## PURDUE PURDUE EXTENSION Image: Stress of Paylean 15-253-W Image: Stress of Paylean in Youth Swine Projects

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The main goal of traditional livestock selection programs is to produce the ideal animal that is representative of the commercial livestock industry, regardless of species. Through participation in youth livestock programs, youth become important members of the commercial livestock industry. It is this experience that teaches them how to care for and manage their animals appropriately. Perhaps more importantly, youth also learn about responsibility, character, fair play, and getting recognized for the results of their hard work. Even if the youth are not involved in animal agriculture as an adult, their youth livestock project can help them develop the skills and work ethic needed to become productive members of society.

The show ring affords youth the opportunity to display their newly learned livestock skills while also competing against other youth. To perform well, they must learn how to select the most appropriate animal and how to feed it for optimal growth prior to the show. In essence, the show becomes an information exchange about how different genetics work and how the latest animal products can affect the overall quality of the animal. But for some, the show ring has developed into an all-out competition for prizes, premiums, and recognition. Some exhibitors are willing to do anything they can to gain a perceived or even real competitive advantage, which could include providing inappropriate treatment or mismanaging the animal. It might even involve using products designed for commercial production above the recommended levels or using products that are designed for other species. These products could be nutritional, pharmaceutical, or simply cosmetic. Paylean® is a popular example of a nutritional product that has been added to swine feed for many years. Elanco® Animal Health received approval from the U.S. Food and Drug Administration for Paylean® in 1999. The active ingredient in Paylean® (ractopamine hydrochloride) is a betaadrenergic agonist that is indicated to increase weight gain, improve feed efficiency, and increase carcass leanness in finishing swine weighing at least 150 pounds when fed for the last 45–90 pounds of gain. When used according to label directions, Paylean® can increase the efficiency and profitability of swine finishing operations. It has a place in the feeding programs of youth market hog projects as long as the recommended feeding instructions and all potential risks are completely understood.

The following section contains questions and answers regarding the feeding instructions and potential risks of using Paylean® in youth swine projects:

## **Q:** How much Paylean® should be fed, and what type ration should it be added to?

A: Paylean® is approved to be fed at a rate of 4.5–9.0 grams per ton in a complete swine finishing ration of at least 16 percent crude protein. It is especially important to remember that 4.5–9.0 grams per ton is an extremely small amount. Proper care should be taken to ensure that animals fed by top-dressing Paylean® do not receive more supplement than what is indicated, especially in group-fed programs. In most situations, it is probably best to purchase a pre-mixed complete finishing ration with Paylean®.

- **Q:** How long should I feed Paylean® to my market hogs?
- A: For the last 45–90 pounds of gain prior to harvest.

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- **Q:** I do not plan on harvesting my market hogs. Does that mean I can feed them as long as I want?
- A: No, you should treat your final show as the harvest. Using your animal's target weight for your last show, subtract 45–90 pounds and begin feeding Paylean® at that point.

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- **Q:** Can I feed it longer than the last 90 pounds of gain?
- A: No, that is illegal. Also, it is important to remember that there is no reported advantage to feeding swine above the upper limit or for a longer period of time than indicated on the label.

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- **Q:** What is the withdrawal time for Paylean®?
- A: There is currently no withdrawal time for Paylean®, so if fed at the appropriate level, there should be no risk of a residue violation.

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- **Q:** What negative effects can I expect from feeding Paylean® to my market hogs?
- A: Paylean® may increase the number of injured and/or fatigued pigs during marketing. No negative effects on meat quality are expected when fed according to the label instructions.

**Q:** Can I feed Paylean® to my breeding gilts?

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A: No, it is only approved for use in swine finishing diets; thus, it is not labeled for breeding gilts and pigs below 150 pounds. Even if your gilt is shown as a market hog, Paylean® should not be used if there is any chance of the gilt entering production.

**Q:** Can I feed Paylean® to my steers, lambs, and goats?

A: No, it is illegal and potentially dangerous to feed Paylean® to other species. It is only approved for use in finishing swine.

**Q:** Does Paylean® increase stress in show pigs?

A: Typical show pigs are much leaner and more heavily muscled than the average commercial hog. This extreme type of hog is more susceptible to stress, which can lead to animal welfare issues and, eventually, decreased carcass quality. Add in the use of Paylean®, and these problems can be intensified. To avoid extra stress, it is important to remember to never restrict feed and water to your market hog.

**Q:** What are the signs of extreme stress, and what should I do if I see it?

A: The signs of stress include panting, tail twitching, and visible trembling/shaking. In white hogs, there may also be discoloration of the skin. If you notice signs of extreme stress in your market hog, get it to a cool place and provide water. Then consult your parent, 4-H/FFA leader, veterinarian, or show personnel immediately.

## **Q:** Is Paylean® appropriate to be fed to all market hogs?

A: Not all animals are structurally sound enough to handle the increased growth rate and muscle mass that result from the feeding of Paylean®; thus, a skeletal flaw can worsen, even to the point of inhibiting mobility. Additionally, it is possible for a hog to be too lean. Extremely lean hogs, besides the potential problems listed above, run the risk of decreasing the value of pork bellies, which produce bacon—an extremely valuable pork product.

For complete product information or when in doubt about the use of Paylean®, please refer to the product label. Appropriate care should be exercised when handling and mixing medicated feeds. Remember, there is no substitute for the knowledge and application of the principles of swine selection, nutrition, health, and proper care and management of the market hog.

Paylean<sup>®</sup> is a trademark for Elanco's brand of ractopamine hydrochloride. Elanco<sup>®</sup> is a trademark of Eli Lilly and Company.

Reference to products in this publication is not intended to be an endorsement to the exclusion of others that may be similar. Persons using such products assume responsibility for their use in accordance with current directions of the manufacturer.

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