

Horses - Mineral Wise, Salt Poor

Short of water and air, there is NOTHING more important than salt, minerals and trace elements for the health of your horse. Everyone knows or is learning about the importance of minerals and trace elements, but what most people don't realize is "salt" or sodium (Na) is a critically important "mineral" that is deficient in most horses. Even if your horse gets a "complete" feed and has salt or mineral blocks in the fields – IT IS NOT ENOUGH! Literally, every function in the horse's body requires salt, minerals and trace elements. Even the slightest imbalance can cause severe consequences, and literally every disease is either directly or indirectly caused by a mineral imbalance. Conditions such as founder, laminitis, abortion, allergies, botulism, cushings, hypothyroidism, lameness, joint problems are the result of salt, mineral and trace element imbalances.

If you also raise cattle, you are familiar with Grass Tetany and Milk Fever and the sudden death associated with these conditions. These issues were once thought to be magnesium and calcium deficiencies but now we know the cause is animals ingesting forage very high in potassium. Most people think grass is "just grass" and that there is "good grass" and "not-so-good grass", but these deadly problems are actually caused by the chemical composition of forage and grass rapidly changing due to weather conditions. Potassium rapidly increases while sodium, calcium and magnesium decrease during cool wet conditions, after long droughts followed by rainfall and rapid growth, and after frost and freezing weather conditions. Horses often develop colic after a frost but not from ingesting frozen grass. To make matters worse, horses mineral and salt needs change with the weather just like the mineral and sodium content of grass changes with the weather.

Excessive potassium and subsequent deficiencies in sodium, magnesium and calcium almost always lead to other opportunistic and infectious diseases. Your horse's gut becomes acidic after ingesting forage high in potassium and this promotes the overgrowth of saprotrophic micro-organisms (normally grow on dead matter), commensal organisms (live together but don't harm each other), and pathogenic microorganisms in the forage itself (microbes that cause disease). The diseased forage then produces and becomes the source of pathogenic bacteria (such as that which cause botulism) and also fungi to which horses are extremely sensitive (especially in fescue). After eating the forage, horses and other livestock face an overgrowth of these microorganisms in the gut that produce toxic by-products like ammonia that is deadly, causing early and mid-term fetuses to abort, while near term fetuses can suffer premature birth and/or septic weak births. Be aware this problem is not limited to only pasture grass; hay can also be a source - especially from fields that are heavily fertilized.

After ingesting poorly balanced forage, the only way a horse can neutralize its stomach acidity and prevent the corresponding health problems is by freely ingesting salt or sodium that is alkaline. Most people respond to this information and say, "My horses have a salt and mineral block in the pasture and I feed a 'complete' feed so horses should be fine, right?" Quite honestly - almost certainly not! A horse cannot lick fast enough to obtain what is necessary to neutralize its stomach acidity. If you have ever seen a horse chew at his salt or mineral block, chances are he is deficient. Cribbing, chewing on wood and other behavioral problems are also likely signs of deficiency. When horses don't have enough salt and minerals (also true for vitamins, enzymes, probiotics, etc.), metabolism is negatively affected leading to such conditions as hypothyroidism, insulin resistance, etc. These are the subject of "nightmare" colic prone, laminitic prone, "just waiting to happen" horse horror stories. Salt and mineral blocks are extremely popular and convenient but cannot be expected to provide sufficient salt and mineral necessary for year-round horse health.

The best all around solution to high potassium forage and grass is to offer a high quality salt, minerals and trace elements free choice AT ALL TIMES. If your horses don't appear to be ingesting enough of your free choice mineral salt, it can be because sodium (the Na part of NaCl or salt) is similar to potassium, and horses often think they have enough sodium so they stop eating salt when it is needed the most. This is especially so in the winter when their needs are greatest. Force-feeding salt is a viable solution particularly in pregnant mares that apparently never seem to get enough. This should be in addition to making it readily available free choice. (Always be sure to put any salt and mineral product near readily available water.)

We are somewhat aware of the needs of our horses and other livestock, but we are feeding minerals and trace elements today that we did not know were essential five years ago. As time progresses, more minerals and trace elements will be determined essential that we do not currently know are necessary today. When sodium, magnesium and calcium are readily available free choice, other minerals and trace elements are utilized more efficiently and deficiencies are less likely to occur.

Unrefined naturally balanced sea salt such as **SEA-90 Essential Elements** is a good source of magnesium, calcium and sodium along with 90 other macro, micro-minerals and trace elements. Offering SEA-90 free choice and in feed provides your horses and other livestock with a naturally balanced mineral approach and leads to more sustainable health. SEA-90 Essential Elements has been offered free choice and in feed mixes to thousands of animals for more than 15 years with outstanding results.



Sources:

Moore, Dan. The Need for Minerals and Salt "Mineral Wise, Salt Poor"

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