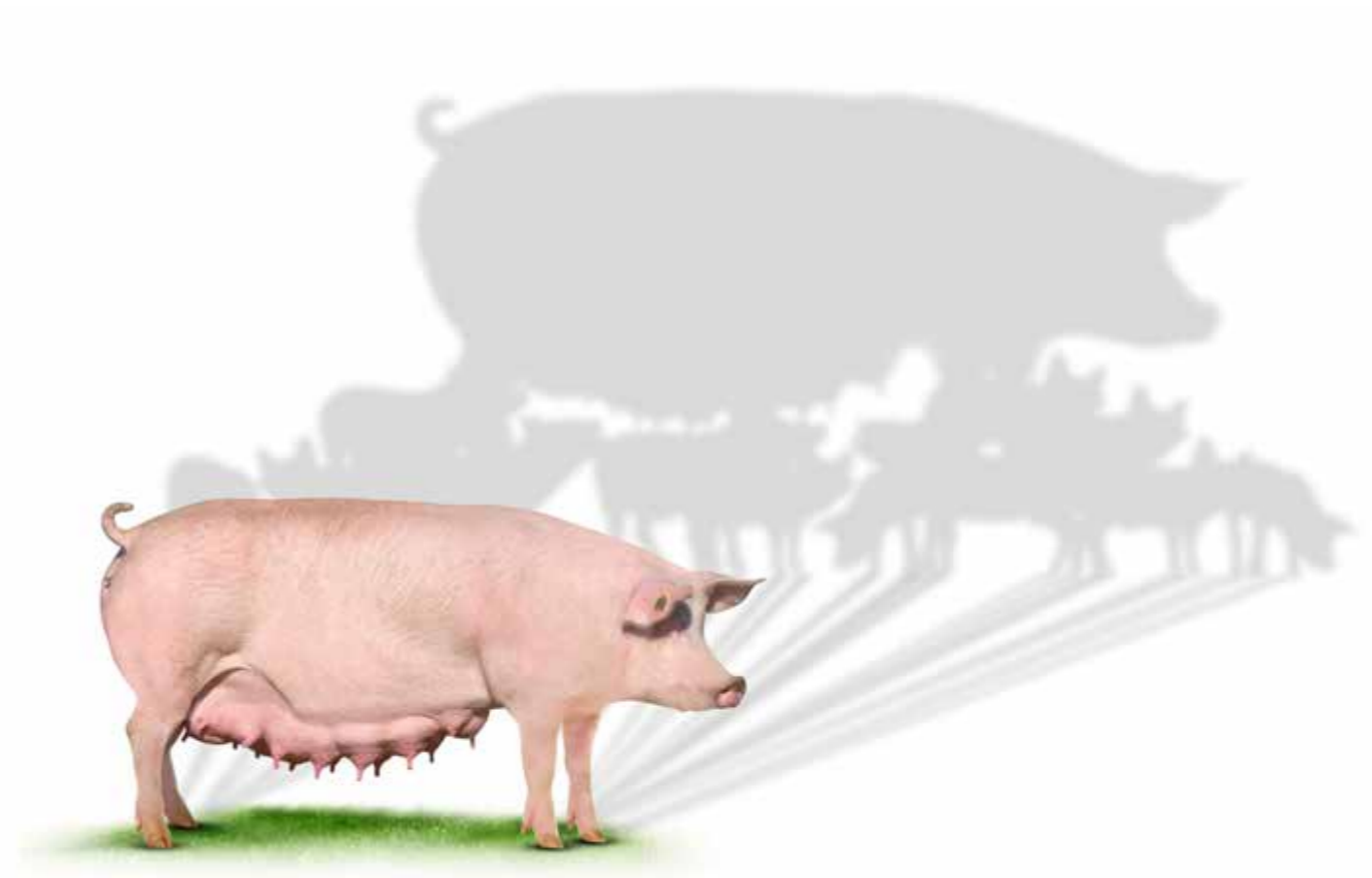


# MINTREX<sup>®</sup>

## Behind a thriving litter is a **well-nourished sow**

# MINTREX<sup>®</sup>



Products not available in all countries.

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# The 6 great benefits of feeding sows with MINTREX®

Not all mineral sources are the same. The exclusive chelated molecule makes MINTREX better than other sources, inorganic and organic.



