

Feed Costs

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Feed cost usually is the largest cash expense and will have a major impact on total cost. Feed costs are typically 2/3 or more of the total cost of producing pigs. Feed cost is affected by feed conversion and diet cost. Both the price of the feed and the amount of feed needed to raise a pig are important in calculating the overall feed cost of pig production.

The variation in feed cost between operations can be the difference between success and struggle. Many niche operations have low overhead and low debt loads that together make feed a greater percentage of cash costs than those of conventional systems. Therefore, managing feed for low cost while maintaining adequate performance is critical. Feeding programs for niche markets should be designed for acceptable growth rates, carcass quality, and reduced cost of gain. Managing for maximum lean gain may not be the goal.

Feed Conversion

Feed efficiency (defined as pounds of feed per pound of gain or feed conversion) is one of the most important pieces of information in a record keeping system. If you do not keep any other records, at least track pounds of pigs produced and pounds of feed fed to determine the feed conversion value for the operation.

Feed conversion is influenced by several factors:

- ◆ Environmental conditions: Cold pigs eat more feed than comfortable pigs and use the extra feed for maintenance, not growth.
- ◆ Diet formulation: Diets should match pig needs for optimal conversion.
- ◆ Quality of feed ingredients: Grains

should be free of mycotoxins, and not damaged by heat or moisture.

- ◆ Genetic potential and hybrid vigor: Genetics set the upper limit on feed conversion.
- ◆ Sow productivity: A sow that produces 14 pigs per year eats almost as much feed as a sow that produces 20 pigs per year.
- ◆ Feed wastage: The amount of feed that is provided but not consumed by pigs greatly influences feed conversion.
- ◆ Death loss and health status: Pigs that die eat feed up until death but result in no saleable gain.

Feed Budgeting

In order to set a realistic feed conversion goal, records are a must. Tracking feed usage also allows producers to detect real, but perhaps visually imperceptible, changes in feed use. This can alert producers to changes in herd health, the impacts of new genetics or management techniques, or areas that need closer attention. Leaflet number 840 of this handbook provides examples of feed budgets.

Feeding pigs based on a certain amount of feed use is another strategy for reducing feed costs. Rather than estimating pig weight and changing diets accordingly, diets are switched after a certain amount of each diet is consumed.

For example, assume you switch diets when the pigs reach 80 lb and your records show that your feed conversion ratio for 50 to 80 pound pigs is 2:1. A pen of 80 pigs with an average start weight of 50 lb would need 4,800 lb of feed.

$$80 \text{ pigs} \times 30 \text{ lbs gain} \times \frac{2 \text{ lb feed}}{1 \text{ lb gain}}$$

$$= 4,800 \text{ lbs of Feed}$$

Thus, the pen of pigs would be supplied with 3,000 lb of the diet formulated for pigs weighing 30 to 80 lb and when that feed is consumed you would begin feeding the next diet formulation.

Purchased Ingredients

Feeding grains that you have grown and processed yourself may be advantageous, but ingredients like soybean meal, dried whey, and mineral and vitamin supplements usually are purchased. Homegrown alternatives to these ingredients may be possible but should be evaluated carefully. A realistic value should be placed on the convenience and services provided by feed suppliers. Comparison shopping should be done periodically and comparisons should be made on uniform measures of value. For example, comparing one product's lysine level with another product's crude protein

level is not a good comparison because you are looking at two different measures. Periodically review feed formulations and evaluate the cost effectiveness of the feed program. Investigate buying ingredients in bulk rather than as bagged feeds and consider joining with other producers to qualify for volume discounts.

Additional Resources

Iowa State University Extension. 1996. Life Cycle Swine Nutrition. PM-489. Iowa State University. Ames.

Purdue University Extension, 2007. Relative Value of Feedstuffs for Swine, The New Pork Industry Handbook-07-06-03. Purdue University. West Lafayette, Indiana.

U.S. Pork Information Gateway
<http://pork.porkgateway.org/web/guest/home>