



# NUTRITION NOTES

Innovation + Research from Kent Nutrition Group

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## SUPPLEMENTAL NUTRIVANTAGE® IN GROW-FINISH PIGS

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Developing products that can help pork producers raise healthier pigs to feed a growing population is an ongoing effort at the Kent Nutrition Group Product Development Center. NutriVantage® Nutrition Optimizer® for swine is a research-driven feed supplement designed to help animals achieve optimum nutrition from their diet. Our exclusive NutriVantage formula is made with nutritional components that consist of a blend of organic macromolecules, trace minerals, antioxidants, and chelating agents. In the following trial, we evaluated NutriVantage at three levels (1.5, 3, and 4.5 lb/ton of complete feed at an added cost of \$1.30, \$2.60 and \$3.15/ton, respectively by substituting NutriVantage for corn) in growing-finishing pigs. We utilized 1,896 pigs involving 24 replications per group. We used a five-phase program with 400 lb/ton of Distillers Dried Grains with Solubles in each diet. The overall performance data are shown below:

### EFFECT OF NUTRIVANTAGE® ON OVERALL PERFORMANCE, CARCASS TRAITS, ECONOMICS IN GROW-FINISH PIGS

| Groups                            | 1      | 2      | 3      | 4      |
|-----------------------------------|--------|--------|--------|--------|
| NutriVantage, lb/ton              | -      | 1.5    | 3      | 4.5    |
| Number of Pigs                    | 474    | 474    | 474    | 474    |
| Number of Pens                    | 24     | 24     | 24     | 24     |
| Final Weight*, lb                 | 249.4  | 248.9  | 253.7  | 250.5  |
| <b>Days 0-112</b>                 |        |        |        |        |
| ADG <sup>c</sup> , lb             | 1.823  | 1.819  | 1.862  | 1.833  |
| ADF <sup>c</sup> , lb             | 4.761  | 4.724  | 4.830  | 4.738  |
| F/G <sup>a</sup>                  | 2.610  | 2.597  | 2.592  | 2.583  |
| Cost/lb Gain <sup>b</sup> , ¢     | 21.00  | 21.04  | 21.12  | 21.19  |
| <b>Net Return, \$/Pig</b>         |        |        |        |        |
| @\$50/cwt live price              | 59.19  | 58.92  | 60.07  | 58.90  |
| @\$55/cwt live price <sup>c</sup> | 69.40  | 69.10  | 70.50  | 69.16  |
| @\$60/cwt live price <sup>c</sup> | 79.61  | 79.29  | 80.93  | 79.42  |
| @\$65/cwt live price <sup>c</sup> | 89.82  | 89.47  | 91.35  | 89.68  |
| @\$70/cwt live price <sup>c</sup> | 100.03 | 99.65  | 101.78 | 99.94  |
| @\$75/cwt live price <sup>c</sup> | 110.24 | 109.84 | 112.21 | 110.20 |
| <b>Carcass</b>                    |        |        |        |        |
| Percent Lean <sup>b</sup>         | 57.18  | 57.24  | 57.29  | 57.33  |
| Dressing Percent                  | 75.43  | 75.33  | 74.85  | 75.23  |
| Grade Premium, \$/cwt             | 5.47   | 5.34   | 5.64   | 5.48   |

<sup>a</sup>NV linear (P < .05); <sup>b</sup>NV Linear (P ≤ .09); <sup>c</sup>NV Cubic (P ≤ .10)

\*Initial Weight/Group = 45.2 lb

## DISCUSSION

We observed a response in gain and feed intake when pigs were fed diets with supplemental NutriVantage at 3 lb/ton of complete feed. In fact, the hogs were **4.3 lb heavier at market weight** when the diets contained supplemental NutriVantage at 3 lb/ton compared to those without. While the optimum level for growth and feed intake was 3 lb/ton, we did see that as the level of NutriVantage was increased, the improvement in feed efficiency continued, which helped to keep the cost/lb of gain just slightly higher than the pigs on Group 1 without the NutriVantage. The improvements in gain with NutriVantage fed at 3 lb/ton resulted in very favorable advantages (\$0.88 to \$1.97 depending on the live price) in net return per hog marketed. We also observed slight improvements in percent lean as the level of NutriVantage was increased.

## SUMMARY

Supplemental NutriVantage for swine (Product # 8101) at 3 lb/ton of complete feed resulted in faster growth rates along with improvements of \$1.10/hog marketed (using a live price of \$55/cwt).

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