

Pig Growth and Development Based on Differing Swine Rations

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Introduction

Objective: To compare the rate of gain and associated economic cost per pound of gain of a control ration to different show pig rations.

Hypothesis: The purchased show pig feeds will provide a higher rate of gain per pound of feed consumed, resulting in less days on feed. Furthermore, it is expected that this will result in a more economical cost per pound of gain as compared to the control ration.

Methods

- The trial was divided into four groups containing seven mixed breed pigs of similar weight
- All pigs were within eight days of age
- Three individual groups were each fed a specific show pig ration
- The control group was fed a balanced corn and soybean meal ration
- All four rations throughout the trial were fed free-choice for 10 weeks
- All of the rations were of similar protein and lysine content
- Weights of individual pigs were recorded weekly
- Total feed consumption of each group was recorded

Data

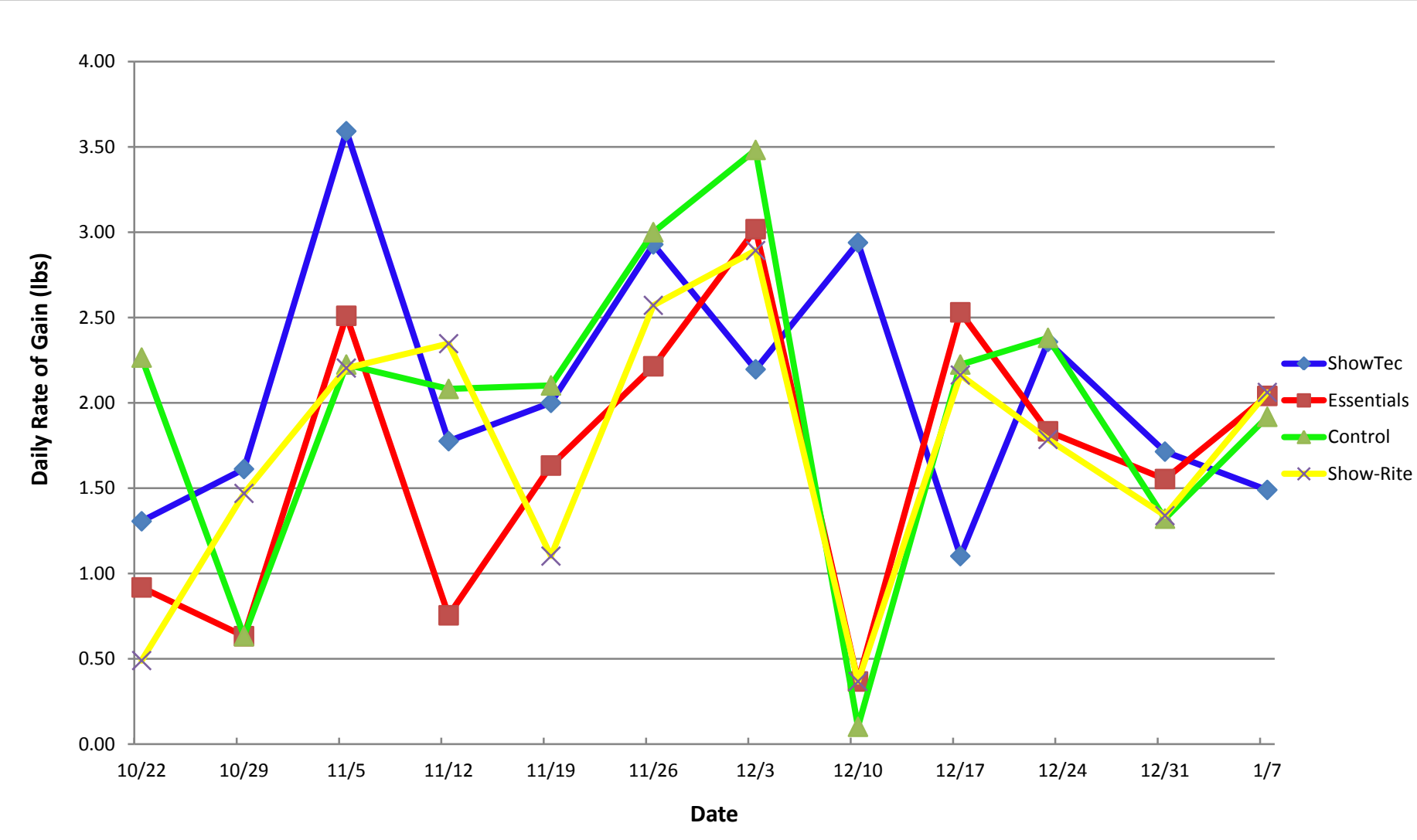


Figure 1: Average weekly rate of gain per pig for each experimental group over the course of the feeding trial.

