



Food & Livestock Science Experiment

Topic Food/Feed Storage

Length of project: 1 hour

Research. What does society know. Look it up!

Purchasing food and feed is expensive. Getting items in bulk can help reduce cost per serving or cost per pound. Therefore, proper storing of feed/food is extremely important. Drying is one method of preserving food however you need to store your food/feed in an environment that will prevent spoilage and contamination.

Words to search: food storage, food contamination, feed storage, feed contamination edu

Situation. Try something different or document a problem that has now arrived.

Different types of storage methods can prevent spoilage and contamination.

Hypotheses. Guess what may happen.

Storing _____ (food/feed) in a cool/wet place will cause it to last longer.

Storing _____ (food/feed) in a sunny/dry place will cause it to not last.

Equipment. What you need.

Gather

- 4 Quart jars with lids and labels
- 4 Cups Food/Feed ingredient such as Oatmeal, Rice, Dog or Cat Food, Hay, Grain
- 1 Cup Water

Methods. Set up a procedure/protocol to test your hypothesis.

- Gather food/feed and equipment
- Label each jar with the treatment used.
 - Dry/ Wet
 - Cool/Sunny
- In two jars place 1 cup of food/feed in jar add ½ cup water and close with lid.
 - Set 1 jar in sunny storage area; place the other jar in cool storage area for 1 week
- In two jars place 1 cup of food/feed in jar add no water and close with lid.
 - Set 1 jar in sunny storage area; place other jar in cool storage area for 1 week
- Record results

Experiment. Conduct the experiment.

Conduct the experiment to test how storage methods and moisture contamination will affect the food/feed.

Change one factor and re-do the experiment

Option 1: Use other foods such as oatmeal, rice etc.

Option 2: Use other feeds such as grain, hay, silage etc.

Redo the experiment.

Results/Observations. What happened?

Record what happened to the feed/food. What did each of the treatments do? Was the color smell, temperature different?

Conclusion. Apply what you found out.

How could you use this knowledge?

Why would you change the storage method used?