



SHOW SOLUTIONS

Trace Minerals in Show Feeds

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Trace minerals are essential nutrients in the diets of all livestock. Because trace minerals interact with each other, it is important to utilize supplements that have the appropriate levels and ratios for their specific situation.

The trace minerals we are typically most interested in adding to the diets of livestock are zinc (Zn), copper (Cu), manganese (Mn), cobalt (Co) and selenium (Se). These products will be listed on feed tags in parts per million (ppm).

So, what exactly do they do, and why does it matter if my show calf is receiving them?

Overall, among other additional benefits to show cattle, these trace minerals contribute to the general health and well-being of the animal. Animals receiving optimal levels of trace minerals will perform better and have more functional immune systems.

Zinc is an essential mineral that is involved in numerous cellular reproductive activities, including normal immune function, cell division, tissue growth and wound healing, as well as protein and DNA synthesis. Hoof, hair and skin health are critical to the success of show cattle. Zinc's key role in protein synthesis has a major impact on the quality of these traits.

Like zinc, copper plays an instrumental role in several enzyme functions: it helps protect the nervous and skeletal systems of the animal and is necessary for the body to produce melanin, which provides pigmentation in skin and hair.

While manganese is primarily critical to the normal growth and development of the animal, it also aids in the formation of bone and cartilage.

Cobalt is an essential nutrient for the rumen microbial population and is involved in the production of vitamin B12. This vitamin plays an important role in several enzymes in the animal and is dependent on the rumen for its production. It is beneficial to show cattle when it comes to appetite and intake.

Last but certainly not least, selenium is a strong antioxidant. A selenium deficiency can cause white muscle disease at birth in calves as well as retained placentas and infertility in cows. Additionally, this mineral is critical to all livestock for the role it plays in their ability to deal with disease challenges.

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Does Show-Rite help my calves meet their needs?

When purchasing show cattle feed, customers should be able to understand the information presented on the feed tags of both complete feeds and supplements. Trace minerals can come in several forms, which are broadly classified into two categories: organic trace minerals or inorganic trace minerals.

For example, you may look for mentions of zinc in the ingredient section of a tag. Zinc sulfate and zinc oxide are examples of inorganic trace minerals and, when fed at the appropriate levels, they can help livestock overcome their deficiencies — but they are less bioavailable to the animal when it comes to digestion and processing.

The sole source of zinc in Show-Rite products is zinc proteinate, which is actually Bioplex® zinc, an organic trace mineral produced by Alltech. In fact, Show-Rite is the industry leader in adopting Total Replacement Technology™ (TRT) in our line of textured show cattle feeds. TRT utilizes Bioplex as its sole source of added zinc, copper, manganese, cobalt, and selenium (Sel-Plex®). Bioplex minerals are organic trace minerals and closely resemble those found naturally in plant proteins, making them both easily absorbed and readily metabolized. This creates less oxidation and interference by antagonists, which, in turn, promotes better performance.

Organic trace minerals play a clear and instrumental role in helping your animals look and feel their best, which is important for them to be successful in the show ring. Show-Rite feeds are always designed with animal health and performance in mind. If you have any questions about trace minerals, Total Replacement Technology or feeding in general, contact a member of the Show-Rite team or a dealer near you.

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