

University of Missouri Extension

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Managing Purchased Feeder Pigs

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Missouri is a major feeder pig producing state and annually markets large numbers of pigs that other farmers feed out to market weight. During these marketing and transportation processes, stress can affect the performance of feeder pigs. Buyers often complain of recently purchased pigs that cough, scour or die. Pigs that are slow to start growing and that have poor feed efficiency also may be a problem.

This publication recommends procedures for buying, feeding and managing purchased feeder pigs.

Buying feeder pigs

Missouri is recognized for having an established program in most of its feeder pig markets. Pigs can be purchased from these markets that have performance standards on breeding stock, a selection program on quality and requirements on health including on-farm monitoring and testing to ensure freedom from pseudorabies. Purchasing pigs from this type of market greatly reduces risk.

In addition, the following obvious characteristics of ideal pigs should be strived for. The ideal feeder pig:

- Weighs 35 to 40 pounds at eight weeks
- Is healthy, vigorous and alert
- Is castrated and healed
- Is relatively free of internal and external parasites
- Is tail docked
- Is purchased from a reliable source.

Effects of stress

Research conducted at MU has shown that the stress of marketing and transportation affects the performance of newly purchased feeder pigs. Tables 1 and 2 demonstrate a reduction in performance as measured by daily gain and feed efficiency. This reduction is most evident in the early stage of the feeding period.

Table 1

Control vs. transported feeder pigs.^a

Treatment	Initial weight	Final weight	Gain per day	Feed per day
Control pigs	89 pounds	240 pounds	1.80	3.31
Travel pigs ^b	86 pounds	238 pounds	1.72	3.41

^aThere were 49 pigs in the control group and 48 in the travel group.

^bPigs were marketed through MFA Tele-Auction and transported 235 miles.

Table 2

Gain of control vs. travel pigs

	14-day periods						Mean
Control pigs	0.77	1.67	2.23	1.85	2.03	2.23	1.80
Travel pigs	0.37	1.83	1.93	2.93	1.94	2.07	1.68

Research has not definitely pinpointed all the areas of stress that may cause a reduction in feeder pig performance or their related harmful effects. However, management techniques can reduce or eliminate some of the more obvious types of stress.

Management from farm to market

Producers with a reputation for having problem-free pigs can be assured of getting a premium price and of having repeat buyers.

A few of the management techniques used by successful producers include:

- The use of superior breeding stock
- A routine worm, lice and mange control program
- A preventive rhinitis vaccination program
- A monitored and tested herd for pseudorabies
- Pigs castrated and docked early
- Convenient handling and loading facilities to reduce stress on pigs and manager
- Proper loading capacity in trucks
- Extra precautions when marketing in extreme weather conditions.

Management at markets

Most sale facilities in Missouri follow a similar routine in processing pigs. They usually are unloaded, checked for health, ear-tagged, vaccinated, sorted, weighed and penned until sale time. Stress involved in these procedures varies according to the sale and manager. Top sales outlets use the following techniques to reduce stress during the processing of pigs:

- Design and maintain convenient chutes, sorting alleys, gates and pens
- Implement dust control measures
- Schedule unloading to reduce the amount of time pigs wait on trucks
- Avoid unnecessary roughness by personnel in sorting and handling pigs
- Design and operate barns to avoid weather stress
- Avoid overcrowding in pens
- Have veterinarians check pigs carefully and reject "off" pigs
- Keep the total time in the marketing process to a minimum.

Moving pigs from market to farm

Prompt delivery after a sale is important in reducing stress. When pigs are not moved out immediately, they should have access to water. Missouri and Nebraska data do not show a clear advantage in providing feed at the market unless the delay is prolonged. There should be a minimal amount of regrouping or unloading and reloading between pick-up points.

Use care in transporting the newly purchased pig. Refer to Table 3 for the recommended trucking space requirements per pig.

Table 3

Trucking space requirements per pig

Weight	Winter	Summer
40 to 50 pounds	1.5 square feet	1.8 square feet
50 to 75 pounds	1.75 square feet	2.1 square feet
75 to 100 pounds	2.00 square feet	2.4 square feet

In hot weather, use sand or sawdust as truck bedding. Avoid parking a truck in direct sunlight for more than a few minutes when the weather is hot.

In cold weather, bed the truck with dry straw. In extreme cold, reduce the openings on the truck to reduce drafts and wind chill.

Group pigs by size and partition the truck so that no more than 50 pigs are in each section. Avoid sudden stops and turns. Give good directions on where pigs are to be delivered.

Handling pigs arriving at the farm

Buyers should assume that feeder pigs have been under stress during marketing and transportation and probably will get sick within a few days after arrival. To improve performance, provide a stress-free environment and prompt treatment of disease symptoms if they occur.

Facilities and equipment to receive pigs should be prepared well in advance. Thorough cleaning and disinfection is important to provide pigs with a clean, dry environment. Feed should be mixed and medication should be ready for the water. For winter arrivals, supplemental heat to maintain a 75 degrees Fahrenheit temperature is helpful, particularly for lighter-weight pigs. Pigs weighing 30 to 50 pounds need four square feet each, and 50- to 80-pound pigs require five square feet.

Observe pigs carefully and often for the first several days and provide individual treatment for animals showing signs of diseases. Call your veterinarian immediately if unusual problems or losses occur.

Nutrition and starter rations

Opinions vary on the types of starter rations needed. Research is underway at MU to fine-tune starter rations for pigs subject to marketing and transportation stress. Consider the National Research Council recommendations as minimum requirements.

A specially formulated receiving diet fed for a minimum of two weeks after arrival may reduce death loss and aid in the control of scours. This diet should provide 15 to 16 percent crude protein with adequate vitamin and mineral supplementation.

