

FEEDER PIG MANAGEMENT

INTRODUCTION

1. Feeder Pig Industry

- A. > 20% of market hogs slaughtered in the U.S. are purchased as feeder pigs!
- B. In the major pig production states, feeder pigs may represent 30 to 35% of finished pigs.
- ☞ Thus, the feeder pig production represents a significant segment of overall swine industry in the U.S.!

2. Marketing Feeder Pigs

- A. Feeder pig market? 1) Sell directly to a finishing operation, 2) sell to a dealer, 3) market through a Co-op, 4) sell at Feeder Pig Fair or Feeder Pig Expo, 5) market via regular auctions, 6) market via Tele-Auction, 7) production of feeder pigs under the contract, etc.

- B. Marketing of feeder pigs: (See a box)

- 1) Majority of feeder pigs are transported, possibly a long distance, and co-mingled with other pigs . . . Very stressful for pigs!

- ▶ “Shrink?”

(1) Purchased at the auction market & transported a long distance (> 600 miles) - 10-11% or 4-5 lb!?

(2) Purchased locally - Still 1 to 2 lb because of stress associated with loading, unloading & transport.

- 2) Majority of finishing operations are purchasing pigs of unknown sources, ∴ facing a risk of introducing new disease organisms to the farm, as well as unknown “potential” of purchased pigs!

3. Purchasing Feeder Pigs

- A. Type of pigs or ideal pigs to purchase? 1) Weigh 35 to 40 lb by 8 weeks of age, 2) Healthy, vigorous and alert, 3) Castrated and healed, 4) Internal and external parasites under control, and 5) Tails are docked.

- To avoid many problems associated with feeder pigs, a careful purchase is must!
- “Cheap pigs” - Obviously, it's unwise to pay too much for feeder pigs, but it's probably worse to pay too little!
- Marketing or pricing of “traditional feeder pigs (i.e, 40 to 50 lb)” are somewhat established.

- B. SEW (segregated early wean) pigs? Because the technology associated with SEW is new, there is no established pricing structure!

North Central U.S. (USDA, 1984)	
Market	%
Pigs sold to or at:	
Finisher	46
Auction	29
Co-op	10
Tele-Auction	7
Dealer	5
Terminal Market	2
Contract	1
Pigs purchased from or at:	
Producer	35
Auction	32
Co-op	16
Dealer	12
Tele-Auction	4
Contract	1

- Some alternatives? (<http://www.ianr.unl.edu/pubs/Swine/nf224.htm>)
 - a) A profit sharing arrangement - The finisher would buy the SEW pig from the producer at a base price, which covers the producer’s out-of-pocket costs. Then, profits would be shared accordingly after selling pigs.
 - b) Based on price of 40- to 50-lb feeder pigs - Make some adjustments to the market price for 40 to 50 lb feeder pigs rather than establishing the price based on the market weight pigs.
 - c) Value based on a budgeting process - Base the value of SEW pigs on cost of production, plus a premium for increased performance (. . . based on 70th, 80th, and 90th percentiles in the Swine Graphics data base).
 - d) Value based on shared risk - As the estimated final value of the pig increases due to market price increases, the price paid for the SEW pig increases. That is, the price paid would vary with the final estimated value of the pig.

FEEDER PIG STRESS

1. Feeder Pig Stress

A. Handling during “sorting-weighing” process - Not unique to feeder pigs?!

B. A physical stress of hauling (see an example):

- 1) “Transportation” by itself may have no lasting detrimental effects on pigs!
- 2) Nevertheless, some tips in transporting pigs?
 - a) “Hot weather” - Use sand/sawdust for a bedding instead of straw/hay, and avoid parking in the direct sunlight for an extended period of time.
 - b) “Cold weather” - Use straw/hay as a bedding, and reduce openings on the truck or trailer to reduce drafts and wind chill.
 - c) No more than 50 pigs/section (& provide more trucking space during the summer) & avoid sudden stops and turns.

Item	Trans.	Non-Trans.
Weight gain, lb/day:		
1 wk	0.42	0.51
12 wk	1.39	1.36
Feed:gain:		
1 wk	4.66	4.15
12 wk	3.57	3.56
Neutrophils, %:		
Pre-transport	37.3	37.5
Post-transport	48.6	43.8
1 wk	35.4	32.2
12 wk	33.3	32.8
Lymphocytes, %:		
Pre-transport	57.5	58.1
Post-transport	48.4	52.1
1 wk	60.1	63.5
12 wk	63.2	64.2

C. Dehydration & deprived feed, or abrupt changes in diets (see an example):

- 1) Providing feed & water at the market can alleviate weight loss during marketing & transport.
- 2) But, no water/feed has no lasting, detrimental effects on overall performance of feeder pigs.

