial to the animal or your wallet and can be better understood with simple psychology.

Let’s say you either haven’t had a mineral program in the past or you just got a new set of cattle. You put them out on mineral; they maul the tub and slick it. In this case, it’s not likely that everybody got to get in a lick or two or 12. Maybe you don’t get back around to putting out more mineral for four or five days, or longer. When you do replenish mineral supply, the cattle that missed out last time are going to be aggressive and will hoard the tub to try and get mineral while they can before it’s all gone again, knowing that it will be some time before they get any more.

PSYCHOLOGICAL VERSUS NUTRITIONAL-FEEDBACK BEHAVIOR
At this point, your cattle are taking mineral in by the mouthful due to competition and desperation rather than simply to meet requirements. This behavior will continue if there is never a consistent and reliable supply. It’s a psychological behavior rather than a nutritional-feedback behavior. Cattle in the feedyard act the same way if there are dramatic swings in the volume of delivered feed, resulting in bunk aggression and increased competition. They are simply anticipating limited availability and getting the nutrition while they can. In these cases, efficiency of nutrients wanes, nutritional status declines and frustration grows.

WHEN IN DOUBT, KEEP THE MINERAL OUT
Contrary to popular belief, if you can keep mineral out consistently through this period of competitive panic, your cattle will learn that mineral is always available and not a resource that will be depleted. There is the option of cutting your mineral with salt to help limit intake, which I only recommend doing for a limited period of time. These minerals have been formulated specifically and shouldn’t need further modification in most cases.

If you do limit mineral with salt, do it to reduce this initial hoarding behavior, then reduce the salt content over time while being sure to keep mineral available. Within a relatively short period of time, you should be able to have mineral always available without salt addition and have normal consumption. It is valuable to you as a producer to have cattle with proper mineral nutrition. It is also good to know when they are under- or over-consuming, but you’ll never know if you don’t get them regulated with consistent delivery management.

Don’t let your mineral tubs get slick. Check them consistently and often, and fill them when they are low. If you’d like more help regulating consumption or understanding the benefits of trace mineral supplementation, contact a beef cattle nutritionist or consultant.