1. More and heavier piglets at birth, with increased post-weaning performance
2. Less sow removals
3. MINTREX® unique, chelated, organic trace mineral provides high bioavailability
4. MINTREX overcomes negative interactions with other feed components in the digestive tract
5. Less mineral excretion and less impact on environment
6. MINTREX is a two-to-one chelate using methionine hydroxy analog as the ligand

# Sows fed MINTREX® produce more and heavier piglets with increased post-weaning performance

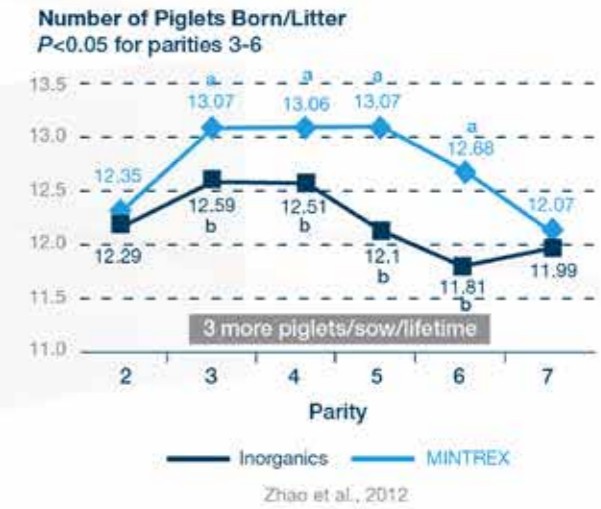


## MINTREX® increases number of piglets

Improvement of lifetime piglet production through parities is a key way to improve overall efficiency of the production system. Some sows do not reach their full genetic potential due to shortages in mineral nutrition. Feeding sows with MINTREX chelated trace minerals (zinc, copper and manganese) increases litter size, improving sow production efficiency.



Research trials show that MINTREX improves lifetime piglet production over inorganic sources by increasing the number of piglets per parity.



## MINTREX increases progeny birth weight

Low birth weight piglets are less likely to survive the competition of a crowded udder, and have more chances of pre-wean mortality and poor performance, which leads to high economic losses. Research corroborated that for every 100 grams increased in birth weight, the survival rate is increased by about two percentage units yielding around 0.30 more weaned piglets per litter. Moreover, pigs that have a light weight at birth will also be lighter than their peers throughout life. Optimum mineral nutrition for sows with MINTREX chelated trace minerals has great potential to boost piglet birth weight and post-weaning growth performance.



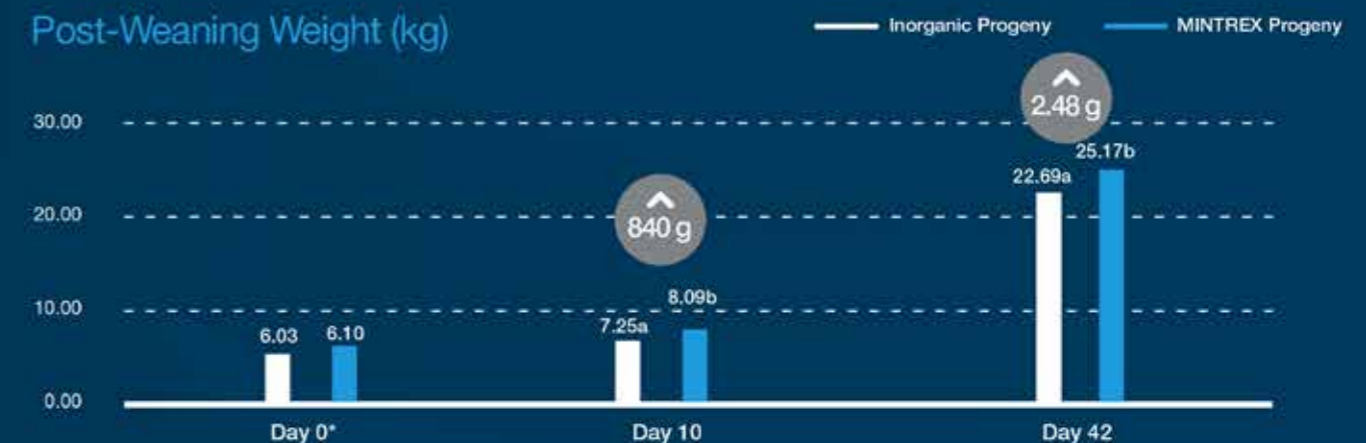
Research trials demonstrate that the addition of MINTREX to sow diets increases piglet birth weight over inorganic sources, allowing them to have a strong start for optimum lifetime performance.

