

## Nursery Feed Management for SEW Pigs

The technology of segregated early weaning (SEW) has helped producers obtain healthier pigs that grow faster and more efficiently than conventionally reared pigs kept on the same farm as the sow herd. With younger, healthier pigs at weaning, more specialized diets and feeding programs have been developed to meet the increased growth potential of these pigs. Proper application of a specialized feeding program is critical to optimize performance and control feed costs.

**Feed Budgeting:** Nursery diets are designed for pigs at specific ages and weight ranges. Following a feed budget is critical to assure feed cost per pig is minimized. More prestarter should be budgeted to younger, lighter pigs than for older, heavier pigs. This will allow pigs to receive the most appropriate diet based on physiological maturity. In a recent Akey research trial, pigs were fed different amounts of each diet in a 4-phase program based on incoming weight and age (Table 1). Heavier pigs grew faster than lighter pigs, which was expected (Table 2). Data from this trial and other Akey trials suggest that a 1 lb increase in weaning weight results in a 1.5 lb increase in weight out of the nursery, *if pigs are well managed*. Budget feeding pigs based on incoming weight and age can help minimize variation in outgoing weights.

Not following a feed budget often leads to overfeeding early prestarter diets. In a comparison of feeding greater amounts of phases 1, 2 and 3 than recommended, pig performance was not improved (Table 3). However, feed cost per pound of gain was increased almost 9%.

**Practical Experience:** Performance of several groups of commercial pigs weaned from 16-19 days of age is shown in Table 4. Excellent performance was achieved from these healthy,

**Table 1. Feed Budget by Weight Group**

Group	Phase 1	Phase 2	Phase 3
1, Heavy	1.8	5.5	12
2 & 3, Medium	2.7	6.5	14
4 & 5, Light	3.2	7.5	16

CSA N9747. Data from 880 pigs fed for 45 days.

**Table 2. Nursery Performance by Weight Group**

Group	Wt in, lb	Wt out, lb	ADG, lb
1	15.2	55.8	0.904
2	12.3	52.1	0.880
3	11.3	48.7	0.832
4	10.0	45.8	0.796
5	8.6	43.9	0.785

CSA N9747. Data from 880 pigs fed for 45 days.

**Table 3. Effect of Overfeeding Early Phase Prestarter Diets on SEW Pig Performance**

Item	Control	High
Wt in, lb	11.1	11.0
Wt out, lb	51.3	51.8
ADG, lb	0.889	0.908
ADFI, lb	1.325	1.358
F/G	1.49	1.50

CSA N9701. Data from 880 pigs fed for 45 days. The High treatment group was fed 1, 2, and 3 lb/pig more of Phases 1, 2, and 3 than the control pigs, respectively.

well-managed pigs. The nursery budget was followed relatively well, with less fed of phases 1 and 2 than budgeted, but more fed of phases 3 and 4 (Table 5). Total feed consumed was similar to the amount budgeted. However, differences were noted in the targeted feed budget (actual vs. expected) when the top and bottom 20% of closeout groups were compared based on growth performance (Table 6). Pigs in the bottom closeout groups were fed only 65% of the budgeted amounts of phase 1 and 2, whereas pigs in the top closeout groups received 94% of these two phases combined. Pigs fed less of the early nursery feeds were over 6 lbs lighter leaving the nursery, with a 6% higher feed cost per pound of gain.

Feed budgets will vary based on many factors including number of phases as well as weaning age and weight. Budgets should be fine-tuned or adjusted based on changes in management, health status, environment and genetics.

During tough economic times, it is tempting to feed nursery pigs less of the more expensive prestarter feeds than budgeted. Doing this, however, will reduce pig performance and may actually increase feed cost per pound of gain.

**Summary:** SEW has helped swine producers obtain healthier pigs that grow faster and more efficiently in the nursery and grow-finish phases of production. When implemented correctly, feed budgeting helps optimize pig performance yet control feed cost per pound of gain. Budgets allow producers to obtain the best return on their nursery feeding investment. Overfeeding nursery feeds does not improve growth, but it increases feed cost per pound of gain. In contrast, underfeeding early prestarter feeds will reduce growth performance and increase feed cost per pound of gain. As improvements are made in management and health, nursery feeding programs and budgets should be adjusted to maximize growth performance and control feed costs.

**Table 4. Performance of SEW Pigs in a Commercial Setting**

Item	Response
Pigs, total no.	9,005
Wt in, lb	11.3
Wt out, lb	66.6
ADG, lb	1.06
ADFI, lb	1.46
F/G	1.38

*Pigs were weaned at 16-19 days of age and were of relatively high health status.*

**Table 5. Comparison of Budgeted vs. Actual Feed Fed (lb/pig)**

Phase	Wt range, lb	Budget, lb/pig	Actual, lb/pig	% of Budget
1	12-14	2	1.6	80
2	14-19	5.5	4.8	87
3	19-24.5	7	9.2	132
4	24.5-46	30	36	120
5	46-65	30	24.5	82
Total		74.5	76.1	102

*Pigs were weaned at 16-19 days of age and were of relatively high health status.*

**Table 6. Performance Comparison of the Top and Bottom 20% of Closeout Groups**

Item	Top 20%	Bottom 20%
Growth performance		
ADG, lb	1.11	0.99
ADFI, lb	1.49	1.40
F/G	1.35	1.41
Targeted feed budget fed per pig, %		
Phase 1	83	93
Phase 2	98	55
Phase 3	127	155
Phase 4	119	112
Phase 5	88	81
Overall	105	99

*Pigs were weaned at 16-19 days of age and were of relatively high health status.*