Paylean® Use in Show Pigs

Dr. Jodi Sterle
Associate Professor and Extension Swine Specialist
Texas A&M University/Texas Cooperative Extension Service

Feeding Paylean® to show pigs remains a hot topic. How much to feed, when to feed it, does it cause feet and leg problems, and what about added stress on the pigs, are all questions that appear to have many different answers, depending on who you ask. It does appear that Paylean® is a product that works as well as it is advertised, but that the effects on show pigs may differ than commercial or research hogs. While we are still trying to sort out some of these complicated effects, the following

The Paylean® label was recently changed by the FDA. On May 9, 2006, the U.S. Food and Drug Administration changed the label to allow Paylean® to be fed to pigs over 150 pounds during their final 45 to 90 pounds of gain before market. The previous label restricted use of Paylean® to pigs weighing 150 – 240 pounds. Additionally, the new label changed the dosage of Paylean® fed, restricting the dosage to 4.5 to 9 grams/ton. The previous label also included 18 g/T, which was removed from the new label.

It appears that pigs that have been fed Paylean® handle stress differently than those which have not. Extreme care should be taken when exposing these animals to any stressful situation, including clipping, transporting, showing and mixing with novel pigs. It is always recommended to handle pigs calmly and gently, to keep them cool and hydrated and to work and transport them in the coolest part of the day, but with Paylean® and the high frequency of the stress gene in show pigs, it is imperative to take extra care. It is important to be attentive and observant of signs of stress on the pig, including panting, tail-twitching, shaking or trembling and discoloration of the skin on white hogs. If any of these signs occur, remove the animal from the stress, make sure the pig has access to clean water and try to keep the animal cool and comfortable.

Paylean® is not approved for use as a top dressing, only as a completely mixed feed. Use of this product as a top dressing is illegal. It is often sold in bags or buckets at the full dose, using companion feeds without Paylean® to dilute it to the dose desired. This is not top dressing, although you are now mixing your own feed and take on added responsibilities when doing so. Top dressing is simply sprinkling an additive on top of the completely mixed ration when feeding. While suitable for some products, top dressing not acceptable for premixes containing Paylean®.
When it comes to Paylean®, “more is not better”. Research data has shown that there is no additional effect of increasing the dosage beyond 9 g/T. Additionally, this is illegal!

Paylean® is not approved for use with any feed medications other than Tylan®. The label was changed to allow for use with exclusively with Tylan® in the feed. Possible interactions with other medications, although not likely, are not understood at this time.

The withdrawal time of Paylean® is 0 days. A withdrawal time of 0 days mean that the half-life of the product is very short in the animal’s body and that no violative tissue residues (including in the muscle, liver, kidney, etc.) have been found. It was previously only labeled to 240 pounds because that was the average market weight of hogs during the time period that most of the research was completed on this product. The recent change to allow feeding during the final 45 to 90 pounds of gain allows more flexibility for producers using the product.

The effects of Paylean® will be maximized after 2-4 weeks of feeding. While most pigs will take 5-7 weeks to gain 45 to 90 pounds at the end of the finishing phase, the effects of Paylean® are realized quickly. Feeding beyond the label directions is not beneficial and is illegal. Many producers report an almost immediate effect on their animals.

One of the most important things to consider when using Paylean® is that the response is not constant over time. The largest response will be seen in the first four weeks of feeding, during the repartitioning phase. Therefore, it does not need to be fed longer to get a response. Feeding it longer than recommended (during the last 7 weeks of the finishing phase) is illegal and will not yield an additive response.

Pigs on Paylean® need adequate protein to increase muscle mass. Since many show pigs are on a holding ration at this phase of the feeding period, it is important not to underfeed protein (as well as the other nutrients) in the ration. It is recommended to feed with at least a 16% CP diet, but with holding rations, this may need to be increased. Vitamins and minerals may also need to be increased to support increased lean gain. Consult a nutritionist if you have questions.

Pigs on Paylean® will grow faster than without Paylean®. It is important to remember that Paylean® increases growth (both in average daily gain and feed efficiency) and therefore the pigs will grow differently than they would normally. If you are “pushing the limit” in weight for a certain show, you may need to carefully watch your pig’s growth while on Paylean®. It is always recommended to weigh your pigs each week (at the same time of the day in order to compare) and plan out your feeding program to target your animal’s optimal weight at the time of the show. Closely monitoring each
individual pig’s growth and keeping track of the days to the show will prevent animals from being over the optimal weight. Carefully plan the use of Paylean® so that it is used legally, the cost is kept to a minimum and results are maximized.

**Paylean® is only approved for use in swine.** The FDA has approved the use of ractopamine hydrochloride in finishing beef cattle as well. However, this product (trade name: Optaflexx®) is at a different dosage. Use of either product in species other than what is on the label, including sheep, goats and horses, is therefore illegal.

**Paylean® is not labeled for use in breeding swine.** According to Elanco®, the manufacturers of Paylean®, no effects on reproduction following Paylean® use have been reported. However, the Food and Drug Administration has banned the use of this product in breeding swine. The gray area surrounds replacement gilts. These gilts are often shown as market hogs and then “kept back” as breeding females. Since gilts that are bred to produce show pigs tend to be leaner and heavier muscled than most commercial gilts, they are often not as reproductively sound. They may take more services to conceive, tend to have small litters and are poorer milkers than their commercial counterparts. While there does not appear to be any direct effects of Paylean® on reproduction, increasing muscling and leanness with Paylean® may exacerbate the potential for reproductive problems in these extremely muscled gilts. Bottom line: if you plan on breeding that gilt, do not feed her Paylean®.

**Not every pig needs Paylean® to win.** Pigs that are not completely structurally sound may not be able to withstand the added muscle (and corresponding stress on the joints) associated with feeding Paylean® and may experience feet and leg problems. Additionally, many argue that we have selected pigs to be lean enough (or even too lean) for the industry today. Bacon is currently one of the most valuable cuts from a hog carcass (although certainly not a lean cut) due to the increased demand for bacon on hamburgers and deli sandwiches. However, at least .6 inches of backfat are needed to produce a good belly for bacon. Many of the show pigs are much leaner than that and hence their bellies cannot be used, forfeiting value. Some pigs are naturally lean enough and also carry plenty of muscle. While Paylean® did not affect belly thickness or belly yield in research trials, many industry professionals feel that we should moderate the muscling and leanness in our show pigs. Which pigs to feed Paylean®, for how long (within label directions) and at what dosage (4.5, or 9 g/T) remains part of the “game” of producing a champion.

For more information, please contact Dr. Sterle at 979-845-2714 or email at j-sterle@tamu.edu.