



# NUTRITION NOTES

Innovation + Research from Kent Nutrition Group

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## SUPPLEMENTAL MINTREX® COPPER IMPROVES GROWER-FINISHER PERFORMANCE AND ECONOMICS

By Michael Edmonds, Ph.D., Vice President, Swine and Poultry Nutrition

Mintrex copper is a newer generation of supplemental copper in which one copper molecule is chelated to two specific methionine molecules. This combination results in a source of copper that is highly bioavailable to the small intestine. In addition, the methionine (78% of formula) is also bioavailable and useful in formulations since synthetic amino acids have been used routinely due to the high cost of soybean meal. To study this, we utilized 192 pigs and 24 pens per treatment. The initial starting weight was 41 pounds with a final weight of about 291 pounds.

The supplementation of Mintrex copper resulted in a 3.3% improvement in gain, a 1.4% greater feed intake and a 1.9% better feed efficiency during the grower phase (Days 0-42) compared to those diets without the Mintrex copper. Overall (Days 0-113), gain was increased by 0.7% with a 1% improvement in feed efficiency from the diets with added Mintrex copper compared to those without. Net return (value of gain minus feed cost) was increased from supplemental Mintrex copper by \$0.35 and \$0.44 per pig at \$55 and \$60 per live hundredweight, respectively. In addition, there was a trend towards a higher grade premium due to the increase in percent lean from the added Mintrex copper.

Treatment	Control (C)	C + Mintrex Copper <sup>1</sup>
<b>Days 0-42</b>		
ADG <sup>2</sup> , lb	1.865	1.927
ADF, lb	4.051	4.108
F/G <sup>2</sup>	2.173	2.132
Cost/Lb Gain, ¢	24.13	24.01
<b>Days 0-113</b>		
ADG, Lb	2.202	2.218
ADF, Lb	5.909	5.890
F/G <sup>2</sup>	2.683	2.655
Cost/Lb Gain, ¢	29.30	29.35
<b>Net Return, \$/Pig</b>		
@ \$50/cwt live price	51.48	51.73
@ \$55/cwt live price	63.91	64.26
@ \$60/cwt live price	76.35	76.79
@ \$65/cwt live price	88.79	89.32
<b>Carcass</b>		
Percent Lean <sup>2</sup>	55.93	56.29
Dressing Percent	75.10	75.12
Grade Premium, \$/Cwt	7.20	7.44

<sup>1</sup>1.07 lb/ton (80 ppm copper)

<sup>2</sup>Mintrex copper effect (P ≤ .05)

### SUMMARY:

Supplementing growing-finishing pigs with 80 ppm Mintrex copper throughout the growing-finishing period, resulted in a significant improvement in feed efficiency along with higher net returns.



## NUTRITION NOTES (continued)

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