

FEEDING PAYLEAN TO SHOW PIGS

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HONOR[®] Show Chow[®] Nutritionist

Paylean[®] is the trade name for Elanco's ractopamine hydrochloride. Ractopamine is an Beta adrenergic agonist. Simply put, Paylean[®] shifts nutrients into synthesizing more lean or muscle, and away from fat deposition. Paylean[®] does not increase the number of muscle fibers, but rather increases the size of the existing muscle fibers. Paylean[®] is not a steroid, however it is classified as a drug by the F.D.A. and is regulated as such. Due to the rapid metabolism is Paylean[®], there is no withdrawal time required. Paylean[®] is approved for use only in swine. Ractopamine HCl is approved for use in both swine and cattle. The cattle product is called Optiflexx[®] and is not approved to be fed to swine.

How to Use Paylean[®]

The best teacher of using this product is experience. Experience will show exactly what Paylean[®] will do and how a pig will respond. Remember here that all pigs are different and will respond a little differently in terms of side effects. However, most pigs with average muscling will respond about the same in terms of days until you see visible effects from feeding Paylean[®]. Usually, in about 7 days you can visually see a difference in pigs fed 9 grams/ton.

The legal levels of Paylean[®] range from 4.5 to 9 grams/ton of complete feed. The amount and duration you select to feed will depend upon these factors: 1) soundness of the pig, 2) stress status of the pig, 3) amount of natural muscling, and 4) desired appearance.

1) Soundness: Paylean[®] will build muscle rapidly. Remember that we are feeding this product at the end of the feeding period, and the pig's skeletal growth curve has slowed and cannot keep pace with muscle deposition when fed Paylean[®]. This results in added pressure on the joints. Pigs that are unsound should not be fed Paylean[®]. Hopefully, we have done our job during the selection and purchasing process and we have selected a structurally sound pig. However, pigs change and a pig once thought to be sound, can be slightly unsound after it reaches 200 lbs. Paylean[®] can be successfully fed to these pigs if care is given and done under a watchful eye. In this scenario I would recommend no more than 9 grams/ton.

2) Stress status: The simple truth is that Paylean[®] and a stress positive pig are not a good combination. Paylean[®] for lack of a better illustration, kind of revs up the pig's metabolism. This combination can lead to unfortunate consequences, and even death of the pig. However, I have seen Paylean[®] successfully fed to stress positive pigs. Basically, great care must be employed. Treat the pig very, very well. Do not impose any form of undue stress on the pig. For example, when exercising do not run, whip, hit, kick, or get the pig excited. I would recommend no more than 4.5 grams/ton in this scenario.

3) Amount of natural muscling: Muscling is everything Paylean[®] is about, and why it is fed. In my opinion very heavy muscled pigs do not need Paylean[®]. The ideal candidate is a structurally sound pig that has moderate muscle. This means that the pig has the structure and mobility to handle the extra, added muscle, without getting "freaky" with too much muscle. Too much muscle, I will leave up to a judge's opinion as far as visual evaluation is concerned. However,

the amount of muscle that renders a sound, mobile pig into anything less is too much. Remember here, that fads come and go, body types change, frame size has changed, but the show ring requirement for soundness and freshness has not and will not change.

It is also important to note here the effects of Paylean[®] and time. The peak response in average daily gain and feed efficiency is seen by about day 14. By day 21 these effects have begun to wane, and by day 28 growth rate is about where it started pre-Paylean[®]. However, as this growth curve increases, levels out, and then subsequently decreases, muscle deposition continues to increase. So, the longer you feed Paylean[®], the more muscle the pig will develop. That is a positive. However, also remember that severe side effects can and will eventually develop with increasing Paylean[®] dosage and duration fed. In other words, the horror stories you have heard about feeding Paylean[®] result from feeding too much for too long.

4) Desired appearance: Basically this is my estimation of what a show pig should be: mobile, durable, young, lean (0.5 to 0.9 inches backfat), and muscular. I do not think I'm alone in that view. This type of pig will fit most judges. In that light, Paylean[®] helps with lean tissue synthesis and growth performance. You have to supply the rest. So, when selecting your next show pig project remember the factors involved in feeding Paylean[®], and the potential side effects. Start the selection process with the thought of feeding Paylean[®] in mind.

