

SPECTRA EQUINE NEWS

Volume 5

Enhancing the Effectiveness of Trace Minerals and the Performance of your Horse.

Horses are supplemented with trace minerals for a variety of reasons related to improving health and performance, growth and development, and reducing stress. When choosing a mineral supplement for your horse, there are many factors to consider. Should the minerals be inorganic or organic? Should the minerals be chelated? Which minerals utilize the best chelating technology?

Benefits of Quality Mineral Supplementation

- Red Blood Cell Production
- Oxygen Utilization
- Increased Stamina
- Energy Production
- Enhanced Immunity
- Antioxidant Support
- Healthy Coat & Hoof
- Joint Health Support
- Bone Formation Support

Inorganic Non-chelated vs. Organic Chelated Minerals

Unlike inorganic non-chelated minerals, which are unstable and inefficient, organic trace minerals can be prepared in such a manner as to pre-bond the element to something that is known to improve the availability of the mineral. This bond helps prevent the nutrient from reacting to something that will tie it up and cause it not to be absorbed. The bonding process is called chelation and the goal is to make the animal more efficient in utilizing the nutrients. In addition, negative interactions between minerals are less likely to occur with the use of trusted chelated organic sources than with inorganic sources.

Inorganic Non-Chelated	Organic Chelated
Disassociate quickly	✓ Prebonded
Highly reactive/unstable	✓ Stable
Inefficient	✓ Optimized

Optimizing Stability and Effectiveness

Research indicates that chelated organic minerals offer the greatest probability of achieving the desired nutritional benefit for your horse. But there's more to consider. All minerals are not chelated the same. Simply chelating organic minerals does not guarantee they will overcome the harsh conditions of digestion such as pH degradation, dilution and chelation breakage. The unique chelation process, often proprietary to the manufacturer, is the key.

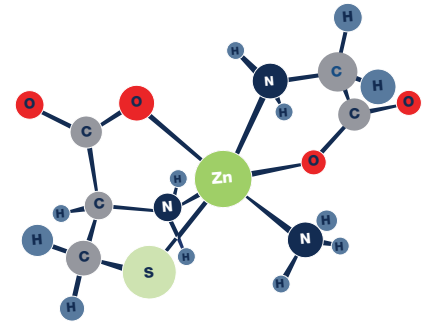
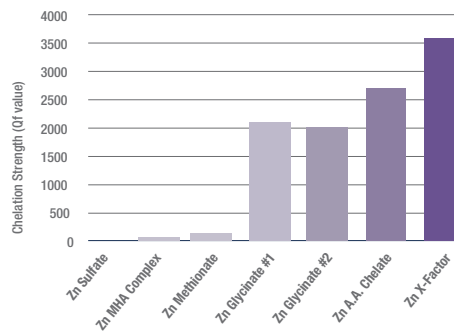
The nutritional success of any organic trace mineral depends on the ability of the organic escort to hold onto and protect the mineral from undesirable reactions. Thus, the chelate material used and the bond strength are crucial at maintaining stability, solubility and integrity of the mineral throughout the entire process. Simple complexes and weak chelate forms can be hydrolyzed and lose their nutritional value during digestion.

Minerals have what are called "attachment sites" at which another material may react or bind to the mineral. The goal is to have every attachment site on the mineral pre-bound so it can't react. Simply being "chelated" is better than non-chelated, but does not assure optimal absorption. By pre-binding more attachment sites, the ability of the mineral to overcome antagonists improves and the absorption rate increases.

X-Factor Chelated Organic Minerals with Intuitive Technology™

X-Factor is a brand of chelated organic (proteinated) minerals that are bonded to multiple oligo-peptides and amino acids rather than a single amino-acid linked compound like a complex chelated mineral. Due to the unique manufacturing process, X-Factor minerals remain chelated even in solution and even in low pH conditions. They have significantly greater bonding strength and over 10 times more chelated mineral in solution than other leading organic products, enabling more of the mineral to reach the site of absorption for greater utilization. X-Factor minerals are also manufactured with Intuitive Technology™, a proprietary chelation process that allows organic minerals to adjust to the specific needs of your horse. Amazingly, it works to enhance absorption availability when the animal needs more and reduces the amount absorbed when too much is provided. X-Factor minerals are supported by over 12 years of field testing, proving that they have the highest stability compared to other organic sources on the market.

X-Factor Zinc (Zn) has the highest bond strength compared to other chelated minerals



Greater resistance to pH degradation means more chelated minerals reach the site of absorption as the original intact molecule to support proper mineral status of your horse.

Research on Horses

Fifteen yearlings (nine Thoroughbreds and six Quarter Horses) were used in a feeding trial to determine whether proteinated trace minerals were utilized advantageously over inorganic trace minerals for growth and development when included in the diet at normal supplementation levels. Hip height gain was higher and hoof growth was greater for yearlings receiving the proteinated minerals than for those fed the inorganic minerals.

When evaluating mineral supplements, look for "Proteinate" in the ingredient list (ie: Iron Proteinate, Copper Proteinate, Zinc Proteinate, etc.).

MEGA-X® contains X-FACTOR Minerals

MEGA-X, a Performance Support supplement from Spectra Animal Health, utilizes the X-FACTOR brand Organic Chelated Mineral Proteinates with Intuitive Technology™.

- Proprietary X-Factor minerals
- High in Lysine plus B-complex vitamins
- Chelated minerals for better absorption
- Shown to increase hemoglobin levels
- Proprietary Sapoplex™ Yucca Saponins



How Supplied

Spectra Code	Size	Description
11127	1 gal. (3.78L)	Mega-X® Equine

Directions: Shake well and thoroughly mix with feed.
Maintenance: Mix 1 oz. (30 ml) daily into feed.
Performance: Mix 1 oz. (30 ml) twice daily or 2 oz. (60ml) once daily into feed.
Expect Results: Within 14 days.

Now with

SAPOPLEX™
 A proprietary source of Yucca Saponins to support reduced inflammation

BIOBOOST™
 bioavailability enhancer

X-FACTOR
 Nutrient Blend

SPECTRA Premium

SPECTRA
 Expect Results.