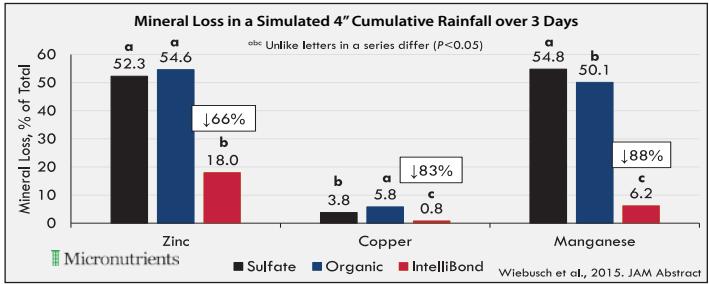


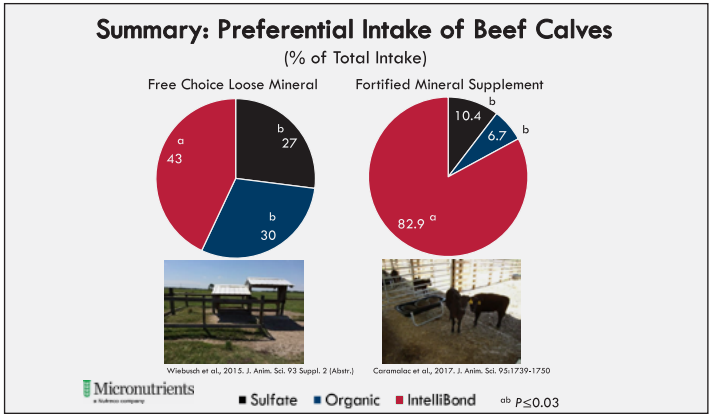
Stability

- Sulphate trace minerals are water soluble and are more hydroscopic (absorb water). IntelliBond® has a strong covalent bond, decreasing mineral leaching.
- IntelliBond® offers stability vs. sulphates/oxides because of the strength of its covalent bonds.
- Soluble minerals can leach out of feed when exposed to precipitation.
- Vitamins are more stable when IntelliBond® is used. Vitamin levels are retained for a longer period of time within a mineral.



Palatability

- Weak ionic bonds from sulphates cause dissociation of metal when exposed to moisture.
- Animals have evolved with an aversion to metallic tasting compounds which are associated with toxic plants. These free metal ions activate bitter-sensing receptors.
- The bond stability of IntelliBond® provides improved palatability of the mineral.



Stability

IntelliBond® avoids negative interactions with moisture and other essential nutrients.

Bioavailability

The unique crystalline structure of IntelliBond® limits interactions with antagonists and therefore minerals are more available for use by the animal.

Fibre Digestibility

IntelliBond® has been shown to increase total tract nutrient digestibility and fiber digestibility in the rumen.

Palatability

Beef animals prefer minerals with IntelliBond®.



