Five efficiency drivers to support producers' bottom lines in 2021

Swine producers are facing pressures on many fronts in 2021. Disease outbreaks, regulatory actions, price volatility and trade restrictions are among the factors shaping a complex production landscape. While regulations and trade are beyond farmers' control, improving production efficiency is an opportunity to retain and even improve profitability across the supply chain.

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At the animal level, opportunities exist to improve feed efficiency. At the farm level, improved efficiencies can contribute to better producer economics. Across the industry, optimising efficiencies can help tackle environmental, ethical and social dilemmas associated with pig production.

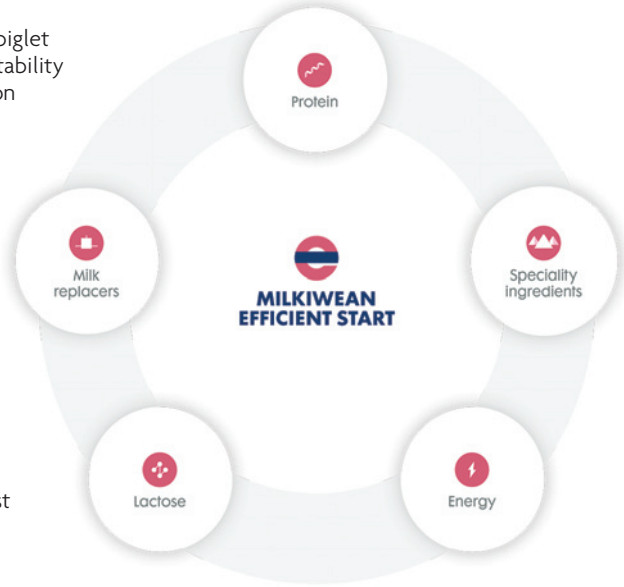
Efficiency efforts must start early in an animal's life and be tailored to the challenges on the farm. Research shows piglet quality at 10 weeks of age largely determines total lifetime performance.

With the goal of driving piglet quality and producer profitability early in life, Trouw Nutrition researchers identified five efficiency bottlenecks.

These bottlenecks inspired the development of the Milkiwean Efficient Start Programme.

Validated in a meta-analysis to improve performance, efficiency and profitability 5-10% above primary competitors' products, Milkiwean Efficient Start meets the industry's highest quality standards.

Here, we introduce five efficiency drivers shown in research trials to support performance and producers' bottom lines.



EFFICIENCY DRIVER 1: Milk replacers

While classical milk replacers leave piglets better prepared for weaning challenges and accelerate piglet maturation, they come with relatively high costs and labour requirements. This efficiency bottleneck inspired Trouw Nutrition to develop Milkiwean Precoce Liquid.

A cost-effective, performance-focused and user-friendly alternative to traditional milk replacers, Precoce Liquid is included in Milkiwean Efficient Start and can be fed manually or via automatic liquid feeding systems.

Bottom line: In trials, Milkiwean Precoce Liquid accelerated piglet performance by up to 0.8kg body weight at 34 days post-weaning for the same cost of liquid feed per piglet compared to a traditional milk replacer.

EFFICIENCY DRIVER 2: Protein delivery

Kinetio technology, included in Milkiwean Efficient Start, cost-effectively tailors the nutritional composition of feed to piglets' physiological requirements. Analysing ingredient digestion rates and applying an algorithm of hundreds of ingredients, Kinetio technology helps developers arrive at a formulation that balances least cost with an adequate nutrient supply.

Bottom line: In trials, piglets receiving feeding programmes that included Kinetio technology showed an 8% increase in daily weight gain, an improved feed efficiency of 5.2% and a 2% reduction in cost per kg gain compared to piglets not receiving Kinetio technology. A 2.9% decrease in corrected feed cost until 42 days post-weaning was also recorded in piglets receiving a feed programme containing Kinetio technology.

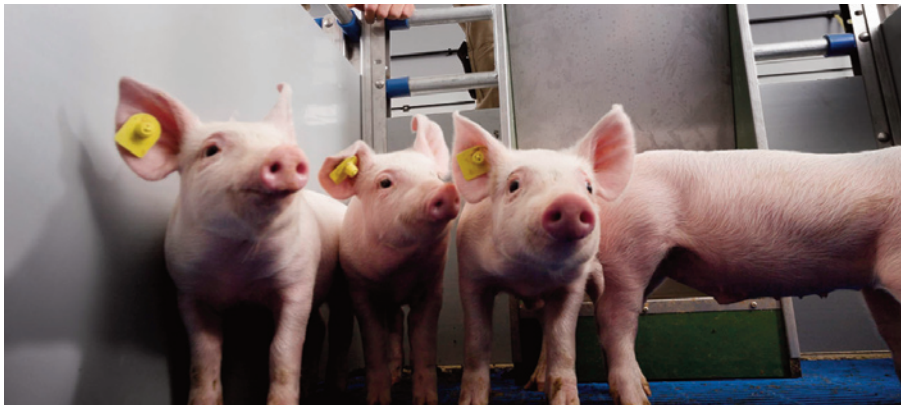
EFFICIENCY DRIVER 3: Specialty ingredients

A four-pillar approach based on specially selected functional feed ingredients drives efficiency in the Milkiwean Efficient Start program supported by Selko.

Pillar one guards against pathogen intake and supports feed safety. Pillar two supports digestion by optimising the stomach pH. Pillar three supports the quality of the mucus layer and tight junctions in the gut. The fourth pillar focuses on stabilising

Continued on page 20

Continued from page 19
gastrointestinal microflora, suppressing pathogens and fostering beneficial bacteria.
Bottom line: Trial data shows that supporting digestion improved daily weight gain by 2-12% and feed efficiency by 7-8%, while lowering cost per kg gain by 2-7% during the first two weeks post-weaning. Trials with Presan-FX included in Milkiwean Efficient Start showed increases in daily gain and efficiency of about 6% and 3% respectively.



EFFICIENCY DRIVER 4: Managing the energy loss dilemma

Not all gross energy in a piglet's diet is utilised by the animal. A complex interplay of factors including feed and energy intake, digestive capacity, urinary nutrient excretion and demands for heat production can reduce net energy available for physiological processes such as tissue gain.

These factors are accounted for in the Milkiwean Efficient Start programme's feed formulation.

Bottom line: Studies on net energy levels in piglets found that the level of energy for optimal efficiency differs and a multifactorial vision on energy utilisation is required.

This multifactorial approach is included in complementary feed which can be tailored to address specific energy needs that arise after the initial complete feed stage.

EFFICIENCY DRIVER 5: Maximising dietary lactose benefits

Lactose has been used in animal diets as a palatability enhancer, stomach acidifier, easily digestible energy source and prebiotic. However, lactose is expensive and its benefits vary with production circumstances. Researchers have identified ways to efficiently exert and leverage lactose's beneficial nutritional characteristics and included them in Milkiwean Efficient Start.

Bottom line: In trials, innovations driving efficiencies achieved the same piglet growth, feed intake and efficiency, whether diets contained high or low lactose levels. Moreover, these trials showed a reduction in feed cost per kg gain of up to 10%.

The bottom line

While profitability will remain a challenge this year, efficient nutrition included in the Milkiwean Efficient Start programme can help farmers achieve a 5-10% improvement in efficiency and profitability. Five drivers can support an efficient strategy for piglet feeding in 2021 and beyond. ■