## Feeding sows with MINTREX increases post-weaning piglet performance



Research has demonstrated that progeny from sows fed MINTREX show better growth rates than progeny from sows fed inorganics. This bodyweight advantage is carried on throughout their lifetime.

## Post-Weaning Weight (kg)



\*Piglets selected for similar initial bodyweight at nursery (d 0; P=0.3)  
Means with different superscript differ (P<0.01)

# Sows fed MINTREX® are better equipped for gestation and lactation

## MINTREX reduces sow removal rate

High replacement rates increase operating costs, so improving sow longevity is critical for pig producers. Reproductive failure and locomotion problems have the greatest impact on removal rates. Together with poor body condition and long wean-to-service interval, these are the most common reasons sows leave the herd. In general, genetic lines recommend keeping replacement rate at around 45%, in order to maximize production profitability. Even more advanced production systems can struggle to increase sow longevity and achieve this recommendation. Supplementation of MINTREX (zinc, copper and manganese) plays a key role in sow longevity which contributes to herd profitability.

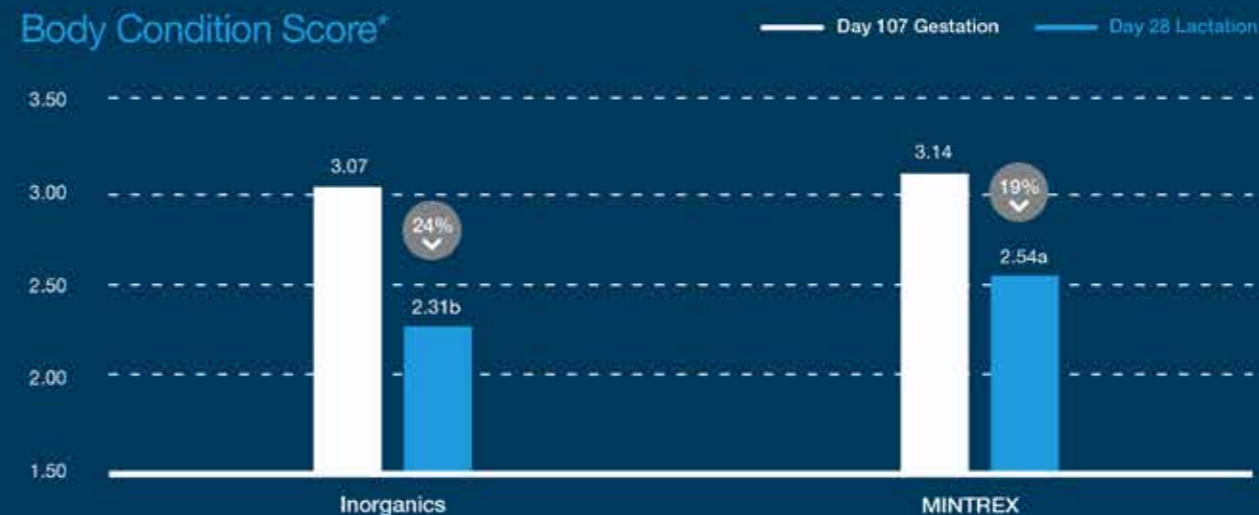


Research trials show that MINTREX reduces sow removal from locomotion, reproduction and disease problems, as well as involuntary removal.

