Survey of Swine Nutrition and Feed Industry Practices in the United States for Development of a National Swine Nutrition Guide

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Historically, 60 to 65% of the total production costs for a farrow-to-finish swine operation were feed costs. However, with the prospect of higher long-term feed prices, that percentage will likely increase. The National Swine Nutrition Guide (NSNG) will include nutritional recommendations by production phase and a simple least-cost diet balancing program to assist those responsible for developing and managing swine feeding programs. In order to ensure that the NSNG is current and relevant to the pork industry, a 16-question survey was conducted. There were 21 respondents (66% response rate) that represented commercial feed manufacturing companies, integrated production operations, genetic companies, independent feed manufacturers, and nutritional consultants (representing over 75% of U.S. pig production). The survey showed 71% recommend or use a four-phase nursery feeding program with a range from 2 to 6. Reported average initial weaning weight for the nursery feeding program was 5.45 kg with a range from 4.55 to 6.8 kg. The average ending weight of pigs leaving the nursery phases was 22.7 kg with a range from 20.5 to 31.8 kg. For the growing and finishing period, 86% of the survey respondents recommend or use a five-phase feeding program plus a ractopamine phase from 122.7 kg to 123.8 kg (with a 118.2 to 129.5 kg market weight range). Half of those surveyed recommend feeding gilts a separate diet during gestation. To establish amino acid requirements for use in diet formulation, 76% use the 1998 NRC plus current literature or internal data. When formulating diets, 95% use ME, 33% use total amino acid, and 86% use percent of the diet for method of expressing nutrient requirements. When working with clients, those surveyed state that when expressing nutrient requirements for energy, ME is used 100%, while for amino acid, total is used 86%, and percent of the diet is used 76% of the time. Survey results suggest that the majority of the swine nutrition and feeding recommendations are similar across the industry. These survey results will support the development of the NSNG by including cutting edge information that is most relevant to the swine industry.

Key words: Swine, nutrition, feeding