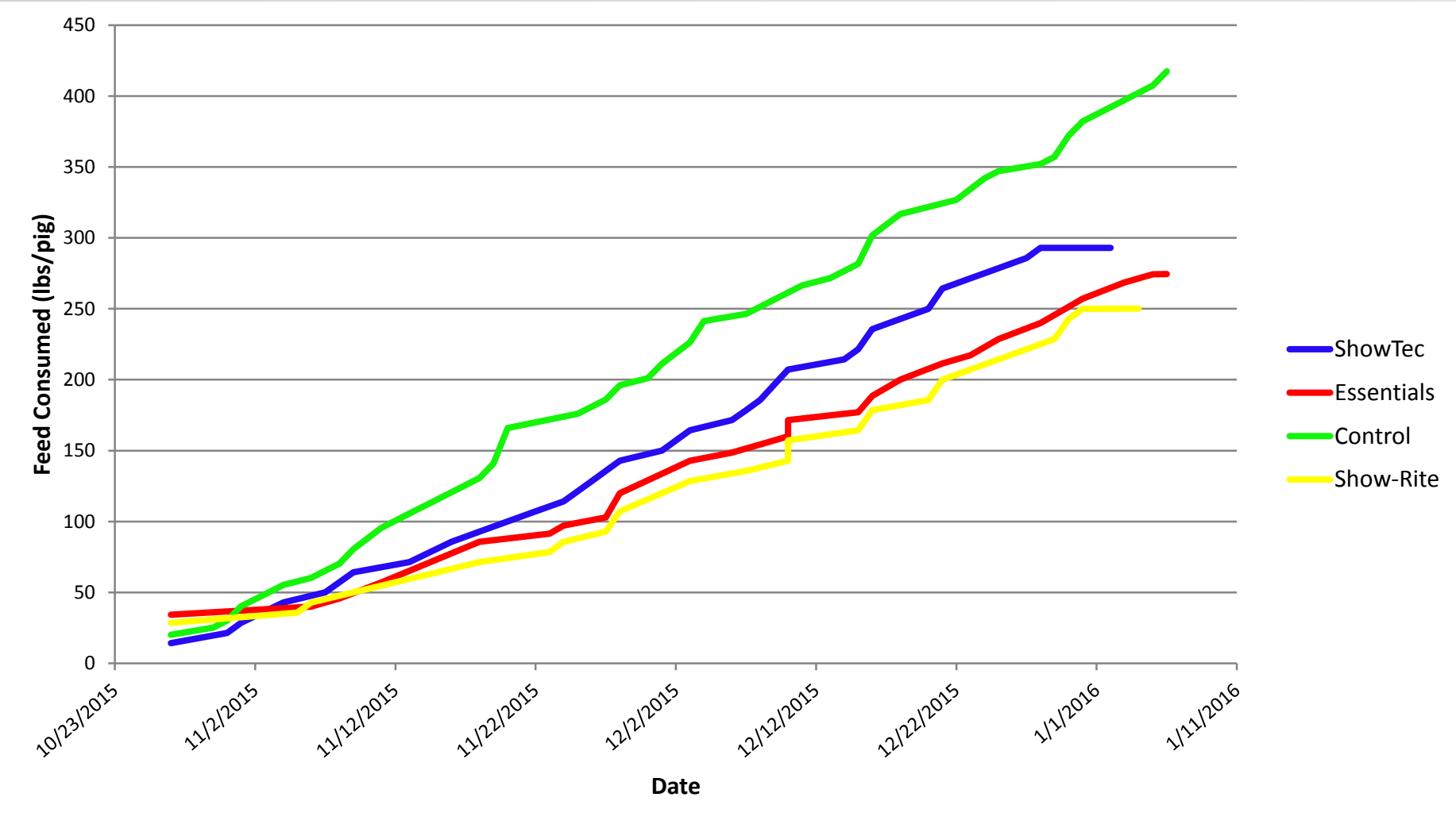


Figure 2: Running total of pounds of feed consumed per pig.