## MINTREX® improves sow body condition score

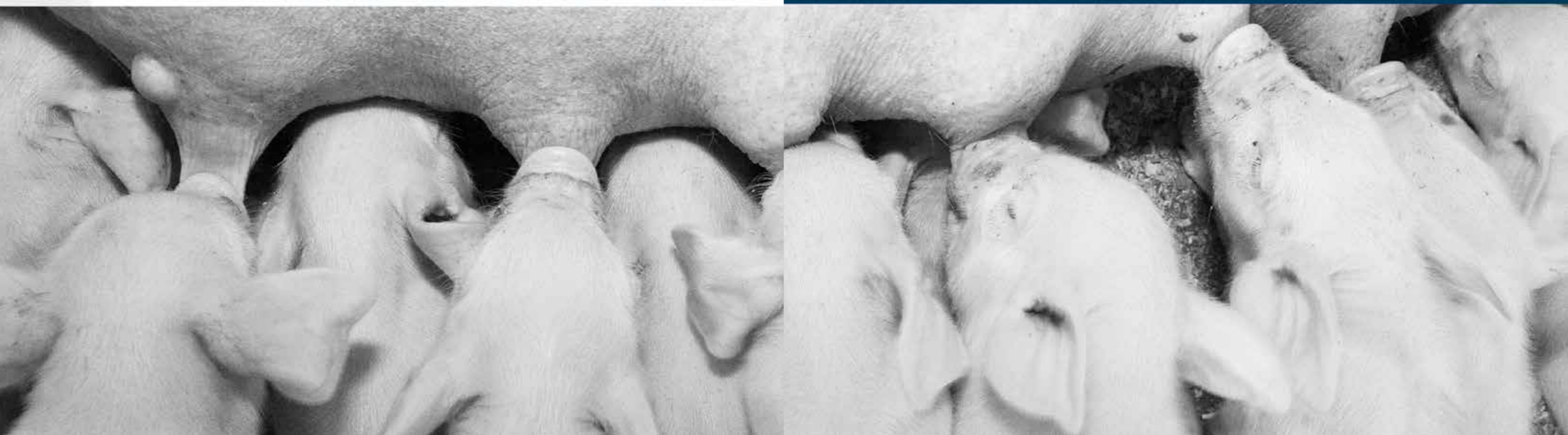
Research demonstrates that gilts fed MINTREX saw less of a decrease in body condition score after lactation.

Proper management of body condition score is critical for successful reproduction performance. During lactation, sow body condition suffers, which can hurt overall reproduction performance. As such, sows will have constant farrowing difficulties, poor rebreeding performance and high removal rates. Inclusion of MINTREX in sow diets helps to minimize the loss of body condition after lactation, leading to a consistent reproduction performance.



Novus internal data, 2015

\*Body condition assessed before and after first parity



**MINTREX<sup>®</sup>** unique chelated molecule delivers more bioavailable trace minerals to sows than other organic & inorganic sources

The verified chelated structure of MINTREX protects minerals that will be used for their full benefit

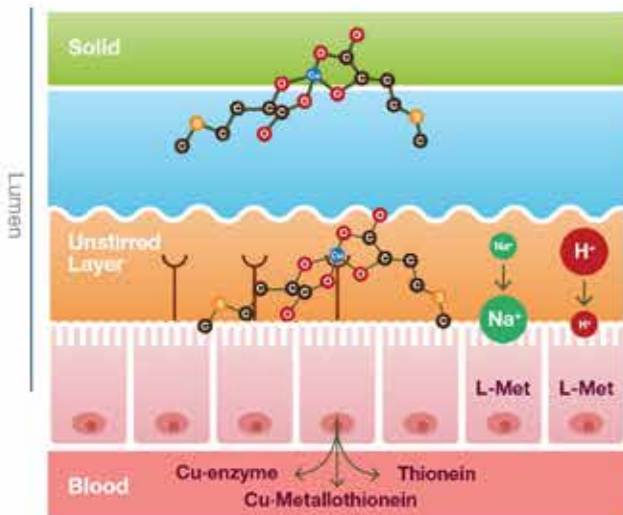
The chelated structure of MINTREX provides more minerals available for absorption allowing them to be used by the sow for improving performance.

Bioavailability is a key factor in mineral absorption and performance. Not all mineral sources are the same and different categories of organic trace minerals can differ in their bioavailability. MINTREX is a chelated organic trace mineral with high bioavailability. The chelated molecule consists of one mineral atom bound by coordinate covalent bonds to two molecules of the ligand, methionine hydroxy analogue. This stable and less reactive structure protects the mineral against numerous antagonisms and interactions with other components in the digestive tract, allowing it to reach the absorption site with increased bioavailability.

The chelated structure of MINTREX protects the mineral against antagonisms that diminish mineral absorption, allowing the mineral to pass through the upper gastrointestinal tract.

