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SWINE NEWSLETTER

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Lactation Feeding Strategies for High-Producing Sows

Feed to Condition. The success of any lactation feeding program is based on a gestation feeding program that maintains sows at an ideal body condition score (BCS) of 3.0, where 1.0 is emaciated and 5.0 is obese. A sow with a BCS of 3.0 has ribs that are barely felt, and hooks and pins that are covered with flesh but still felt beneath the skin. A sow with a BCS of 3.0 will not be too fat upon entering the farrowing house, nor will she be too thin. Depending on diet formulation, environment, age of herd and genotype, this usually requires a baseline feeding level of 4 to 5 lb/sow/d in gestation.

Avoid Routine Feed Increases at the End of the Gestation Period. Increase feed allowance in late gestation only if 1) sows are losing body condition because of increased nutrient demand by the gestating litter, 2) sows are in thin condition (≤ 2.5 BCS), 3) birth weights of piglets average less than 3 lb, or 4) piglet viability at birth is low. In these cases, increasing the daily feed allowance by 1 to 2 lb/sow/d from day 90 of gestation to farrow may be beneficial. Just remember that in many cases, routine increases in feeding rate the last part of gestation are not advantageous. They may result in increased feed costs as well as over-conditioned sows with lazy metabolic systems going into the farrowing house.

Do Not Switch to the Lactation Diet Too Soon. It is not advantageous to switch sows to the lactation diet until they are moved to the farrowing house no more than one week prior to farrowing. Switching to the lactation diet more than one week pre-farrowing has the same net effect as routine increases in late gestation feeding levels: over-conditioned sows that eat less in lactation, produce less milk, wean lighter pigs, and take longer to breed after weaning.

Lactation Feeding Strategy

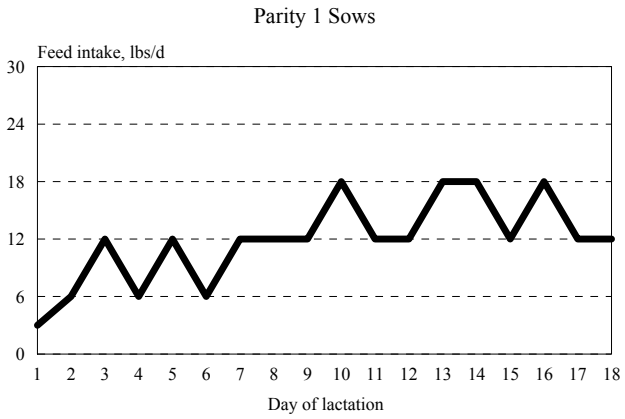
Assuming sows are moved to the farrowing house no more than one week pre-farrow, they should receive no more than 4 to 5 lb/d of the lactation ration. The day before the sow is expected to farrow, and if she has dropped her milk, decrease the feeding level to 2 lb/d. If she farrows overnight and the litter is dry and ready to be processed the next morning, consider this Day 1 and follow the feeder-checking schedule outlined in Table 1.

Table 1. Feeder Checking Schedule and Level of Feed Offered to Lactating Sows

Day of Lactation	7 AM	10 AM	1 PM	4 PM
1	3 lb	Skip	Skip	3 lb*
2	6 lb*	Skip	Skip	6 lb*
3+	6 lb*	6 lb*	6 lb*	6 lb*

**Start every morning with fresh feed. Assumes all feed from the previous meal has been consumed (excluding fines and wet, moldy feed). If there is feed in the feeder, skip this feeding.*

Figure 1. Typical Lactation Feed Intake Curve



Average intake = 11.8 lbs/d (213 lbs in 18 days)

This program is designed around a 4x/d **checking** of feeders beginning day 3 post-farrowing. This does not mean all sows will eat 24-lb/d beginning day 3 post-farrowing, nor will they continue at that level for the entire lactation period. It does mean sows will have the opportunity to eat a total of 6 lb on Day 1, 12 lb on Day 2 and 24 lb from Day 3 to weaning, if that is what they want to do. In reality, most sows will eat between 6 and 18 lb/d throughout lactation (Figure 1). Some sows will eat 24 lb on some days, but it will vary depending on appetite, parity and nutrient demand. The point is, **if a sow has not consumed all of the feed from the previous meal, do not feed her at the next scheduled mealtime.** If more than two meals in a row in a 24-hr period after day 3 have to be skipped, make sure the sow has water and then check her and her litter for potential health problems.

Timing of meals is designed to cover a normal workday and maximize intake while preventing sows from gorging on too much feed in too short a period of time. Some producers may have night help who could check feeders a fifth time, especially during the hotter summer months. If night help is not available, feeding times may need to be modified based on season. In hot weather, the second feeder check should be done 1 to 2 hours after the first feeder check in the cooler part of the day, enhancing sow feed intake.

Benefits of Frequent Feeding

Smaller, more frequent meals allow sows to increase intake at their own rate, preventing over or under feeding. This system does not depend on a complicated, pre-programmed, step-up procedure that probably does not meet the majority of the sows' needs. Sows are less likely to go completely off feed because they cannot gorge on large amounts of feed at any one time; they are only offered a maximum of 6 lb/meal. Frequent feeder checking and feeding takes about the same amount of time as feeding two times daily because even though feeders are checked more often, less time is spent cleaning wet, moldy feed out of the feeders. This translates into less wasted feed and more consumption by sows. Overall, sows should wean heavier litters and have a decreased interval from weaning to estrus, resulting in fewer non-productive days. Anyone can feed the farrowing house regardless of his or her experience or rotation. All it takes is a simple explanation and a 6 lb feed scoop. **NOTE:** No one should assume a 6 lb feed scoop holds 6 lb of feed. Scoops of feed should be weighed periodically to protect against over- or under-feeding based on bulk density of the diet at any given time.

Summary

The beauty of this feeding strategy is it allows the sow to tell you what she can eat, regardless of level of appetite. With younger parity females, more meals will be skipped because these sows will not clean up their allotment of feed in the time allowed. Older parity sows will not skip as many meals. The net result will be a higher average feed intake for multiparous compared to younger sows, which is expected. Younger sows have lower appetites and higher nutrient requirements than sows of parity 3 or higher, so lactation diets need to be formulated to account for these differences. This is especially true during start up of newly stocked farms. In more mature herds where the percentage of gilts is lower, a top dress may be applied to the lactation diet so that younger sows can consume adequate levels of nutrients even with lower intakes.