INFO SHEET
Veterinary Services

United States Department of Agriculture
Animal and Plant Health Inspection Service
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Feed Management by U.S. Pork Producers

Feed costs are approximately 60 to 70 percent of pork production costs. Therefore, management of swine diet procurement, storage, and feeding are segments of the production chain with wide-ranging financial effects.

Performance, the amount of feed required to produce a pound of gain, can be influenced by feeding the optimum diet for the grower/finisher pig's growth stage.

According to a 1995 National Animal Health Monitoring System (NAHMS) study of grower/finisher operations, pork producers changed rations often between a hog's entry to the grower/finisher phase and when it was marketed for slaughter. The 16 states[1] involved in this USDA project represented nearly three-fourths of U.S. pork producers.

Sixty-seven percent of U.S. hog producers fed more than two diets to their grower/finisher hogs, while 29 percent fed two diets during the grower/finisher stage (Figure 1).

As the size of the swine operation increased, producers tended to use a greater number of diets to meet pigs' optimum dietary needs (Figure 2). Over 24 percent of producers marketing more than 10,000 head changed rations six or more times during the grower/finisher period. A majority of the smaller producers (marketing fewer than 2,000 head) fed two (33.1 percent) or three (34.2 percent) different diets to pigs in this phase.

Figure 1

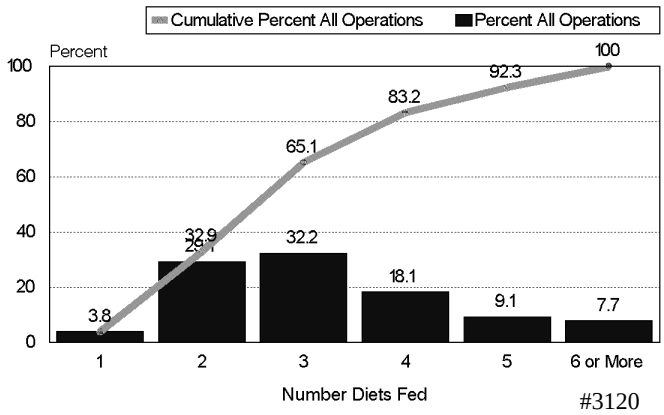
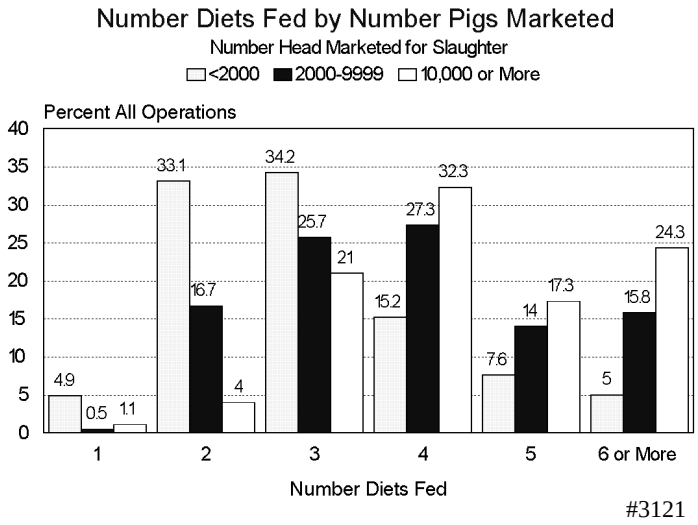


Figure 2



1 Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Carolina, Ohio, Pennsylvania, South Dakota, Tennessee, and Wisconsin.

A pig's weight was the primary reason 63.4 percent of pork producers progressed to different dietary rations. Time on feed was the first reason for 5.3 percent of producers, while 30 percent equally considered weight and time on feed to change diets.

Gilts and barrows in the grower/finisher stage require different diets for maximum efficiency and carcass quality. Gilts require higher protein than barrows of the same size because of their increased lean tissue. Also, feeding the optimum dietary protein provides a leaner carcass. These factors are important in today's premium-for-lean pork quality market.

Larger operations were more likely to feed different rations to males and females (split-sex feeding). Operations that practiced split-sex feeding had different diets for pigs of various weights and separate diets for gilts and barrows. One-fourth of the hogs marketed by operations in the southeast were on operations that practiced split-sex feeding, compared to 38 percent of hogs marketed in other areas.

The NAHMS Swine '95 study showed that 71.2 percent of larger operations, those that marketed 10,000 or more head, practiced split-sex feeding management (Figure 3). Nearly 42 percent of producers marketing 2,000 to 9,999 head and 10.3 percent of producers marketing fewer than 2,000 head practiced split-sex feeding.

On-the-farm feed mixing was common. Overall, 82.0 percent of U.S. pork operations mixed at least one diet on the premise, and over 76 percent mixed all diets on the farm.

Operations marketing over 10,000 head were less likely to mix all their diets on the farm. Herds marketing fewer than 2,000 head for slaughter mixed 81.7 percent *of their diets* on the farm compared to 70.2 and 55.9 percent of those marketing 2,000 to 9,999 and 10,000 or more hogs, respectively (Figure 4). Likely some of the larger operations owned and operated a feed mill off-site that manufactured and delivered mixed diets to operation sites.

NAHMS collaborators on the Swine '95 study included the National Agricultural Statistics Service (USDA); State and Federal Veterinary Medical Officers and Animal Health Technicians; and the National Veterinary Services Laboratories (USDA:APHIS:VS).

Figure 3

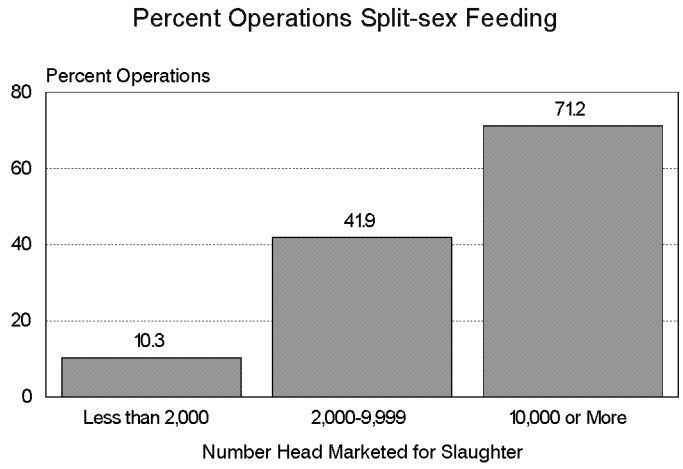


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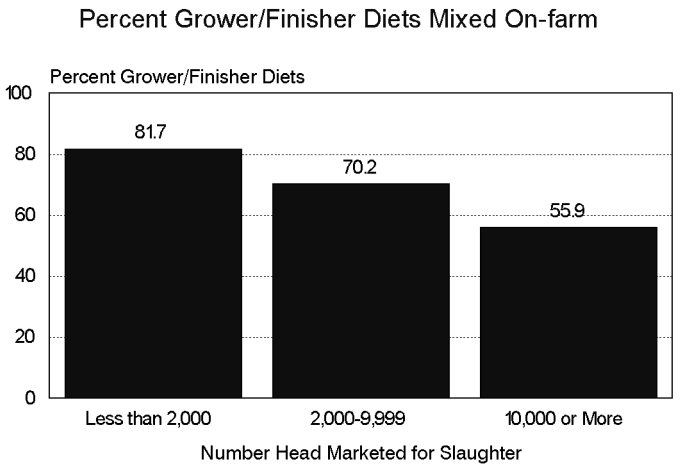
Figure 4



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For more information on the Swine '95 study, contact:

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