

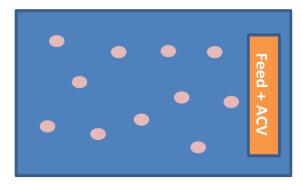
Livestock Research Protocols

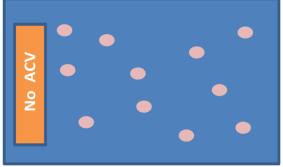
Apple Cider Vinegar Supplementation in Feeder Pigs, September 2014 – November 2015

Objective: Does supplementing pigs with apple cider vinegar (ACV) provide health benefits that contribute to better rate of gain? Anecdotal evidence suggests improved health, and we're looking for quantifiable benefits.

Farmer-cooperator, Tom Frantzen, will:

- Keep two groups of similar animals, one control and one treatment group. Try to maintain uniformity within the two groups.
- Record weights, age and number of piglets per group.
- Keep production, feed and supplementation records.
- Report carcass yield comparisons.
- Replicate this study with three successive groups of pigs.





Measurements and Data Collection

Animal information and weights

• Identify the name or tag number, sex, age or birth date, and status (growing/finishing) of each animal in the trial. Any health notes, veterinary treatments, or mortalities should be noted. Any management differences between groups should also be noted.

Production records

- Weigh animals at the beginning and end of the trial and at intervals as frequently as possible.
- Use weight records to calculate average daily gains (ADG).
- Record observations of thriftiness, appearance, feed intake and palatability of feed.

Feed records

- Record amount of feed fed to each group.
- Record the number of days on feed.

Supplementation records

- Note the amount and price of purchased and consumed ACV, and the rate of supplementation.
- Mix 5 gallons of organic, unpasteurized ACV per ton of feed. With a daily intake of 5 lbs of feed, pigs will receive 1.5-2 ounces of ACV per head per day.

Carcass evaluation

- Record carcass yields from control and treatment groups after each harvest.
- Working with the University of Wisconsin, record tissue sample analysis of control and treatment pigs, if available.
- Conduct pork quality evaluations, if meat is available.

Practical Farmers of Iowa will:

- Monitor progress of project and provide support when needed.
- Analyze the data, compile with past data and write an updated report.
- Publish results in a PFI research report, on PFI website and potentially other outlets.
- Pay the Farmer Cooperator a fee of \$550 at the conclusion of the project in 2015.