

Immediate post-weaning hydration for raising healthy piglets

Immediate hydration post-weaning is essential for the continued growth performance of pigs. Arriving into new surroundings and the initial separation from the sow and the littermates, can lead to stress conditions and even 'post-wean lag'.

Post-wean lag occurs when changes in the weaned pigs' intestine contribute to diarrhoea, weight loss, a decline in appetite and reduced growth. At weaning, higher activity of the piglet and adaptation to new physical and social environments, correlates to a higher energy requirement for maintenance. It is vital to encourage pigs to drink early to preserve the robust functionality of the intestine and maintain growth development.



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When piglets have proper access to fresh and good quality water post-weaning, they will usually start drinking after 3-5 hours. However, it takes up to 30-35 hours for 85-90% of the pigs to start drinking, and more than one week to rebalance fluid intake post-weaning.

As far as feed intake is concerned, about half of the piglets start eating in the first four hours post-weaning, but it takes more than a day to see 90% of them consuming feed. This pushes the piglet's gut towards an inflammatory state which can degenerate into disease and mortality.

The perfect solution

Tonisity have the perfect solution to minimise weaning disruption in the form of Tonisity PxW (PxW). PxW is a concentrated, water-soluble solution that is designed to be administered to weaning-age pigs through ordinary water lines. It is specifically designed to improve water intake and intestinal function during the weaning transition. Consisting of an innovative and palatable combination of amino acids and electrolytes, it hydrates and encourages feed intake during this stressful period.

Tonisity recently completed a meta-analysis performed on seven farms and 31,861

weaner pigs across the US. Fluid intake, mortality and fall-behinds were the key measurements recorded (Fig. 1).

A five-day protocol was used to deliver PxW (or water) to newly weaned pigs, with an average weaning age of 18.5 days, who had just arrived at wean-finish barns.

Transit time from the farrowing site was anything between three and 15 hours.

Water meters were installed in each half of the barn, so that pens on one side of the barn received PxW and the other side got water. Before the pigs were placed in the pens, the PxW water lines had been flushed through to make sure that PxW had run through from the medicator pump to the drinkers.

Pigs started drinking PxW from as early as 30 minutes post-weaning. After 12 hours post-weaning on day one, PxW consumption was 1.4 times higher than water consumption; after 24 hours this rose to 2.1 times that of water. On average across the five days, PxW was consumed 1.7 times more than water.

Mortality in the control groups was 0.7% compared to 0.3% in the PxW groups, a 57% reduction or four pigs per 1,000 weaned. Fall behinds or weaker pigs that needed to be moved to hospital pens, were 4.4% in the control group and 2.6% in the PxW group, a 41% reduction in weak pig removals or the equivalent of 18 more pigs per 1,000 weaned.

This post-weaning nutritional support acts like fuel for the gut cells. The palatable formula attracts pigs to their water post-

weaning and encourages early hydration.

We know that 75% of drinking is associated with feeding, and improved fluid intake correlates to increased feed intake. Pigs do not eat when they are thirsty and a hydrated pig is more likely to consume feed sooner.

Producer advantages

Tonisity PxW helps reduce labour time as it can be administered through the water lines. Producers can see positive results almost immediately, by reading water meters, and evaluating initial fluid intake of the solution versus water consumption.

PxW can also be given to pigs before transport, where pigs are exposed to various stress factors like space restrictions, travel conditions and transit time. It helps them cope with this challenging situation and improves their hydration.

Recent trials have also shown that it is compatible with water medication/vaccination. With Tonisity PxW we see that pigs are thriving, not just surviving. ■

References are available
from the author on request

Fig. 1. Fewer fall-behinds and reduced mortality.