Item	F/W	None
Weight, lb:		
Arrival (Market)	47.5	48.4
Departure (Market) ^a	49.7	45.5
Arrival (Res. Center) ^a	45.4	42.8
Weight gain, lb/day ^a	1.46	1.51
Feed intake, lb/day	4.64	4.85
Feed to gain	3.19	3.23

^aP < .05.

D. Exposure to different environmental conditions (temperature, humidity, etc.) - Not unique to feeder pigs?!

E. Changes in pen mates, thus upheaval in the social order!

Essentially, pigs are “hungry, thirsty, tired, and confused,” but a normal stress associated with marketing may have no long term adverse effects, i.e., no effect on overall growth performance or carcass traits!

2. The Main Problem?

A. Exposure of co-mingled pigs to various diseases when their defense mechanisms are low is perhaps the greatest problem for feeder pig finishing operation!

B. This is especially true when purchasing feeder pigs from “unknown” sources - See an example.

- 1) Pigs purchased at the auction market are slower to start on feed & may have more health related problems!
- 2) Thus, if possible, purchase pigs from a known, reliable source(s).

Item	One-owner	Auction
Weight gain, lb/day:		
13-day	0.99	0.57
Final	1.50	1.36
Efficiency (F:G):		
13-day	2.43	3.64
Final	3.31	3.25
Pigs treated	0	17
Pigs lost	5	6

C. On the average, pigs produced on one farm and finished on another farm take 10-12% longer (2.5-3 wk) to reach market weight vs those finished on the same farm!

To minimize ill effects of stress, good management practices during the marketing and upon arrival are extremely important!

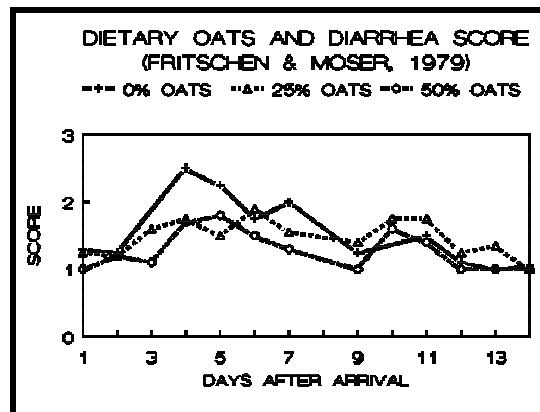
STARTING PURCHASED FEEDER PIGS

- o The most common problem among newly arrived pigs is “diarrhea,” which can be caused by bacteria/virus infections, or non-disease factors such as nutrition or stress (especially temperatures). (Respiratory problems/pneumonia can be a problem too!)

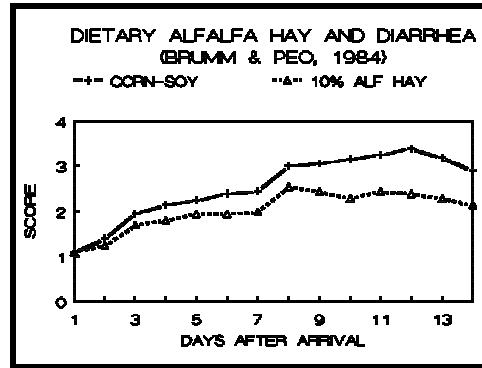
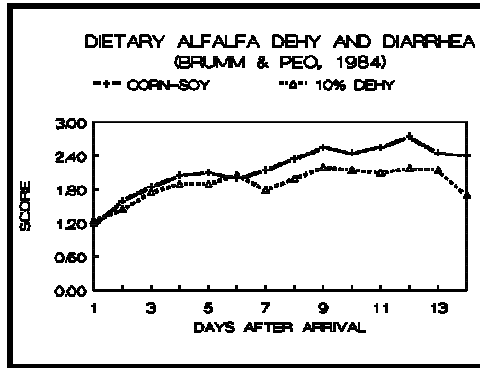
1. To Prevent/Alleviate Diarrhea Through Nutritional Means

A. Use of fibrous ingredients - Inclusion of fibrous ingredients in receiving diets is one way to alleviate problems with diarrhea in newly arrived feeder pigs.