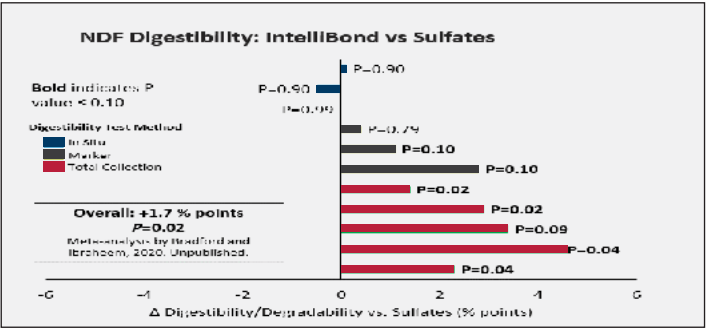
SELECT BEEF MINERAL PROGRAM

Optimized with IntelliBond®
a Selko product



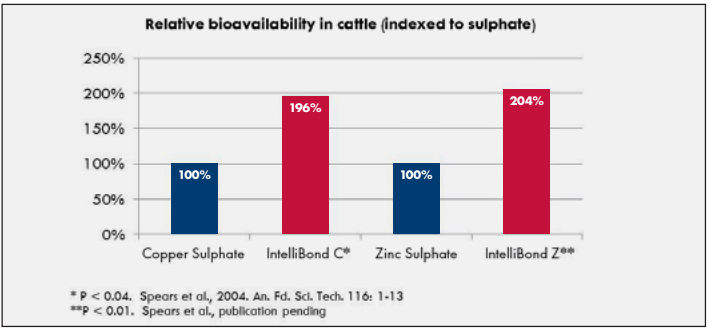
Fibre Digestibility

- Weak sulphate ionic bonds cause dissociation of metals when exposed to moisture (saliva and rumen fluid) and release free metal ions.
- Free metals may negatively affect microbe function.
- Free metal ions are highly oxidative and antimicrobial which can impact fibre digesting microbes in the rumen.
- Because of the strong covalent bonds of IntelliBond, there is minimal antimicrobial effect on the fibre digesting microbes.



Bioavailability

- Mineral absorption is dynamic and depends on many factors - both animal related (mineral status and homeostatic control) and dietary related (source and antagonists).
- Bioavailability is a measure of how much mineral is available to be absorbed by an animal relative to other sources of mineral.
- IntelliBond® has a better availability because of its covalent bonds which cause it to stay intact through the rumen allowing for improved animal utilization.



“Ability Matters
- it’s all about the
bonds”



IF IT’S ALL ABOUT THE
BONDS, WHAT’S THE
DIFFERENCE?

Hydroxy (IntelliBond®)

Hydroxys bound to metals with COVALENT BONDS.

Sugar: COVALENT bonds keep atoms together when sugar dissolves.

Salt: IONIC bonds allow atoms to dissociate when salt dissolves.

Hi-Range® Beef Mineral Program

The Hi-Range® Mineral Program was specifically formulated to meet the nutritional requirements of beef cattle for all stages of production.



Product	Ca %	P %	Salt %	Mg %	Cu mg/kg	Mn mg/kg	Zn mg/kg	I mg/kg	Co mg/kg	Se mg/kg	Vit A IU/kg	Vit D IU/kg	Vit E IU/kg				Comments
TRACE MINERAL SALT			90		5,000	8,000	10,000	150	50	120							Basic trace mineral salt for pasture.
BETTER BOOTS TRACE MINERAL SALT			90		5,000	8,000	12,000	1,250	50	120							Trace mineral salt with increased Iodine and Zinc for hoof health.
SPRING MINERAL	10	5	33	5	3,000	7,000	9,000	400	50	30	500,000	50,000	400				High Magnesium mineral for prevention of grass tetany.
SUMMER MINERAL	10	5	40	1.5	3,000	7,000	9,000	400	50	30	500,000	50,000	400				Pasture mineral for dry or late summer grass. Also a multipurpose 2:1 mineral all year round.
WINTER MINERAL	12	9	26	1.5	3,000	7,000	9,000	150	50	30	750,000	75,000	2,500				Winter pasture mineral used when protein supply is adequate.
CEREAL FORAGE MINERAL	20	2	26	3	3,000	7,000	9,000	150	50	30	600,000	100,000	3,000				High Calcium mineral for confined cattle or grazing corn.
CALVING MINERAL	10	8	28	3	3,000	7,000	10,900	150	50	30	750,000	100,000	5,000				Select line of calving mineral contains chelated Manganese, Zinc, Copper and Selenium.
BREEDER MINERAL	12	10	21	1.5	3,000	8,400	10,900	150	50	30	700,000	100,000	1,000				Select line of breeder mineral contains chelated Manganese, Zinc, Copper and Selenium.
PREM* MINERAL	10	6	29	3	2,500	5,330	8,000	200	10	22.5	400,000	40,000	400				42% protein, provides supplemental nitrogen on dormant pastures.
1:1 PRAIRIE MINERAL	16	14	0	2	3,000	7,000	9,000	150	50	30	500,000	75,000	2,500				Salt free option for use with high Sodium water or forage
2:1 PRAIRIE MINERAL	16	8	0	2	3,000	7,000	9,000	150	50	30	500,000	75,000	2,500				Salt free option for use with high Sodium water or forage

Recommended Mineral Intake = 85-100g/head/day Trace Mineral Salt Intake = 20-25g/head/day PREM Mineral Intake = 125g/head/day

All minerals available in SELECT and STANDARD formulations *PREM = Protein Enriched Mineral

= Garlic

= Rumensin

= IntelliBond
Available in 'Select Minerals' Only.

HI-RANGE® MINERAL PROGRAM