



Uniferon Best Practice Recommendation

Increased productivity may lead to iron depletion

The impressive increase in productivity for swine production operations may become even more impressive in the future if management pays increased attention to the risk of anaemia and the need for additional iron supplementation prior to weaning.

Creation of an iron gap

Improved weight gains on an all-milk ration increase the risk of the development of iron deficiency and, hence, may well prevent optimal weight gains as well.

Modern swine production may cause an increase in iron needs beyond the industry standard of 200 mg iron parenteral supplement provided in the first three days of life. In essence, the increased productivity may have created a potential "iron gap" due to the factors delineated below:

- Increased litter size equates to lower iron stores at birth
- Increased spread in birth weights and growth weights thereafter have been widely observed
- Accelerated growth rates for piglets born with higher than average birth weights means increased risk of depletion of available iron stores
- Low levels of iron in the sow's milk (1 mg) are diminished to even lower levels with the increased litter sizes

In the evaluation of European clinical trials by Van Gorp et al in a poster paper at AASV 2012, they hypothesize that the iron gap due to depletion of iron stores may develop after the average piglet reaches 4 kg in weight gain on an all-milk diet, whereby there is a greater inherent risk of iron deficiency, which could lead to iron deficiency anaemia and other conditions detrimental to health.

Effective way to reduce the iron gap

An effective way to reduce the iron gap would be to treat the piglets with an additional parenteral iron supplement before iron depletion actually occurs. Van Gorp et al suggest a second dose of iron prior to weaning. We note that administration of more than 200 mg iron per piglet prior to weaning should be done under the supervision of a qualified veterinarian.

Sincerely
The Uniferon Team

