What prevents livestock from eating minerals?

By STOCKADE Brands

I am often faced with questions about self-fed mineral consumption. Unfortunately, many producers only have a vague idea about the amount of mineral consumed by their livestock. And then when mineral consumption alters for any reason, they don't have a good baseline to compare with. For this reason, it is imperative that you monitor mineral consumption.

Monitoring mineral consumption doesn't have to be hard. It can be as easy as looking at your receipts (from your tax records) for mineral bought over a specific time period, dividing by the number of livestock exposed to the mineral and further dividing by the number of days exposed to arrive at an amount per head per day. Or you could empty a set number of mineral bags into mineral feeders and measure the length of time needed to replace them. Divide the pounds of mineral set out by the number of days to replace and number of head exposed (lbs of mineral/days to consume/number of head exposed). Go ahead and do this calculation for yourself. Most folks are surprised at the outcome. It's usually way lower or higher than they originally assumed. Read the product label. If your consumption level falls within the range listed on the product label, you are good. But if it is too low, they are not getting proper nutrition from the specific product.

So back to the original question, what can cause livestock (cattle, horses, sheep, goats, etc.) to under-consume mineral? There are an almost infinite number of possibilities, but below are some of the most common situations that I've come across over the years.blocks. Provide only one source of free choice salt.

1. **Presence of other sources of salt or mineral.** Self-fed minerals are designed to be the sole source of salt. Salt acts as both an attractant and a limiter. (Think of salt on French fries. Add a little and it makes you want to eat more. Add too much and you stop eating.) Providing other sources of salt (granular salt, white salt blocks, red tracemineral salt blocks, yellow sulfur salt blocks, blue cobalt salt blocks, etc.) can and will interfere with the intake of the more complete mineral supplement. Many of the minerals provided in a complete supplement (phosphorus, magnesium, copper, etc.) are very unpalatable on their own and must be masked with salt and other ingredients to get proper consumption.

2. **Not enough mineral feeders.** All animals need to have adequate access to mineral at all times. Animals have a very set pecking order, thus the dominant animals will always have first dibs at any feedstuff. If there are not enough mineral feeders, then the subordinate animals will not have an opportunity to eat the minerals they need. Fear of the dominant will override any craving for minerals. A good general rule of thumb is to provide at least one mineral feeder per 10-20 cattle or horses (depending on the size of the feeder) or one feeder per 10 head of sheep or goats, with a minimum of two mineral feeders in any one area.

3. **Placement of mineral feeders.** Mineral feeders need to be placed where livestock frequently congregate. Most commonly, this is near watering areas. However, be aware that congregation areas can change with the season or environmental conditions. For example, cattle may congregate near the barn during fall and winter months while hay is being fed, but might congregate at the back of the pasture in a grove of trees or near a pond during hot summer months. If you notice that the congregation area has changed, move the mineral feeders accordingly.

4. **Mixing mineral with "other" ingredients.** Unless the product specifically states otherwise, self-fed minerals are designed to be fed "as is". Mixing in additional salt, sodium bicarb, dicalcium phosphate, copper sulfate, etc. will adversely affect consumption as well as dilute the overall levels of nutrients provided. You've spent good money buying a balanced self-fed mineral, why undo the work of a trained nutritionist by mixing in outside ingredients? Strictly follow feeding directions to achieve desired results.

6. **Improperly stored product/old product.** Just like you have to properly store your groceries to keep them fresh and tasty, you have to do the same for minerals. When purchasing large quantities of minerals, they should ideally be stored in a cool, dark area that is protected from the weather. Product that is exposed to the elements and large temperature extremes may not retain acceptable palatability. Additionally, product does lose its freshness over time (just like a box of cereal). We recommend that any product be consumed within a year of manufacture. A good rule of thumb is to only purchase a

maximum of 6 months' worth of mineral at one time in order to utilize all product within a reasonable time limit.

7. **Allowing minerals to get dirty.** This is more of an issue for small ruminants like sheep and goats than cattle or horses, but the premise is the same. If the minerals become defiled by urine, feces or dirt, the animals will not want to eat them. For this reason, sheep and goats do not do well with the "open" types of mineral feeders used for cattle or horses. Use mineral feeders that lambs/kids cannot climb into and defile.

7. **Not all minerals are the same.** When it comes to minerals, you truly do get what you pay for. As mentioned above, many essential minerals are very unpalatable on their own, thus it is necessary to mask the unpleasant taste of the minerals in order to get livestock to consume adequate amounts. Some of the cheaper mixes out there will rely solely on salt to drive consumption or may have too high levels of unpalatable ingredients. This is especially common in "homemade" mixes or mixes for which the producer took a "formula" to a local manufacturer to ask for a custom mix. While the mineral mix requested may or may not be adequate nutritionally, it often takes the knowledge and experience of a trained nutritionist to get livestock to consume ingredients that taste bad.

In summary, it is important to monitor mineral consumption to make sure that livestock are receiving adequate amounts as outlined on the product label. If animals are under-consuming minerals, first check that none of the 7 issues listed above are a factor. If so, make appropriate adjustments. If you have tried all of the above, and still have problems, contact your mineral manufacturer. For STOCKADE® minerals call 800-835-0306 to speak to a nutritionist.