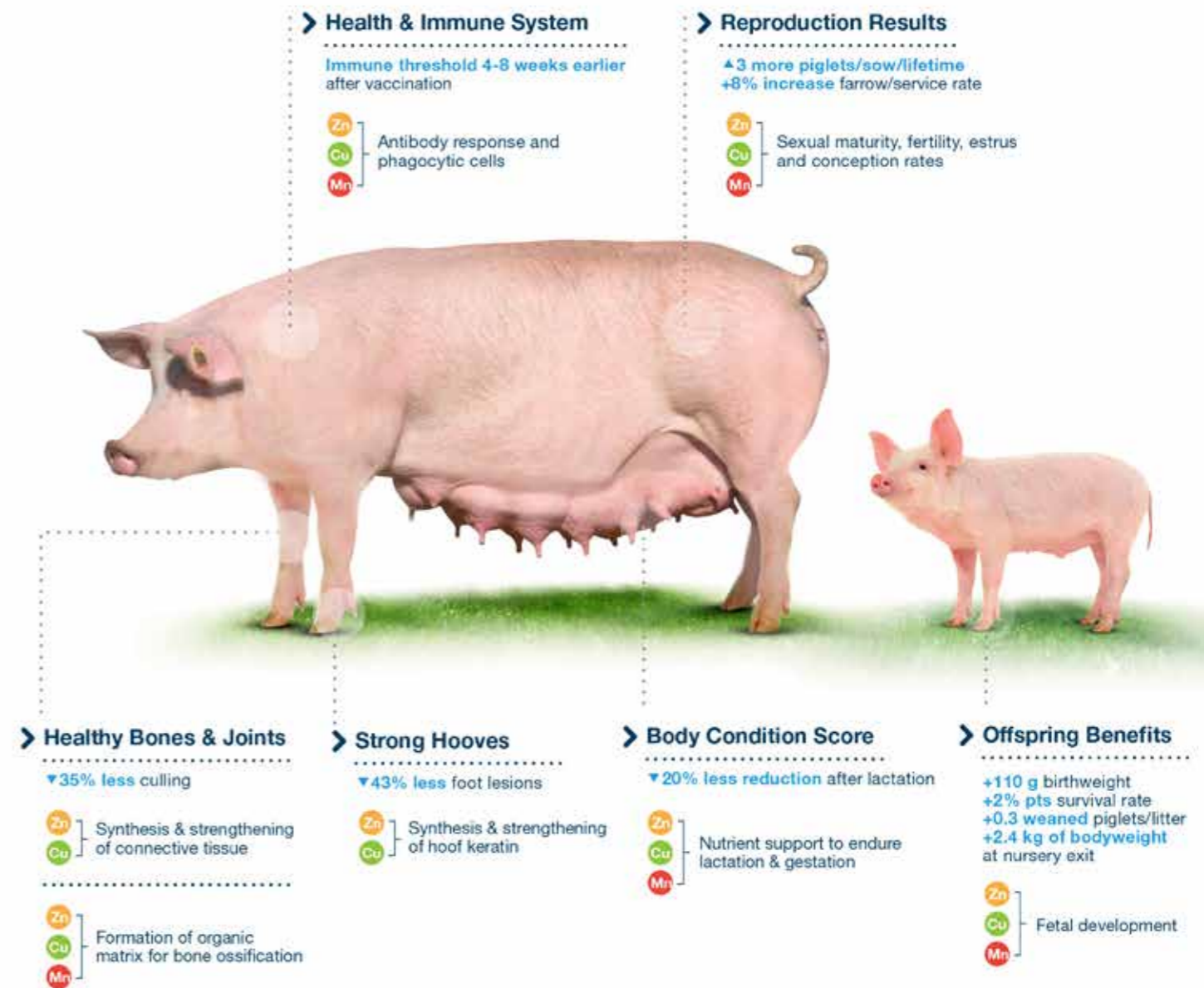
The chelated MINTREX molecule reaches the site of absorption in the small intestine allowing for more efficient delivery and uptake.

Once the mineral reaches the absorption site, it dissociates from the two methionine hydroxy analogue ligand molecules and is absorbed to be utilized by the sow in many metabolic pathways.



# The efficient mode of action of MINTREX<sup>®</sup>

MINTREX is a key tool in maternal feeding to support progeny performance and sow health





“Behind a thriving litter  
is a well-nourished sow”