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Color the Lamb Parts
Sheep, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:
• Recognize the body parts of a lamb
• Identify at least five parts of a lamb from memory

ABOUT THEMSELVES:
• Appreciate differences and similarities

Materials Needed:
• Activity Sheet 1, Lamb Parts
• Leader’s Key, Activity Sheet 1, Lamb Parts
• Activity Sheet 2, Lamb Part Match
• Leader’s Key, Activity Sheet 2, Lamb Part Match
• Colored pencils, crayons or markers

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Knowing the parts of a lamb is important when learning about the sheep project. Knowing parts and correct terminology will increase your knowledge of sheep. Knowing the parts of an animal is important when participating in judging contests, answering questions, selecting your own animals, talking to a veterinarian about an injury or visiting with other producers.

Leader Notes

Hand out Activity Sheet 1, Lamb Parts. Let members work in groups of 2 or 3 to identify parts before coloring. After 15 to 30 minutes, review some of the main parts. Have members name parts in unison as you point to them or let one member point to a part while others name. Hand out Activity Sheet 2, Lamb Part Match to see how well they have learned some of the main parts.

Remind members to keep Activity Sheets in their record book.
**Leader Notes**

**ACTIVITY**

**DIALOGUE FOR CRITICAL THINKING:**

Share:
  1. What parts of the lamb are the smallest? Biggest?
  2. What parts of the lamb are hard/easy to remember?

Process:
  3. How many lamb parts can you name?
  4. Why do you think you need to know the parts of a lamb?

Generalize:
  5. Have you or someone you know ever judged sheep? How important was it to know the parts of the lamb and the general shape of each part?
  6. What shapes do some parts have?

Apply:
  7. As the lamb grows, do these parts or shapes change? Why or why not?
  8. What parts of the lamb are similar to parts of other animals? Discuss.

**GOING FURTHER:**

- Design your own lamb drawing and label each part.
- Share Activity Sheet 1, Lamb Parts, with a parent or sibling and identify parts.
- Visit a meat locker and identify parts.
- Place velcro part labels on a live lamb.
REFERENCES:

Author:
Jeremey Geske, former Extension Assistant, Kansas State University
James P. Adams, Extension Specialist, 4-H and Youth Programs, Kansas State University

Reviewed by:
Dr. Clifford Spaeth, Extension Specialist, Animal Sciences and Industry, Kansas State University
Sheep Design Team
COLOR THE LAMB PARTS
SHEEP, LEVEL I
Activity Sheet 1, Lamb Parts

Color each of the parts the designated color.

1. Head—Orange
2. Neck—Pink
3. Shoulder—Purple
4. Breast—Green
5. Front Legs—Yellow
6. Rib—Red
7. Flank—Blue
8. Rear Legs—Orange
9. Leg—Brown
10. Dock—Blue
11. Rump—Purple
12. Loin—Orange
13. Back or Top—Blue
COLOR THE LAMB PARTS
SHEEP, LEVEL I
Leader’s Key, Activity Sheet 1, Lamb Parts

Color each of the parts the designated color.

1. Head—Orange  
2. Neck—Pink  
3. Shoulder—Purple  
4. Breast—Green  
5. Front Legs—Yellow  
6. Rib—Red  
7. Flank—Blue  
8. Rear Legs—Orange  
9. Leg—Brown  
10. Dock—Blue  
11. Rump—Purple  
12. Loin—Orange  
13. Back or Top—Blue
COLOR THE LAMB PARTS
SHEEP, LEVEL I
Activity Sheet 2, Lamb Part Match

Draw a line from the word to the correct part of the lamb.
COLOR THE LAMB PARTS
SHEEP, LEVEL I
Leader’s Key, Activity Sheet 2, Lamb Part Match

Draw a line from the word to the correct part of the lamb.
Sheep Breed Groups
Sheep, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:
• How breeds of sheep are classified
• What type of lamb they own
• The purpose of some breeds of sheep

