

Trace Minerals

Why do we need them & what do they do?

Zinc

Required: growth, conception, spermatogenesis, tissue synthesis, wound healing, Vitamin A metabolism, immunity, and hemoglobin & enzyme production
Deficiency: poor feed efficiency and intake

Iron

Required: growth, immunity & hemoglobin oxygen transport
High mortality in severe deficiency

Manganese

Required: growth, rumen cellulytic bacteria, reproduction (conception, estrus, ovulation), protein synthesis, enzyme systems, immunity, & hormonal systems
Subject to interference by inorganic minerals

Copper

Required: growth, ovulation, spermatogenesis, pigmentation of hair / skin, immunity, & enzyme / collagen synthesis
Subject to interference by inorganic minerals

Iodine

Required: metabolic regulation
Component of thyroid hormones (Goiter in deficiency)

Cobalt

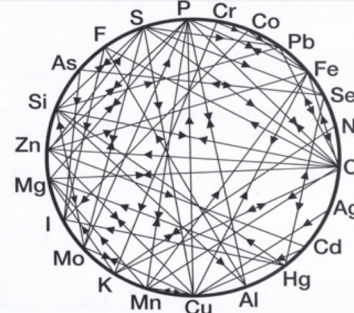
Required: growth, & Vitamin B12 synthesis by rumen bugs
Deficiency: feed intake depression & Wasting Disease

Selenium

Required: growth, and immunity
Deficiency: retained placentas, White Muscle Disease & Mulberry Heart

Mineral Interactions

P - Phosphorus
Cr - Chromium
Co - Cobalt
Pb - Lead
Fe - Iron
Se - Selenium
Na - Sodium
Ca - Calcium
Ag - Silver
Cd - Cadmium
Hg - Mercury
Al - Aluminum
Cu - Copper
Mn - Manganese
K - Potassium
Mo - Molybdenum
I - Iodine
Mg - Magnesium
Zn - Zinc
Si - Silica
As - Arsenic
F - Fluorine
S - Sulfur



Direction of arrows denotes interference.

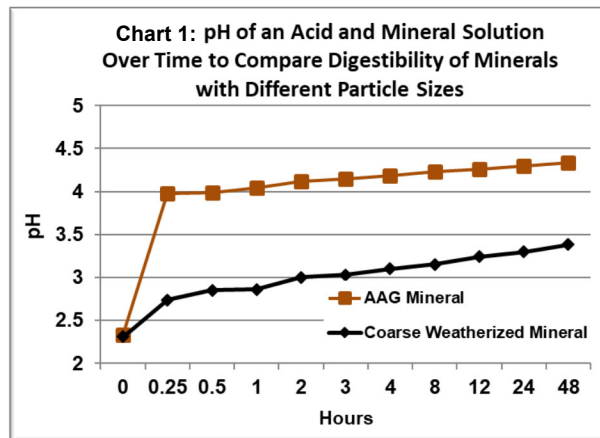
Arrows aimed at each other denote mineral synergy.

Arrows aimed away from each other denote mutual mineral interference or antagonism.

Mineral Digestibility

Mineral is expensive, so higher digestibility means you get more return on your money.

Chart 1 shows a coarse mineral of a major competitor compared with our finer ground mineral with added oil. The finer ground mineral raised the pH of the acid much faster and higher than the coarse mineral resulting in improved digestibility.



Fanning, K. C., Great Plains Livestock Consulting, Inc.

Contact Us Today



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Range & Stocker Minerals





AAG Calving & Breeding Mineral

A Mineral Supplement for Beef Cattle

-GUARANTEED ANALYSIS-				
Calcium	(Min)	14.1%	(Max)	16.9 %
Phosphorus			(Min)	8.0 %
Salt	(Min)	16.2%	(Max)	19.4 %
Magnesium			(Min)	2.0 %
Zinc			(Min)	5,750.0 ppm
Copper			(Min)	2,500.0 ppm
Selenium			(Min)	26.4 ppm
Vitamin A			(Min)	275,000.0 IU/lb
Vitamin E			(Min)	275.0 IU/lb

Feed at a rate of 2-4 oz/head/day depending on season & nutritional status

Features & Benefits

- **Feed 30 days before calving thru breeding season**
 - ◊ Balanced calcium & phosphorus for lactating and ovulating cows
 - ◊ Takes phosphorus of forages into account
 - ◊ Saves money & the environment
- **Added Chelated Trace Minerals**
 - ◊ Improves mineral absorption by preventing antagonists from tying up minerals
- **Increased Vitamin Levels**
 - ◊ Improves health & immune function

AAG Range & Stocker Minerals

AAG Gestation Mineral

A Mineral Supplement for Beef Cattle

-GUARANTEED ANALYSIS-				
Calcium	(Min)	17.5%	(Max)	21.0 %
Phosphorus			(Min)	5.0 %
Salt	(Min)	16.2%	(Max)	19.4 %
Magnesium			(Min)	2.0 %
Zinc			(Min)	4,800.0 ppm
Copper			(Min)	1,800.0 ppm
Selenium			(Min)	26.4 ppm
Vitamin A			(Min)	275,000.0 IU/lb
Vitamin E			(Min)	275.0 IU/lb

Feed at a rate of 2-4 oz/head/day depending on season & nutritional status

Features & Benefits

- **Feed from end of breeding season until 30 days prior to calving**
 - ◊ Balanced calcium & phosphorus for maintenance & fetal development
 - ◊ Takes phosphorus of forages into account
 - ◊ Saves money & the environment
- **Balanced and proven vitamin & trace mineral formulation**
 - ◊ Maintains healthy eyes & tissues
 - ◊ Increases calcium & phosphorus absorption
 - ◊ Improves health & immune function

AAG Summer Stocker Mineral

A Mineral Supplement for Beef Cattle

-GUARANTEED ANALYSIS-				
Calcium	(Min)	17.1%	(Max)	20.5 %
Phosphorus			(Min)	3.0 %
Salt	(Min)	18.0%	(Max)	21.6 %
Magnesium			(Min)	1.0 %
Zinc			(Min)	3,000.0 ppm
Copper			(Min)	1,250.0 ppm
Selenium			(Min)	26.4 ppm
Vitamin A			(Min)	100,000.0 IU/lb
Vitamin E			(Min)	100.0 IU/lb

Feed at a rate of 2-4 oz/head/day depending on season & nutritional status

Features & Benefits

- **Balanced for calves & yearlings on pasture**
 - ◊ Proven formula used on tens of thousands of stockers in Kansas
 - ◊ Added Magnesium included in wheat pasture mineral to balance electrolytes and aid in consumption control
- **Balanced and proven vitamin & trace mineral formulation**
 - ◊ Maintains healthy eyes & tissues & aides in prevention of Pink Eye
 - ◊ Cost effective mineral formulated for the needs of growing cattle on pasture

Variations available with legal combinations of the following additives:

- **Fly Control:** Altosid IGR, ClariFly
- **High Magnesium**
- **Availa 4:** Organic "chelate" trace minerals
- **Antibiotics:** Aureomycin (with VFD)
- **Ionophores:** Rumensin or Bovatec
- **Bio-Mos**
- **Diamond V**