

Mineral Facts, Fiction, and Frequently Asked Questions

Kim Mullenix, Ph.D., Extension Beef Specialist and Josh Elmore, Animal Science and Forages Regional Extension Agent

Minerals are an important part of beef cattle diets and are part of a complete nutrition program. Minerals support animal maintenance, growth, lactation, and reproduction, and are needed in varying quantities depending on the stage of production of the animal. The following are some frequently asked questions and fact-or-fiction debunking on minerals:

All minerals in the diet come from mineral supplementation: FICTION

Mineral packages are designed to supplement minerals coming from other components of the diet. A large majority of mineral requirements can be met from forages and supplemental feedstuffs. Mineral supplementation is the “icing on the cake” to make sure needs are being met as part of the nutrition program.

Alabama soils and forages are often deficient in certain trace minerals: FACT

While actively growing forages may serve as a great source of minerals in the diet, Alabama soils are often deficient in copper, selenium and zinc. Mineral packages are formulated with “trace” minerals which help cover the bases for these needs. Trace minerals are important for livestock health and production but are needed in small quantities in the diet.

A complete mineral contains calcium, phosphorus and a trace mineral package: FACT

Cattle producers are faced with many options when purchasing minerals. A complete mineral package contains both macromineral and trace minerals, whereas a trace mineral package only contains certain trace minerals. Often times, a complete mineral package is needed to provide calcium and phosphorus (both macrominerals) in addition to the trace minerals like copper, selenium, and zinc. Trace mineralized salt packages can also be hard to decipher – sometimes these products are almost all white salt with very little

actual trace mineral product in it. Our Extension resources below provide information on mineral ingredients and quantities to look for on the mineral tag when making a purchasing decision.

Cattle know what minerals they need/which ones they are deficient in: FICTION

This is a popular thought on mineral supplements and probably stems somewhat from human medicine. We routinely take various supplements for perceived or real deficiencies in our diet. While cattle may show signs of various mineral deficiencies, they don’t seek out individual minerals when they are in need of them. Mineral products that offer minerals in an ala carte fashion are not effective strategies for supplementing cattle.

In fact, salt is the main driver that encourages mineral consumption. Cattle crave salt and actively seek out salt in their diet. Salt consumption will fluctuate during the calendar year depending on animal stage of production, feed and water consumption and weather. For example, during the summer months, it is not uncommon to see mineral intake increase because of animals consuming salt.

A free-choice mineral should be consumed at 4 ounces per head per day: FICTION

While many free-choice mineral packages are labeled for a 4 ounces per head per day consumption rate, not all products have the same target level of intake. The phrase “target intake” is key here. The labeled consumption rate is based on an average. This means that sometimes mineral intake will be greater than what is listed on the tag, and sometimes it will be less. Don’t make rapid changes in mineral products when over or under consumption occurs or “cut” the mineral with salt to help even out consumption. Let the cattle tell you if consumption will level out by giving the product at least a one-month window of acclimation after switching to a new product.





I need to feed a high-magnesium mineral year-round: FICTION

A high-magnesium mineral is primarily beneficial during the cool-season months when cattle are on high-quality winter grazing. Supplementing high-magnesium mineral can help prevent grass tetany on well managed cool-season forages. During the summer and fall months, there is less advantage or reason to provide a high-magnesium mineral during that time.

I can use my mineral program to deliver additives to beef cattle: FACT

Yes, mineral programs can be an effective way to deliver other additives in beef cattle diets. This is because cattle should consume minerals daily, which can provide a consistent source of supplementation in the diet. Some examples include ionophores, fly control products, and certain antibiotics (with an approved Veterinary Feed Directive).

For more information on mineral supplementation, check out the following Alabama Extension resources on this topic:

Extension Resource	QR Code (Scan with Phone/Tablet to Download)
Importance of Mineral Supplementation and Mineral Tags	
Considerations for Mineral Supplementation in Cow-Calf Operations	



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