

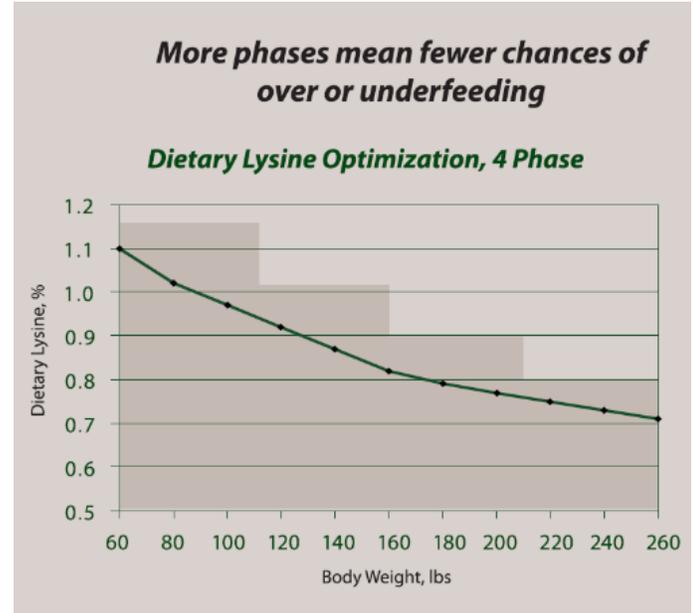
Feed budget management is an important part of delivering proper nutrition throughout a pig's growth cycle. Following a well-designed feed budget serves two purposes, it reduces the chance of underfeeding important diets and over feeding the higher cost diets.

Phase Feeding and Nutrition

The purpose of phase feeding is to accurately deliver the right nutrients at the right time throughout a pig's growth cycle. As a pig's body weight and feed intake increases, its requirement for digestible amino acids, phosphorus, and other key nutrients decreases. Phase feeding allows diets to be formulated based on a pig's specific weight range and nutritional needs, while minimizing the under- and over-feeding of nutrients, as depicted in the graph to the right.

Feed Budget Development

A feed budget is a practical tool used to manage the amount of feed pigs receive during each phase of growth. Feed budgets eliminate the need for weighing pigs to determine when it is time to switch to the next diet. Instead, feed budgets use consumption data that estimates how much feed each pig consumes during a certain weight range. Every production system is different so it is important to develop a feed budget based on your pig's genetics, target market weight, dietary energy levels, and performance history. This will increase the accuracy of delivering the right feed at the right time during the pig's growth cycle.



Utilizing performance history, dietary phases are ordered and delivered based on an estimated feed intake per pig. The table on the next page shows an example of a feed budget. You can see that a 25-40 lb pig is projected to consume an average of 27 lbs of feed. Therefore, if you have a 1000 head barn you would order 13.5 tons of the N3 diet. When the 13.5 tons of N3 has been delivered, you would then switch to the next phase in your program, which in this case is GF #1. This group of pigs would require 20 tons of this stage of feed.

Example Budget

Diet #	Pig Weight	Lbs. per Pig	Tons per 1000 hd	Est. Days
N#3	25-40	27	13.5	11
GF #1	40-60	40	20	13
GF #2	60-80	45	22.5	12
GF #3	80-120	100	50	23
GF #4	120-160	110	55	21
GF #5	160-200	115	57.5	20
GF #6	200-230	95	47.5	15
Paylean or GF #7	230-280	170	85	23

Total Feed Usage per hd.(Lbs)	702	Start Date	4/14/2015
Total Feed Usage per 1000 hd. (Tons)	351	End Date	8/30/2015
Total Weight Gained per hd.	255		
Estimated Feed:Gain	2.75		
Total Days on Feed	138.00		
Estimated Average Daily Gain	1.848		

Budgeting for Paylean

While diet changes in a swine feed budget are based off pounds per pig fed, the one exception to the rule is Paylean® (ractopamine hydrochloride from Elanco). Paylean has a diminishing financial return the longer it is fed. Back-calculating from the estimated date a group of pigs will be closed out is the best way to feed Paylean.

Recommendations for feeding Paylean:

- A single step Paylean program (*feeding only one rate of Paylean*) should be fed for the duration of 22- 25 days pre-closing of a group of pigs.
- A step up Paylean program (*feeding two rates of Paylean with the later rate increased from the first*) should be fed for 28-30 days total with each rate being fed for 14-15 days each.

Using Feed Budgets to Determine a First Cut

Feed consumption is the best indicator of live body weight. After careful analysis of historical close out data a protocol can be developed for determining when to take the first cut of pigs to market. For example, let's assume based on historical farm data that when a group of 50 lb feeder pigs consumes an average of 505 lbs per pig, the average group weight will be 230 lbs. Given this average group weight of 230 lbs, the top 15% will have an average weight of 270 lbs and can be marketed.

Feed Budget Compliance

A feed budget compliance analysis is an important process that measures how closely a feed budget is being followed. If too many or too few pounds of one diet is fed, then the subsequent diet's budgeted amount needs to be adjusted up or down to stay compliant with the budget. If no budget adjustments are made, mistakes in feed delivery and ordering will greatly distort the feeding program. Retrospective analysis of feed deliveries is an important exercise that gives insight into what is actually being fed to a group of pigs rather than what is assumed to be fed.

Feed Budget FAQ

- **Why is feed consumption the best predictor of weight?**
 - In general feed is the best predictor because gain is directly related to feed intake. A health challenged group of pigs will have reduced feed intake and gain. Conversely, a high health group of pigs will have an increased feed intake and gain weight faster.
- **How many phases should I feed?**
 - 5-6 diets provide enough phases to properly match the pig's requirements. More phases can be fed but there is little to no financial return in doing so. In addition, feeding more than 6 phases increases the difficulty to properly manage a feed budget leading to feed budget compliance issues.
- **Should I switch to the next phase if there are only a few pounds per pig left?**
 - The question really asks if it is better to continue with the budget or move to the next phase. It's a subjective answer but often the decision is made based on the truck. If less than half a truckload of feed remains on this phase, switch now. If it's more than half a truck, make a full truckload of the current phase, then switch. Just make sure to adjust the amount of feed for the next phase so that the budget remains accurate.