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## 4-H VOLUNTEER INFORMATION SERIES

### Nebraska 4-H Youth Development

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#### Club Activity Idea: Livestock Feed Rations

**Specific Project(s):** Animal Science Projects

**Description of Activity:**

This activity helps young people understand what animals need to eat and what a livestock ration is. It helps them to understand about balanced diets and what animals need to thrive.

**Age Level:** 8 – 12

**Group Size:** 1-50

**Time Involved:** Preparation time: 15 minutes Activity time: 15-30 minutes

**Materials Needed:**

- Large Mixing Bowl
- Measuring Cups
- Mixing Spoon
- Ingredients for your ration (Amounts will vary depending on number you are feeding)
  - 2 Cups Popcorn--Energy
  - 2 Cups Round oat cereal--Protein
  - ½ Cup Raisins or Cranberries--Roughage
  - ½ Cup coated round candies—Minerals and Vitamins
  - Makes 5 – 1 Cup Servings
- Small plastic cups for each participant (if in-person)
- Sample of feeds, if available

**Introduction:**

1. What do you like to eat?
2. What kinds of things should we eat to stay healthy?
3. Eating a balanced diet helps us to grow. Animals are the same way. Their balanced diet is called a ration. There are five things that should be a part of their ration. Do you know what they are? Energy, protein, roughage, vitamins and minerals
4. Can you name what livestock eat in livestock terms we call them feedstuffs? (i.e. hay, alfalfa, corn, soybeans, minerals, vitamins)
5. How do these feedstuffs fit into the five parts of a ration?
  - Protein (soybeans)
  - Energy (corn)
  - Roughage (prairie hay, oats, alfalfa, etc.)



- Minerals (salt, minerals)
- Vitamins (A, D, E)

6. We are going to build a ration for our animals today including the things they like to eat.

- **Energy** = Popcorn
- **Protein** = Round Oat Cereal
- **Roughage** = Raisins or Cranberries
- **Minerals & Vitamins** = Color coated round candies

### Virtual delivery note:

When you are leading the activity, consider pausing between each step and evaluating if all participants are ready to move forward, if they need assistance, etc. To do this, you could use some built-in features of zoom, such as turning off their camera until they are ready, using the thumbs-up reaction when they are ready to continue. There are many ways to engage virtually with youth, you are encouraged to be creative!

### Activity:

1. Take each ingredient and explain what it represents in the ration.
2. Measure each ingredient according the list at the beginning of this lesson and dump it in the bowl. Lead the youth through measuring each ingredient separately.
3. Mix all together with spoon. Why is it important that we mix it well?
4. Now that the ration is mixed it is time to feed the animals, which means you can eat the ration!

### Discussion Questions:

1. What do you feed your animals?
2. What do animals need in their rations? Energy, protein, roughage, vitamins and minerals
3. What do animals need besides feed? Water
4. What are some careers that we could have related to animal nutrition?

### Virtual Delivery Email:

Send the following email to all participants 4-7 days prior to the scheduled 4-H experience:

*We are excited for our next 4-H Club meeting on (date, time) and are looking forward to seeing all of you virtually. We will be focusing on animal science and specifically on what animals eat. We will learn about what an animal ration is and make our own ration using the ingredients below. Please have these ingredients ready to go when we meet. We will be building our "ration" together.*

*Ingredients for your ration.*

- *2 Cups Popcorn*
- *2 Cups Round oat cereal*
- *½ Cup Raisins or Cranberries*
- *½ Cup coated round candies*
- *Makes 5 – 1 Cup Servings*

*You will also need a bowl and a spoon to stir with. Let me know if you have questions. See you soon!*