



## EVALUATION OF WHEY SOURCES IN NEXGEN® 12-17

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Milk sources such as whey provide a highly digestible source of protein as well as lactose for a young pig. Since 2002, we have been using a whey source called Cheese Whey that contains similar protein and lactose levels to dried whey, but has a natural taste and aroma that pigs prefer from our testing at the Kent Product Development Center. In addition, the cheese whey contains higher levels of fat and energy compared to dried whey. Our research from 2002 showed improvements in performance and economics from using cheese whey compared to dried whey. In this trial we re-evaluated cheese whey compared to dried whey in NexGen 12-17. The data during the first 9 days post-weaning are shown in Table 1 below:

**Table 1.**  
**Evaluation of Whey Sources in NexGen 12-17 (Days 0-9)**

Whey	✓	✓
Cheese Whey		
Avg. Daily Gain, lb	.44	.42
Avg. Daily Feed, lb	.61	.60
Feed/Gain	1.49	1.51
Cost/lb of gain, cents	48.90	49.33
Net Return, \$/Pig @ 80 cents/lb	1.33	1.29

KNG; 224 pigs/trt; 32 pens; Avg. Initial Wt., 15.7 lb

The results during the 9-day post-weaning period show that pig performance was similar between the two whey sources. After the 9-day test period, we fed both groups of pigs the same diets which were NexGen 17-25 (Days 9-21) and NexGen 25-40 (Days 21-35). The overall results from the 35-day test period are shown in Table 2 below:

**Table 2.**  
**Evaluation of Whey Sources in NexGen 12-17 (Days 0-9)**  
**Followed by NexGen 17-25 (Days 9-21) and NexGen 25-40 (Days 21-35)**

Cheese Whey(Days 0-9)	✓	✓
Common Diets (Days 9-35)	✓	✓
Avg. Daily Gain <sup>1</sup> , lb	.85	.89
Avg. Daily Feed, lb	1.19	1.23
Feed/Gain	1.40	1.38
Cost/lb of gain <sup>1</sup> , cents	23.67	23.14
Net Return <sup>1</sup> , \$/Pig @ 60 cents/lb	10.84	11.49

KNG; 224 pigs/trt; 32 pens; Avg. Initial Wt., 15.7 lb

<sup>1</sup> Treatment effect (P ≤ .10)

Pigs previously on the NexGen 12-17 with cheese whey had numerically greater gain, a lower cost of gain and an improved net return (\$0.65/pig) compared to those pigs previously on diets with dried whey.

Based on these results and the extensive studies from 2002, we are going to continue to use cheese whey along with several other key ingredients (increased lactose levels, higher egg antibodies, increased levels of poultry meal, lower levels of soybean meal with the addition of a highly digestible soy protein from Hamlet) in our new NexGen 12-17 formulations (see Nutrition Notes entitled: Innovative New Pig Starter Formulations for NexGen 12-17).