



NUTRITION NOTES

Innovation + Research from Kent Nutrition Group

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THE EFFECT OF SKYCIS™ IN GROW-FINISH PIGS

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Coming changes to antibiotics regulation in pork production, make it imperative that alternative compounds be developed to help improve performance and/or health of swine. Elanco has developed a new compound called Skycis, featuring the ionophore narasin as the active ingredient. This antimicrobial product has been used strictly in food animals for over 40 years. Skycis works by improving the efficiency of hindgut fermentation by shifting the population of gram-positive and gram-negative bacteria in the hindgut so that more gram-negative bacteria is produced. Gram-negative bacteria produce propionic acid which results in more favorable energy utilization. This in turn helps with growth and efficiency in the animal.

Because Skycis has been shown to improve performance, and is an innovative product with global acceptance, we elected to test this compound at the Kent Product Development Center. We utilized 240 pigs with 18 pens per treatment involving a five-phase grow-finish program utilizing NexGen VTM 6/5 PT and 200 lb per ton of Distillers Dried Grains with Solubles. The initial starting weight was 50.5 lb for a 110-day test period. The overall performance data are shown in Table 1 below:

Table 1. Effect of Supplemental Skycis in Grow-Finish Pigs on Performance

	Control(C)	Skycis	Skycis vs. C
Daily Gain ^a , lb/day	1.943	2.013	+3.6%
Daily Feed, lb/day	5.300	5.377	+1.4%
Feed/Gain ^b	2.726	2.671	-2.0%
Cost/lb gain, ¢	23.22	23.19	-0.03¢
Total Gain after 110 days, lb	213.73	221.43	+7.7 lb
Feed Cost of Gain, \$/pig ¹	49.63	51.35	+\$1.72
Initial Weight, lb	50.5	50.5	-
Final Market Weight, lb	264.23	271.93	+7.7 lb

^a Skycis effect ($P < .01$); ^b Skycis effect ($P < .05$)

¹ $213.73 \times .2322 = \$49.63$ and $221.43 \times .2319 = \$51.35$;

Skycis added at 13.6 grams/ton with a cost increase of \$2.36/ton of complete feed

continued

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Supplemental Skycis resulted in both a significant increase in gain (3.6%) and an improved feed efficiency of 2% compared to pigs fed the Control diets without Skycis. Based on the improvement in growth rate with Skycis, the pigs on Skycis had a market weight of 271.93 lb compared to 264.23 lb for those on the Control diets.

Table 2. Effect of Supplemental Skycis in Grow-Finish Pigs on Carcass Traits and Net Return

	Control(C)	Skycis	Skycis vs. Control
Final Market Weight, lb	264.23	271.93	+7.7 lb
Dressing Percent	74.39	75.27	+0.88
Final Carcass Weight, lb	196.56	204.68	+8.12 lb
Value carcass using a Meat Price of \$66.67/cwt ¹	131.05	136.46	+\$5.41
Value carcass using a Meat Price of \$73.33/cwt ²	144.14	150.09	+\$5.95
Grade Premium, \$/cwt of carcass	5.74	6.43	+\$0.69
Total Grade Premium/pig, \$	11.28	13.16	+\$1.88
Net Return per pig ³ @ \$66.67/cwt	92.70	98.27	+\$5.57
Net Return per pig ³ @ \$73.33/cwt	105.79	111.90	+\$6.11

^a Skycis effect ($P < .01$)

¹ \$50 live price divided by standard dressing percent of 75 = \$66.67/cwt meat price

² \$55 live price divided by standard dressing percent of 75 = \$73.33/cwt meat price

³ Total value of carcass, including grade premiums, minus the feed cost of gain

The carcass and economic data are shown in Table 2 above. Pigs on Skycis had a numerical improvement in dressing percent (75.27 vs. 74.39) compared to pigs on the Control diets. Taking the dressing percent differences into account would result in a difference of 8.12 lb of additional carcass weight for those pigs on Skycis. Moreover, there was a significant response to Skycis in grade premiums (6.43 vs. 5.74) of \$0.69 per cwt of carcass, giving an advantage of \$1.88 per head for those pigs on supplemental Skycis. The bottom line is that pigs on Skycis had a \$5.57 and \$6.11 advantage in net return based on a meat price of \$66.67 and \$73.33 per cwt, respectively.

SUMMARY:

Skycis is an ionophore product that clearly provided very significant improvements in performance, carcass traits, and net returns of about \$6 per hog marketed!