

Strategies to Reduce the Incidence of Lightweight Pigs

Every producer deals with lightweight pigs that pull down the average closeout weight for a finisher group. Pigs weighing less than 220 lb at market are considered lightweights. Their contribution to sort loss is significant, as packers dislike light pigs and dock them accordingly. Most lightweight pigs at slaughter start out as the lightest weight pigs at birth, and consequently, become the lightest weight pigs at weaning. Many studies have verified that beginning weight is the best predictor of end weight, whether it is measured at birth, weaning, or at the end of the nursery phase. Knowing this, what can be done to minimize the effects of lightweight pigs? Several strategies have been devised with varying results.

1. Snatch-and-Save Baby Pig Program (Akey Swine Newsletter, January 2002)

Allowing all pigs adequate time to get over the trauma of birth and processing, and allowing all pigs equal access to 'first colostrum', has been shown to reduce pre-weaning mortality. This may also promote faster growth by all pigs, eventually reducing the number of lightweights at slaughter.

2. Identify problem pigs at birth and euthanize immediately.

The simplest way to identify potential problem pigs is to set a minimum for body weight at birth. Unfortunately, this minimum may not be the same from farm to farm. It depends on mothering ability of sows and level of management in the farrowing house. We recommend identifying pigs at birth, tag according to body weight, follow pigs to market, and establish minimum weight thresholds. For some farms, pigs need to weigh at least 2.0 lb at birth to have a good chance of being marketed with their group. For other farms, birth weight may need to be heavier (e.g., 2.2 to 2.5 lb). In general, producers have established that pigs weighing less than 1.8 lb at birth should be euthanized, as their chances of keeping up with contemporaries are very slight.

3. Maximize feed intake of lactating sows (Akey Swine Newsletter, June 1998)

Sows that eat more feed in lactation produce more milk and wean heavier litters, resulting in fewer lightweight pigs.

4. Supplemental milk

Supplemental milk fed to litters made up of the smallest pigs in a farrowing group may increase weight of those pigs at weaning. Specialized systems for milk delivery work better than gruel pans, as product is kept fresh and labor associated with feeding supplemental milk is reduced.

Cost of supplemental milk systems vs. return on investment may not make this an economically attractive technology for many producers.

5. Sorting pigs (Akey Swine Newsletter, March 2002)

Akey research demonstrated that sorting pigs by weight into nursery pens and budget feeding by weight resulted in poorer ADG vs. gate-cutting pigs into pens and feeding a common budget. In these trials, 'at risk' pigs were still sorted off into special care pens at weaning. Age as well as body weight at weaning influence response of pigs to diets and feed budgets. Similar research with grow-finish pigs gave similar results: Pigs perform better when they are not sorted into pens by body weight. This may be due to less time spent fighting to establish pecking order, which results in more grow days.

6. Akey Pig Savor appetizer product (Akey Technical Report, December 2001)

Data presented showed an improvement in starve-out and fall-behind pigs when Pig Savor was top-dressed on pellets the first 3 d postweaning. Feeding Pig Savor also resulted in 4.5 lb more body weight in the lightest weight pigs at the end of the nursery period. These results should carry over into finishing, resulting in fewer lightweight pigs at slaughter.

7. Number of dietary phases

Nutrition obviously has an impact on growth rate of a group of pigs. If a group is close in age and weight (i.e., ≤ 7 d age spread from youngest to oldest), more phases should be fed to meet nutrient requirements and save money on feed. If fill time is longer (i.e., 14, 21, or 28 d), age and weight spread within the group is larger, necessitating fewer phases. Otherwise, smaller pigs keep getting further behind as diets get less nutrient dense, resulting in even more lightweight pigs at slaughter.

8. Enteric disease-related variation

Enteric diseases such as ileitis can damage the gut, disrupting nutrient absorption and resulting in poorer growth and feed efficiency. Strategies that eliminate or reduce ileitis include vaccination (i.e., Enterisol, an orally administered modified live Lawsonia product that is showing very good results in the field) or antibiotic therapy.

9. Strategic use of injectable antibiotics on lightweight pigs

Connor (Proceedings of the AASP, 2000) evaluated the impact of intramuscular injections of lincomycin for 3 consecutive days in lightweight pigs at 150 to 180 lb body weight. In this field trial, percentage of lightweight pigs at slaughter was reduced from 9.6 to 3.1%, a 68% reduction. This program was very effective for this particular farm. Akey recommends that producers work with their veterinarian to come up with individual programs that fit their particular needs.

10. Paylean® (Akey Swine Newsletter, February 2000)

Akey customers feeding Paylean (4.5 g/ton) the last three weeks prior to slaughter are realizing an extra 4 to 8 lb of body weight per pig marketed. This extra weight shifts the average of the group such that the percentage of lightweight pigs is reduced.

11. New large-scale pen technology to sort off market pigs

This technology does not reduce the percentage of lightweight pigs, but if managed correctly, it does help reduce (and in some cases, eliminate) sort loss. Large pens are designed so that pigs must cross a bi-directional scale to access feeders. The scale is set to the desired minimum weight, and pigs that meet or exceed that weight are automatically sorted to market pens that are positioned near the load-out chute. Market loads are created by pigs not people, resulting in less stress on pigs and personnel. Lightweight pigs will be excluded from the loads based on the minimum scale weight.

Consider using some or all of these techniques to reduce the number of profit-robbing lightweight pigs at slaughter.