

Ask A Vet: Animals Must be Supplied with Minerals

Sunday, January 29, 2017

Dear Dr. Weldy's,

We recently moved our horses and steers to a new location that has pasture available instead of the dry lot housing they were in. Do we still need to provide extra salt and trace minerals to their ration?

-Home on the Range

Dear Reader,

You have touched on a subject that is frequently overlooked by animal owners and often results in serious problems for them and their treasured critters. Animals seldom get enough salt in their ration if supplemental sources are not made available. In our area trace mineral supplementation is also very important due to the lack of certain minerals in our soil.

Salt is essential for life for humans as well as animals and we and our animals seek it out second only to water. We use it to enhance taste and unfortunately often overdo it as our diet of prepared foods often contain excessive amounts of sodium. Our animals depend on us to provide them with nutrients and the sodium and chloride in salt, as well as iron, copper, zinc manganese, cobalt, iodine, and selenium are supplemented in very small amounts to sustain life. It is interesting that animals have such a strong defined appetite for sodium that they will imprint in their memory the exact location of a salt source and return to it when they become deficient.

As veterinarians we see problems with salt and trace mineral deficiencies that include depressed immune systems, poor reproduction performance, reduced growth rates, low feed efficiency, dehydration, and sometimes death. Producers often miss the sub clinical signs of these deficiencies and in the highly competitive, low margin livestock business it can be the difference between profit and loss. Horse owners will see markedly lower reproduction rates, increased sickness due to depressed immune systems, and digestive problems such as colic if they are not providing adequate salt and trace minerals. About this time every year we start seeing dehydration colic when the weather gets colder. This is often due to lack of salt availability to horses and the resulting decrease in water consumption leads to dehydration, constipation, and colic. In most cases the salt and minerals that were provided free choice to the animals were used up and the busy owner failed to replace them.

Selenium is an essential trace mineral that is extremely important in our area as our soils are some of the most devoid of selenium in the world. The ancient great lakes basin that we live in contains 1/200th of the selenium in the soil that is needed to provide feed grown here with adequate levels. This fact is compounded by decades of high yielding crops that further deplete soil levels. Without low levels of selenium supplementation a multitude of health problems occur here. They include newborns with muscles so weak they cannot rise, heart failure, and death. Cows and mares retain their placentas at birth more frequently and reproduction suffers greatly with selenium deficiency. Deficient horses have muscle cramping and azoturia problems. Excessive levels are toxic and can result in death so great care needs to be taken to provide just the right amount of trace selenium. Consult your veterinarian and nutritionist for advice in providing this important trace mineral.

-Dr. Jerry Sellon