The addition of ground whole oats to the receiving diet often may aid in the reduction of scours. While adding oats may not influence the rate of gain or feed efficiency from purchase to market, researchers in Nebraska and Missouri have reported a delaying effect on the onset of the typical post-arrival scour.

A typical receiving diet with and without 20 percent ground whole oats is illustrated in Table 4. If oats are not

available, some alternative feedstuffs include ground alfalfa hay, dehydrated alfalfa meal and wheat bran. Use of alternative feed ingredients such as these does require reformulation of the diet, since these feedstuffs cannot be substituted directly for oats.

Table 4
Suggested feeder pigs receiving rations

Ingredients	Ration #1	Ration #2
Oats	0 pounds	400 pounds
Yellow corn	1,558 pounds	1,172 pounds
Soybean meal, 44 percent	390 pounds	375 pounds
Calcium carbonate	15 pounds	18 pounds
Dicalcium phosphate	27 pounds	25 pounds
Salt	7 pounds	7 pounds
Vitamin-trace mineral mix	3 pounds	3 pounds
Antimicrobial additive	+ pounds	+ pounds
Total	2,000 pounds	2,000 pounds
Protein, percent	15.40 pounds	15.80 pounds
Lysine, percent	0.75 pounds	0.75 pounds
Tryptophan, percent	0.17 pounds	0.18 pounds
Threonine, percent	0.60 pounds	0.60 pounds
Methionine + cystine, percent	0.53 pounds	0.52 pounds
Calcium, percent	0.64 pounds	0.69 pounds
Phosphorus, percent	0.56 pounds	0.56 pounds
Metabolizable energy, kcal per pound	1,456.00 pounds	1,298.00 pounds

From PIH020 Guide

The use of an antimicrobial feed additive in the receiving diet is recommended. The feed additive selected and level of usage depends on the individual farm situation. Consult with your swine nutritionist, MU Extension swine specialist or veterinarian in selecting the additive.

The choice of additive will depend on farm history and additive availability. Regulations concerning additives and their approved levels change constantly.

Always read and follow label directions

After the two-week receiving period, pigs may be switched to a balanced grower diet.

Health management

The major health problems affecting newly purchased feeder pigs are respiratory distress (pneumonia) and diarrhea (scours). The majority of health problems are expressed five to 14 days after arrival.

Frequent observation is a must

Close scrutiny at least twice a day for the first few weeks and daily thereafter may prevent a serious disease outbreak. Monitor the feed and water consumption, as reduced consumption of either is a sign of a problem. Provide a separate pen for any sick animals, so that individual observation and treatment can be provided to help the sick animal overcome the stress of illness.

Be prepared to act immediately in the event of illness. Have personnel trained to recognize the symptoms of the major swine diseases and the most appropriate action to take if signs appear. Do not hesitate to consult with a veterinarian if in doubt as to the appropriate treatment. Have necropsies done on dead pigs to accurately determine the cause of death and the most effective preventive treatment.

Since a sick or stressed pig will often drink while refusing to eat, medicated water is often desired for early treatment. Water medication equipment that allows measurements of consumption is preferred. Depending on weather condition, a 40-pound pig will consume nearly a half gallon of water per day, with higher consumption in warm weather. If the average consumption is much less than this, other avenues of medication should be pursued. Although all pigs may not require water medication, it is a good practice to have the medication equipment available if needed.

If pigs have been trucked a long distance or have been withheld from water for a period of time, it also may be advisable to include an electrolyte medication in the water to aid in restoring body water balance.

If palatability of the water medication is a problem, a flavoring agent such as corn syrup or flavored gelatin may increase consumption.

Avoid combining drugs or formulations unless it is done under the direction of a veterinarian. Many combinations are incompatible and the effectiveness of the combined drugs may be reduced.

Always read and follow all medication label directions and precautions, even if you have previously used the medication.

In a disease outbreak, individual animals may require injections with appropriate antibiotics. Unless special long-acting drugs are used, these injections need to be continued for a minimum of three days.

Plan on treating pigs for internal and external parasites. Treat the pigs for worms shortly after arrival with a broad spectrum dewormer.

Spray the pigs for lice and mange soon after arrival, weather permitting, using approved treatments. Read and follow label directions. Do not spray visibly sick pigs. Successful treatment requires breaking the life cycle of these parasites. Since the recommended insecticides do not kill the eggs, two or more sprayings at 10-day intervals are required for successful control.

Because of potential disease risks to swine already on the premises, isolation of the purchased pigs, either in separate lots or facilities, is recommended for at least 30 days. There is a definite health risk for producers who purchase feeder pigs and house these pigs adjacent to breeding stock.

Summary

Stress in the marketing process affects the performance of feeder pigs sold and transported from farm to market to farm. Feeder pig producers, market personnel and finishers can all develop procedures to reduce stress and improve total performance.

Management practices that can help reduce stress while handling and moving pigs include:

- Production of healthy thrifty feeders
- Care in transporting pigs to market
- Top management and care at markets
- Prompt delivery to finisher
- Medicated water at the new location
- Superior nutrition plus additives in starter ration
- Close observation and prompt treatment if needed.

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Related MU Extension publications

- G2324, Swine Diet Manipulation to Minimize Environmental Impacts
<http://extension.missouri.edu/publications/DisplayPub.aspx?P=G2324>
- G2340, Biosecurity for Today's Swine Operation
<http://extension.missouri.edu/publications/DisplayPub.aspx?P=G2340>
- G2430, Common Internal Parasites of Swine
<http://extension.missouri.edu/publications/DisplayPub.aspx?P=G2430>

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