- 1) Effect of oats: [See a figure(Fritschen & Moser, 1979. NE Swine Rep.)]
 - a) By ↑ dietary oats (~ 11% fiber), may be able to delay & reduce incidence of diarrhea.
 - b) ↓ pig performance with 50% oats, ∴ 25% may be the optimum?!



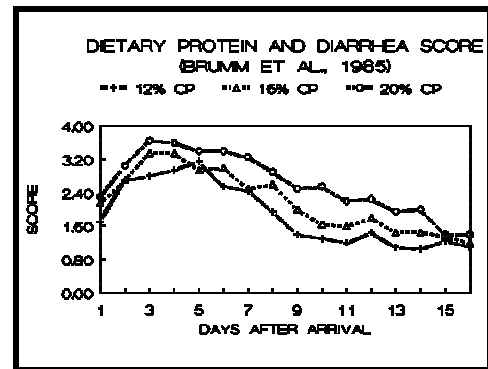
2) Effect of dehydrated alfalfa & alfalfa hay: (Brumm & Peo, 1984. NE Swine Rep.)



- ▶ No adverse effects on performance, and 10% alfalfa may ↓ severity of scours!

B. Dietary protein

- 1) It is a common practice among feeder pig finishing operators to reduce dietary CP content of receiving diets to alleviate diarrhea.
- 2) Effect of dietary CP content (Brumm et al., 1985. NE Swine Rep.):
 - a) Fair common to feed a diet with 16% CP to pigs weighing 40 to 110 lb.
 - b) “12% dietary CP” - May have a positive effect on diarrhea scores, but may not be sufficient to support the optimum gain or efficiency.
 - c) “20% dietary CP” - Tendency for pigs to have higher diarrhea scores, but similar performance to those fed a 16% CP during the initial 16 days.



- ☞ The bottom line? “Reduction of the CP content for receiving diets may not be warranted!”

2. Medications

A. Antimicrobial agents:

- 1) Because of a possible exposure to new microorganisms, pigs may benefit from antibiotics in the receiving diet!?
- 2) Because of uncertainties on the type of microorganisms present, better to use broad spectrum antibiotics (e.g., chlortetracycline/Aureomycin & oxytetracycline/Terramycin).

B. Water medication:

- 1) A stressed-pig is willing to drink than to eat, and water medication (antibacterial agents) has been recommended by many veterinarians and swine specialists.
- 2) May be a good insurance, but no or inconsistent response to water medications in many controlled experiments & it is costly (\$1 or more/pig)!

☞ Thus, rather than making it as a routine management practice, should be equipped to medicate the water . . . just in case!?

C. Electrolytes - May be useful when transporting a long distance without water, but no or little response has been observed in many controlled experiments, so . . . ?

D. Parasites” - Should treat for both internal and external parasites soon after arrival:

- 1) For lice & mange, should use lindane, malathion, etc.
- 2) For pigs of unknown sources, should use broad spectrum dewormers (e.g., dichlorvos/Atguard & levamisole/Tramisol).
- 3) For pigs of known source(s), can achieve more precise control by determining a species of worms present first, and then use appropriate anthelmintics.
- 4) An alternative is to use Ivomec for both internal & external parasites.

3 Other Considerations

- A. During the first few weeks, observing pigs frequently is extremely important!
- B. If possible, isolate newly arrived pigs for 30 days or so. This is especially useful for pigs of unknown source(s).
- C. Provide a minimum of 2 pens for sick pigs.

4. Preparation/Management

- A. Thoroughly clean and disinfect the facility.
- B. Provide a dry, draft-free sleeping area - may want to use a supplemental heat, hovers, bedding or combination of these during the winter months.
- C. Group pigs by size upon arrival.
- D. Space requirement for 30-60 lb pig? - Provide 3-4 ft² and 3-4 ft² sleeping space + > 4 ft² outside area for those housed in the confinement & semi-confinement, respectively.
- E. Place no more than 25 to 30 pigs/pen.
- F. Provide one waterer for every 15-20 pigs & let nipple drinker drip until pigs learn how to drink.
- G. Provide one feeder space for 3 to 4 pigs.
- H. Floor feeding twice a day in the sleeping area (solid floor) for the first few days:
 - 1) Often enhances feed intake.
 - 2) Promotes good dunging habits.
 - 3) Allows and encourages the producer to:
 - a) Monitor feed intake of pigs.
 - b) Other possible problems.

☞ Caution! May be able to reduce the incidence of diarrhea by continuing this feeding practice for 7 to 10 days, but it can reduce growth performance of pigs! (Fritschen and Moser, 1979. NE Swine Rep.)