



Illinois 4-H | Spark Ideas. Ignite Possibilities.

Are you ready to learn more about beef? In this project you will learn about breeds, production, selection, grooming, management, and more! You will also gain skills that you will use in other areas of your life such as decision making, communicating with others and being an effective leader.



Exploring 4-H Beef

Spark Activity: Trail Mix Feed Rations

Did you know that when cattle are fed in feedlots, the feed is mixed according to a ration?

You may be wondering, “what is a ration?” Well, a ration is like a recipe that provides the exact nutrients an animal needs. Some examples of cattle feed ingredients include corn, alfalfa, hay, grass, barley, and minerals.

Trail Mix Feed Ration:

Mix the following ingredients:

- 2 cups pretzel sticks
- 2 cups toasted oat cereal
- 1 cup mini marshmallows
- ½ cup milk chocolate candies
- ½ cup raisins



Just like each ingredient has different nutritional value, so does each part in a cattle feed ration. It is important that we have a balanced diet. Cattle nutritionists work hard to ensure cattle have a balanced diet as well!

Other Activities to consider:

1. Tour a beef feedlot, local locker, or feed mill.
2. Cooking and tasting different beef cuts and identifying where they come from on the carcass

4-H Project Levels and Goals

Beginner

- Identify different beef breeds
- Learn proper feeding of cattle
- Locate and name parts of the beef cow
- Learn how to groom your animal
- Identify how a healthy calf looks and acts.

Intermediate

- Learn appropriate handling techniques
- Identify livestock safety hazards
- Learn the wholesale and retail cuts of beef
- Explore the ruminant digestive system
- Explain the injection triangle and its importance to food safety

Advanced

- Balance a beef ration
- Learn how to manage a cow and newborn calf
- Explore the technological impacts to beef breeding and reproduction
- Properly identify and learn to treat common cattle diseases

Put Your Project Into Action

Show Your Skills

- Create a poster showing the costs associated with purchasing, caring for and showing an animal
- Develop a video demonstrating how to properly groom and animal for show
- Create a poster that included important animal and food science terminology

Service and Leadership

- Beef promotion during May Beef Month
- Post beef recipes on Facebook regularly
- Organize a “farm to table” event during a local festival
- Teach someone to select a breeding heifer
- Arrange a tour of a farm
- Share a presentation on the importance of following drug labels

Entrepreneurship

- Sell beef calves to new beef project members
- Start a hay baling service
- Start a beef fitting education service

Technology Connection

- Drones gather cattle and survey the pasture
- Solar power used to operate water systems
- Digital records for livestock management
- Sensors to monitor health and “invisible” fencing
- Digital feed systems

Connecting with a Mentor

- Local cattle producers / Beef Associations
- Local Veterinarians
- Feed Companies
- A.I. technician
- Food company/meat locker
- University researcher

Events

- 4-H Livestock Judging Contest
- Illini Summer Academies
- Illinois 4-H Junior Livestock Conference
- Livestock Skillathons
- Superior Young Producer Award Contest
- Fitting and Showing Clinics
- Junior Breed Associations



Careers for People Interested in Beef

Livestock Auctioneer	Meat Inspector
Feed Mill Manager	Meat scientist
Livestock Veterinarian	Geneticist
Animal Nutritionist or Feed Sales	Chef

Start a Conversation

What was the most difficult part of showing your animal?
What skills did you practice by completing this project?
Looking back at your experience, what would you have done differently?

What did you learn that you can apply to other areas of your life, outside of 4-H?

Want to learn more?

go.illinois.edu/4Hbeef

Explore more at Illinois 4-H!

4-H.extension.illinois.edu



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Sources: UC ANR 4-H Youth Development Program (2016). <http://4h.ucanr.edu> Author: N. Wilson | Steve Austin, Extension Associate for Youth Livestock Programs, University of Kentucky | Iowa State University Extension, 2011, Iowa 4-H Project Hot Sheet. Retrieved from <http://www.extension.iastate.edu/4h/projects> | University of Wyoming-Sheep Project “What’s it all about?” | 4-H Spark Sheets are a collaborative effort of 4-H staff, volunteers, alumni and teens from across Illinois. A big thanks to the many contributors and reviewers!