IntelliBond®
a Selko product

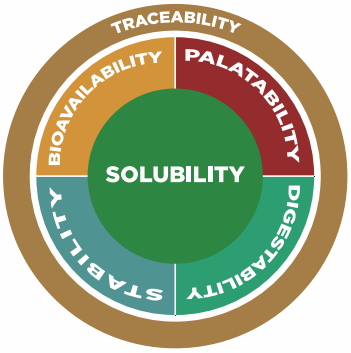
SMART MINERALS. SMART NUTRITION.

THE ABILITIES OF INTELLIBOND TRACE MINERALS

BIOAVAILABILITY

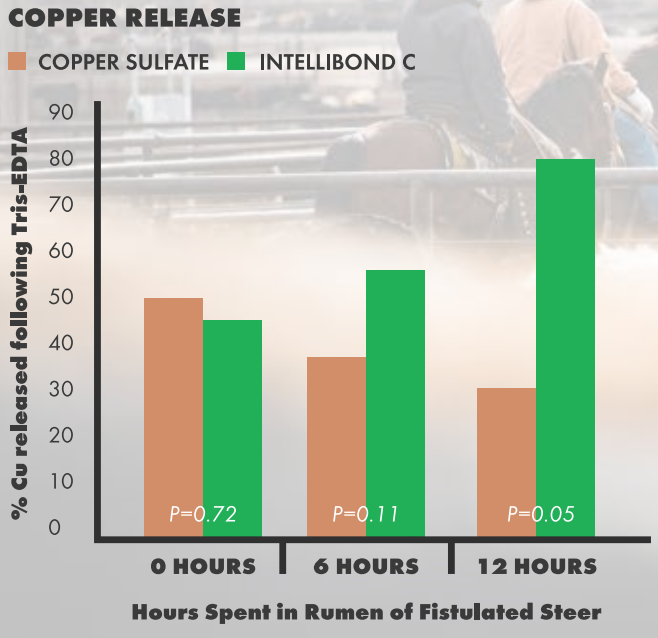
Trace Minerals and Bioavailability

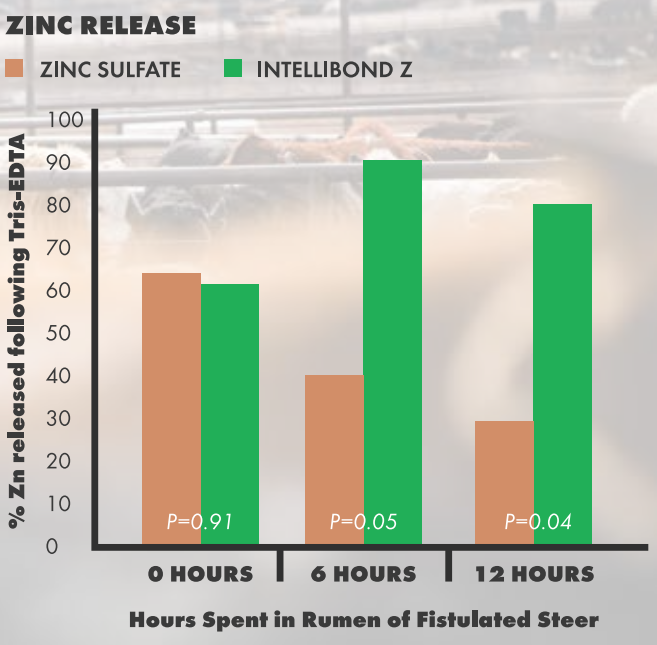
- Mineral absorption is dynamic and depends on many factors – both animal related (mineral status and homeostatic control) and dietary related (source and antagonists).
- Bioavailability is a measure of how much mineral is available to be absorbed by an animal relative to other sources of the mineral. Bioavailability is not an absorption coefficient.
- IntelliBond does not necessarily increase mineral absorption – rather IntelliBond remains available to be absorbed if the animal needs the mineral.



INTELLIBOND MORE AVAILABLE THAN SULFATES

After incubating in the rumen of fistulated steers, the solid digesta was exposed to a strong chelator to mimic the absorption sites in the small intestine. IntelliBond sources of copper and zinc were more available than the sulfate sources, indicating that the copper and zinc from the sulfate sources were bound to an antagonist (Caldera et al., 2019).





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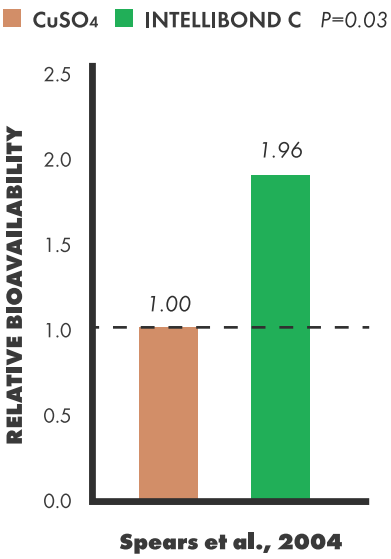
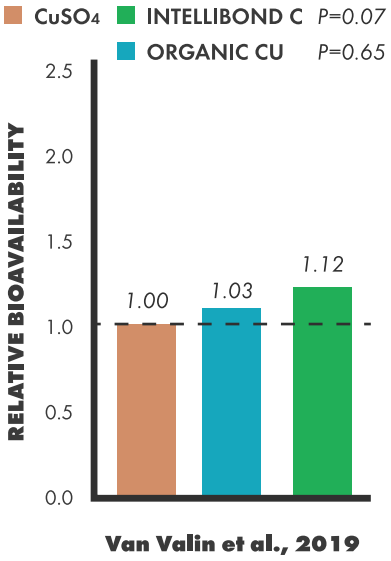


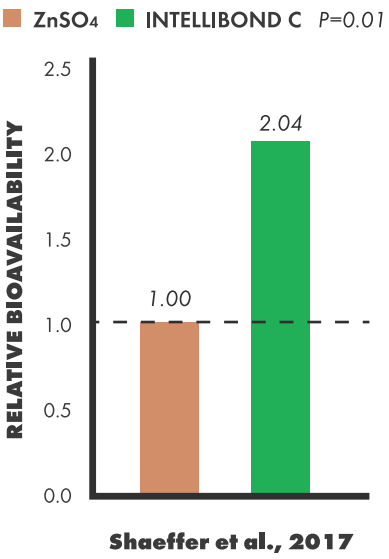
Spears et al., 2004

98 day depletion period
60 steers
10 steers/treatment
0, 5, & 10 ppm Cu
5 ppm Mo & 0.15% S



Van Valin et al., 2019

84 steers
12 steers/treatment
0, 5, & 10 ppm Cu
5 ppm Mo & 0.16% S



Shaeffer et al., 2017

14 day depletion period
16 steers

25 ppm Zn

REACTIVE VS. NON-REACTIVE

REACTIVE

- Subject to antaognistic interactions in the rumen.
- High metal load in the proximal small intestine with rapid mineral release.
- Metal bound to antagonists remains bound throughout the rest of the tract.

NON-REACTIVE

- Low solubitlity in the rumen so rumen antagonists are avoided.
- More soluble in abomasum (low pH).
- Slow, stable release throughout the entire gastrointestinal tract.