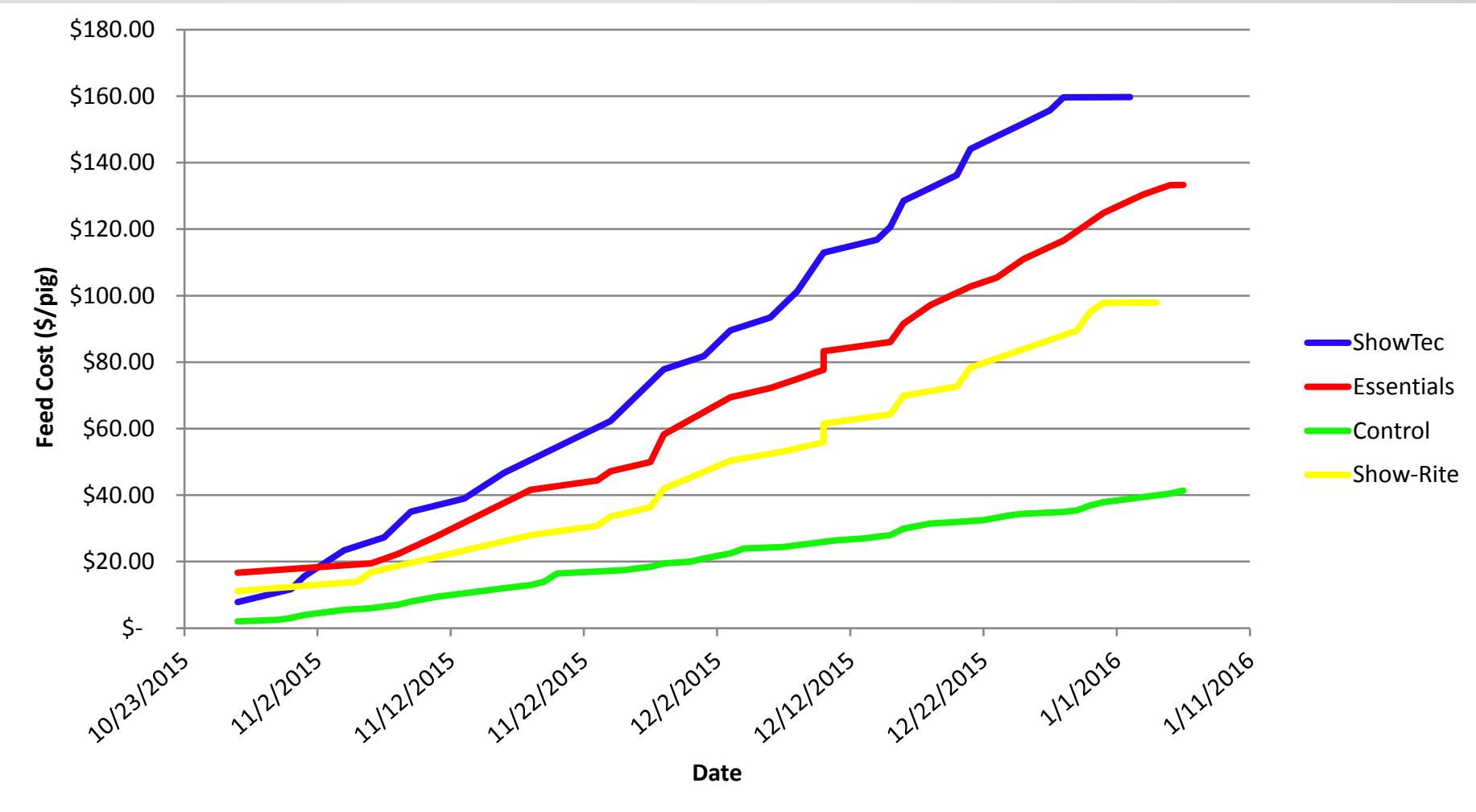


Figure 3: Running total cost of each ration per pig throughout the feeding trial.

Results

Ration	Days on Feed	Total Pounds Gained	Cost of Feed	Average Daily Gain	Cost per Pound Gained
ShowTec	67	166	\$159.64	2.48	\$0.96
Essentials	71	141	\$133.21	1.98	\$0.95
Control	71	166	\$41.40	2.33	\$0.25
Show-Rite	72	139	\$97.86	1.93	\$0.70

Table 1: Calculation of average total pounds gained and total feed cost per pig.

