

The Importance of Organic Minerals in the Horse's Diet

Why Organic Minerals for Horses?

Copper, Manganese, Zinc, Magnesium and Iron are critical for immunity and health, normal metabolism of nutrients and reproductive function; yet

despite routine addition of inorganic minerals (oxides and sulfates) horses are frequently subject to marginal deficiencies that affect health and performance.

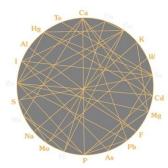


Common Reasons for Horses to be Low in Certain Minerals

- Poor quality pasture or restricted pasture availability
- Poor availability of inorganic mineral sources
- Reliance on 'trace mineralized salt' alone
- Low mineral content of hay and grains
- Interfering substances such as mineral antagonism
- High calcium content of drinking water

How EquiMix® Helps Ensure Proper Mineral Balance

The minerals in EquiMix are organic chelated mineral proteinates; trace minerals bound to a range of amino acids and small peptides. These minerals are designed to increase absorption and retention in the body, thus they resemble the mineral bonds found in plants and grains. EquiMix minerals offer advantages in absorption and metabolism over inorganics and other types of organic minerals.



Protection Against Interactions

Mineral interactions can complicate proper equine mineral supplementation. For example, excess iron from water sources or soils can interfere with copper, zinc and chromium supplementation in the horse. The trace minerals used in EquiMix are designed to prevent these interferences allowing optimum mineral availability to the horse.

The Role of EquiMix in Equine Health

- Allows the horse to cope with oxidative stress
- Strengthened keratin structure for sound hooves
- Supports the reproductive system for mares and stallions
- Improves mare milk quality, which in turn promotes healthy growth in young foals
- Proactively builds tissue and bone strength in foals



EquiMix® vs. "Organic Sources"

Warning: Not All Organic Mineral Sources Are Created Equally

Form

The organic trace minerals used in EquiMix are designed with a precise blend of mineral-aminoacids and mineral-peptide chelates. This design closely resembles the mineral bonds found in plants, a natural, more bioavailable form. In this structure, they are protected from oxidation and are more readily absorbed and retained.

A variety of dietary supplements on the market are listed as organic minerals. This generic label has caused confusion as they range from single aminoacid chelates to complex mineral proteinates.

Variable bioavailability is associated with organic sources because different production processes can result in differing levels of minerals as well as incomplete protection of bonds resulting in potential oxidation or mineral interferences.

Protected

EquiMix contains trace minerals that have the necessary properties to ensure they pass safely through the volatile GI tract environment to absorption sites. Inorganic minerals such as iron have been found to negatively interfere and have an antagonistic effect with the absorption of other minerals. However, the organic minerals in EquiMix are protected from interactions. Therefore, optimum mineral status is achieved while reducing the level of nutrient waste.

"Mineral Complexes" are not well protected in the GI tract, or against other minerals competing for absorption. Because of these losses and interference antagonisms, more mineral must be fed to ensure adequate mineral supplementation. This results in more nutrient waste and less than optimal mineral status.

Quality Control

All minerals used in the manufacture of Triple Crown products have been selected for their quality and safety.

- Vendors must be qualified under an approved vendor/supplier program and must meet stringent quality and safety standards.
- All products are produced in accordance with GMP, FAMI-QS and principles of HACCP; these programs are designed to minimize the

As recently as 2007, the FDA discovered melamine tainted ingredients used for animal food in the US.

- With over 70% of the worlds copper sulfate sources estimated to be from renewable sources, the threat of contamination is very real.
- Dioxins are catalyzed during trace mineral preparation, inorganic trace minerals are common sources.



possibility that products could be contaminated with any undesirable substances, including dioxins during manufacture and storage.

- All products are tested for Dioxin, PCBs, Cadmium, Arsenic, Lead and Heavy Metals.
- PCB is a member of the dioxin family. It is a by-product of the production of transmission fluids, electric wire coating etc. It is also present in inorganic trace minerals due to recycling (e.g. copper wiring). PCB is a known carcinogen in humans and animals.