In addition, I would estimate that about 85% or more of show pigs today are fed Paylean[®]. That means that your competition is feeding Paylean[®]. It will greatly improve your chance of success to learn how to use it safely and effectively.

5) Extra growth or "pushing": As stated above, Paylean[®] increases growth rate. However, consideration must be given to the duration on Paylean[®]. The pig will grow faster on Paylean[®], but side effects may still occur, and the longer the pig is fed Paylean[®] the greater the chance for encountering those side effects.

Methods of Paylean[®] Delivery

High Octane[®] Showpig Paylean[®] Premix: Two ounces mixed with 5 lbs 14 oz of a non-medicated feed, or a feed medicated with Tylan[®] at 100 grams/ton will result in the 9 gram/ton concentration. The directions for feeding this product are on the bucket. The basic theory in this product is providing 27 mg/day, based on a 6 lb./day intake. This product is ideal for feeders that desire to feed either the 4.5 or 9 grams/ton concentrations of Paylean[®].

This product is also completely fortified with vitamins and minerals, extra biotin to help prevent cracked pads, and zinc methionine to help prevent cracked hooves. High Octane[®] Showpig Paylean[®] Premix is available in a 15 lb. buckets (or pails).

Discontinuing Use of Paylean[®]

Basically, about 7 days after removing Paylean[®] from the diet, muscle begins to atrophy or decrease. Therefore, once you start Paylean[®], you should continue use all the way through show.

Sometimes, a side effect can be belligerence. If a pig becomes hard to manage after initiating the use of Paylean[®], discontinue use about 3 days prior to the actual show date. This will minimize the side effects of Paylean[®], without causing muscle atrophy.

Basic Rules of Thumb

<u>Pig description</u>	<u>Amount of Paylean®</u>	<u>Length</u>
Very sound, heavy muscle	9 grams/ton	14 days
Very sound, moderate muscle	9 grams/ton	14-21 days
Slightly unsound, heavy muscle	none	0 days
Slightly unsound, moderate muscle	9 grams/ton	14-21 days
Very unsound, regardless of muscle	none	0 days
Stress positive (feed with care)	4.5 - 9 grams/ton	14-21 days

Important Points

1. Feeding too much, for too long results in severe side effects.
2. Do not feed to stress positive pigs, unless extreme care is given.
3. Never limit water. Water comprises about 72% of a muscle cell, without sufficient water you will limit muscle deposition.
4. Reduce stress levels by treating the pig calmly and quietly.
5. Some pigs do not need Paylean® at all.
6. Paylean® is not a secret weapon, or magic potion, it is a tool that needs to be well managed.

ADDENDUM:

Key Changes in the New FDA Label for Paylean®. A unique characteristic of the original Paylean® approval was that, although there was no pre-slaughter withdrawal required, the product was only approved for feeding within the body weight range of 150 through 240 lbs. Presumably this was due to the fact that in most of the safety and efficacy studies submitted to FDA, the pigs were slaughtered at or near 240 lbs. of body weight. However, government market reports indicate that average weight of market hogs delivered to packing plants is in excess of 260 lbs. Based on new safety and efficacy data, Elanco announced on May 10 that FDA has removed the market weight restriction for feeding diets supplemented with Paylean®. The new label now allows for Paylean® feeding for pigs weighing at least 150 lbs. body weight for their final 45 to 90 lbs. of weight gain, regardless of final weight at slaughter.

For example if the desired marketing weight is 260 lbs., Paylean® supplemented feed could be fed from a starting point of 170 to 215 lbs. all the way to market at 260 lbs. body weight.

The new label also limits the allowed inclusion rate of Paylean® to be between 4.5 to 9 grams of active ingredient per ton of complete feed with a minimum crude protein level of 16 %. This label adjustment makes use of Paylean® more compatible with typical marketing strategies for commercial hogs. Ultimately, the decision to use Paylean® will vary depending on individual production situations. Specifically, for each pig genotype and production situation, the cost of using Paylean® would need to be completely covered by returns associated with improved growth and feed utilization and packer premiums for improved carcass leanness.

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