Sustainable feed cost optimisation during Covid-19 and beyond

Feed represents the largest cost in pig production. Identifying effective strategies to optimise feed costs is essential for the prosperity of the feed producer and farmer. Raw materials as such are prone to price and quality fluctuations, making this aspect harder to manage.

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Therefore, increasing feed efficiency at a lower investment is the primary strategy to more profitability and a sustainable business model. It is reported by the European Compound Feed Manufacturers Federation (FEFAC) that the European compound feed production is estimated to decrease by 2.2% due to the coronavirus pandemic in 2020. In pig feed production an estimated reduction of 1.1% is predicted as African Swine Fever has a negative impact on exports to China and some countries demand lower agricultural environmental emissions.

Making the difference

As a commercial feed mill, offering unique, high nutritional diets will result in excellent feed conversion, healthier pigs and more satisfied customers for stronger bench-marking against competitors.

For the integrated pig meat producer, a more efficient diet will produce increased quantities of better quality carcases and meat, which directly adds to profit and increases the appeal of the final product to the consumer.

Years of scientific research and field experience have demonstrated the positive impacts of increasing feed efficiency through enhanced digestion. However in this process, the absorption aspect of nutrients through the intestinal wall is highly important to achieve a final optimal outcome. Furthermore, from an ecological point of view, nutrients that are not well absorbed by the animal are eventually excreted, thus lose their nutritional value as dietary components and can even cause detrimental effects to the environment of the pig.

The use of lysolecithin-based absorption enhancers to obtain increased feed efficiency has been gaining both academic and commercial attention.

Cost savings without compromising profitability

Lysoforte Extend (LEX) is a unique nutrient absorption enhancer that combines the benefits of three well-chosen active ingredients in a synergistic ratio; lysophospholipids together with monoglycerides and a synthetic emulsifier. It is specifically designed to increase not only the emulsification of the dietary fat matrix, but also to accelerate the further hydrolysis and absorption of lipids.

Consequently, the complete digestion process is improved whilst at the same time enhancing the absorption of other essential nutrients such as amino acids and vitamins. Through this unique mechanism, LEX can not only benefit sows, but also piglet and fattening pigs in multiple ways leading to a higher production profitability.

LEX can be applied either as an additive 'on top' of the standard diet formulation, recommended for periods of production when animals require support, such as during lactation and weaning, or during other periods in conjunction with diet reformulation to allow significant feed cost savings.

On top application

During lactation, sows enter a negative energy balance as, especially in modern prolific sow strains, feed intake is insufficient to cover nutrient demands. This has a direct impact on sow performance and subsequently her piglets.

In numerous studies, performed across the globe, the 'on top' application of this lysophospholipid-based nutrient absorption enhancer was found to reduce the number of non-productive days in sows as a result of reduced backfat losses.

Sows had a higher feed intake and improved condition which subsequently resulted in more uniform and heavier litters.

As a result, their piglets demonstrated improved growth rates until weaning, with reduced coefficient of variation, as well as higher liveability, which also positively impacted their further growth and feed conversion efficiency.

Changes in average daily gain and litter weaning weight in piglets from supplemented sows were consistently positive across different trials. The results of these trials indicate that adding LEX to late gestation and lactation diets, can consistently improve sow and piglet performance.

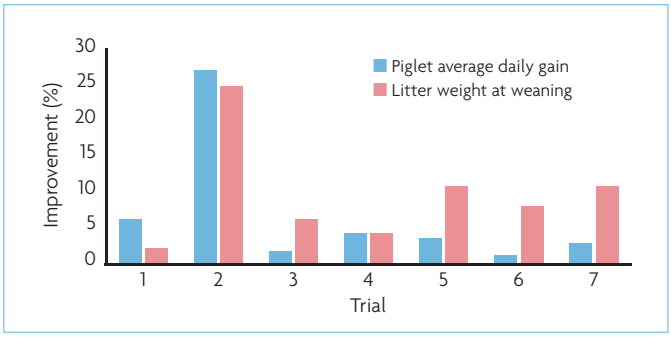

Fig. 1. Percentage improvement in piglet average daily gain and litter weight at weaning in litters from sows supplemented with Lysoforte.

Reformulation approach

In piglet diets, when applied 'on top', of a standard feed formulation, LEX can support weight gain and feed conversion rate. This is particularly important around weaning, where the gastrointestinal tract is still developing and the secretion of enzymes and bile salts have not yet reached their maximum level of contribution to optimise digestion and absorption of essential nutrients.

In a reformulation approach during the subsequent growing and fattening phase, LEX allows a reduction of crude protein and crude fat requirements, saving substantial feed costs, while maintaining the productive performance of the pigs.

Through the combination of enhancing the digestion of dietary energy and other nutrients, LEX also promotes loin thickness and carcase quality which contributes to a higher final profitability of the fattening production cycle.

Cost optimisation during Covid-19 and beyond

In economically challenging times, like the Covid-19 pandemic, LEX can play a crucial role in optimising the delicate balance between animal performance and feed costs.

To exploit the full economical benefit of Kemin's unique three ingredient nutrient absorption enhancer, a combined programme delivers the best of all worlds, as it may support sow productivity, boost initial piglet growth in the starter phase and help to save feed costs in the fattening period.

Finally, this will help you to achieve the best value for your money with the most advantageous combination of cost, quality and sustainability. ■

References are available from the author on request