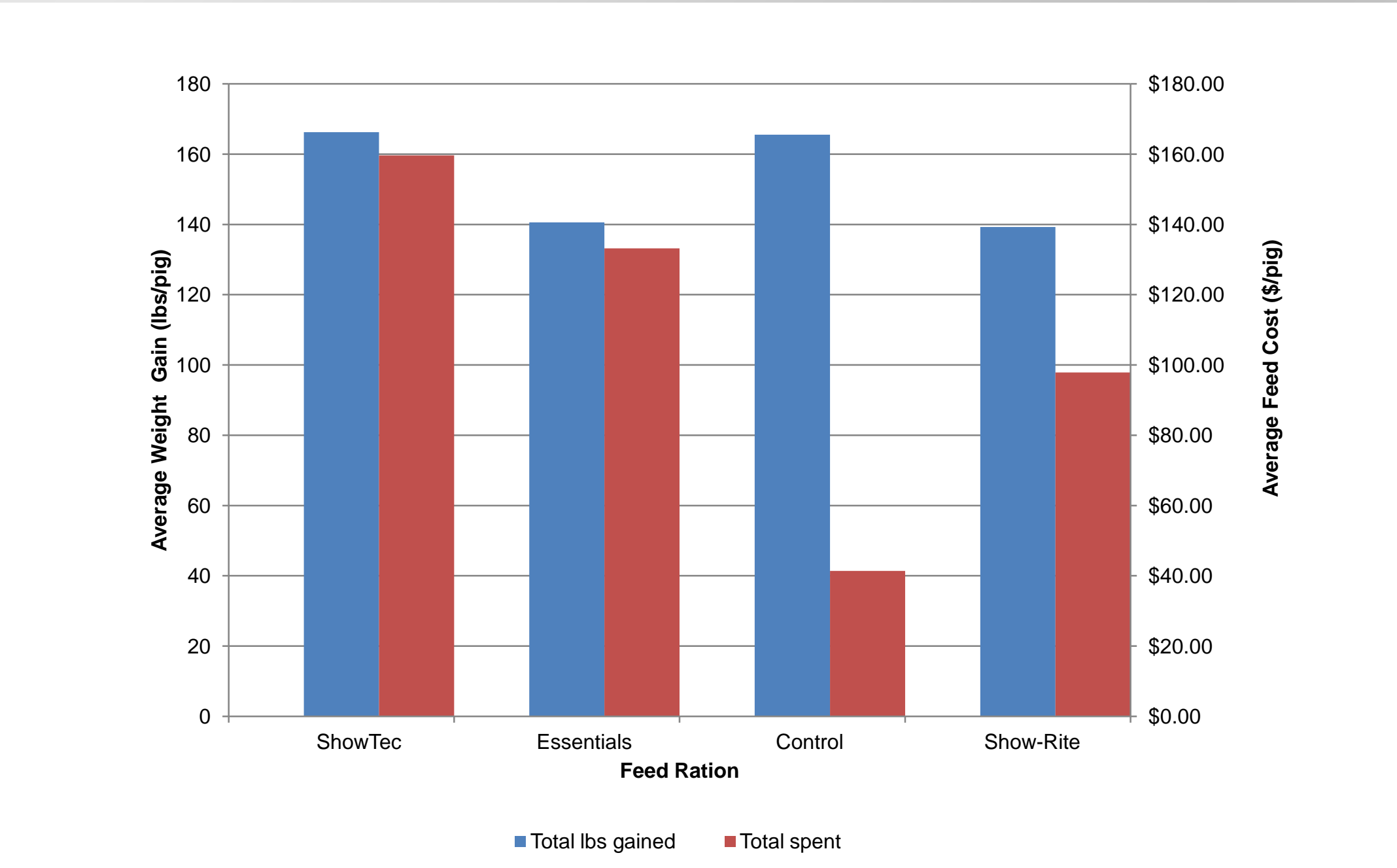


Figure 4: Comparison of average total pounds gained to the total cost of feed consumed per pig.

Conclusions

The initial hypothesis was proven incorrect. When comparing the rate of gain and cost per pound of each ration, it is seen in Figure 4 that the control ration provided a similar rate of gain at a significantly lower cost. However, this ration had to be consumed in greater volumes than other show rations to achieve the same results. Variation in grain prices will help producers determine if economical weight gain is best achieved through a grain ration or a purchased show feed.

Acknowledgements

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