ABOUT THEMSELVES:
• Organizational skills
• Things they can classify or group

Materials Needed:
• Slides or pictures of the following sheep breeds:
  Suffolk, Hampshire, Dorset, Rambouillet, Merino, Columbia,
  Corriedale
• Activity Sheet 3, Breed Matching Game
• Leader’s Key, Activity Sheet 3, Breed Matching Game

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY

Let’s start by looking at some common sheep breeds. How would we know the breed if we had a pen full of sheep? A breed is a group of sheep that look alike and have the same ancestors or relatives. If all the sheep in the pen had parents of the same breed, they would be purebred sheep. A crossbred lamb has parents of different breeds.

Sheep can be classified (grouped) in three ways:
1. by the product they produce → meat, wool, dual-purpose
2. by their wool type → fine, medium, long or hair
3. by their commercial use → ram, ewe or dual-purpose

First, let’s talk about the products. Meat type sheep are those breeds raised for the production of meat with very little consideration for anything else. Common meat breeds include Suffolk, Hampshire and Dorset. Wool breeds, such as Rambouillet and Merino, produce a fine, high quality fleece but place less emphasis on growth and muscle. Dual-purpose breeds are generally those that try to place some emphasis on both meat and wool; such as the Columbia and Corriedale.

Leader Notes
Show a picture, ask what is significant or can help identify that breed—color of head and legs, ear shape or color where wool is, etc. Compare and contrast the pictures. Identify the breeds. Point to a picture and have the members name the breed in unison or see if they can match names with pictures.

Show two breed pictures to illustrate crossbreeding.

Develop a flannel board or chart as you talk about the three groups. After discussing mix the labels and see if members can match correctly.
Next, sheep can be grouped by their wool type. Fine wool is the most valuable, followed by medium wool, then long wool and finally, hair being the least valuable. We have already talked about Merino and Rambouillet which are fine wool breeds. Other wool breeds will be talked about later.

Most commercial sheep operations use a crossbreeding system. That is the mating of ewes of one breed to a ram of another breed. Typically the shepherd will emphasize wool quality in the ewes while stressing meat production in the lambs. Because of that, fine wool breeds (generally white faced) such as Rambouillet and Merino are called “ewe” breeds. “Ram” breeds are those that will sire meaty, growthy market lambs, such as Suffolks and Hampshires. Some breeds, like the Columbia, are considered dual-purpose breeds because they can be used as ram breeds in some flocks and ewe breeds in others.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**
1. What breed of lamb do you have or plan to buy? Why?
2. What is the main use of your breed?

**Process:**
3. How is a breed of sheep defined?
4. What is a crossbred lamb?
5. What are the three major groups of sheep?
6. What are some sheep breeds in each sheep group?

**Generalize:**
7. What are other things do you collect or put into groups? (ball cards, stamps, etc.)
8. How does grouping things help you learn about them?

**Apply:**
9. How do you use groups of things at home? School?

**GOING FURTHER:**
- Visit a purebred sheep farm and ask what type of sheep they raise and why.
- Visit a grocery store to see if they sell lamb.
- Visit a wool buyer and compare different types of wool.
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Sheep Design Team
SHEEP BREED GROUPS
SHEEP, LEVEL I
Activity Sheet 3, Breed Matching Game

Draw a line from the breed to the correct classification.

PRODUCT PRODUCED

Suffolk            Wool
Merino              Meat
Columbia            Dual Purpose

COMMERCIAL USE

Rambouillet         Ram Breed
Corriedale          Ewe Breed
Hampshire            Dual Purpose
Draw a line from the breed to the correct classification.

**PRODUCT PRODUCED**

- Suffolk → Wool
- Merino → Meat
- Columbia → Dual Purpose

**COMMERCIAL USE**

- Rambouillet → Ram Breed
- Corriedale → Ewe Breed
- Hampshire → Dual Purpose
Beginning to Set Goals in Your Sheep Project
Sheep, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:
• How to set project goals

ABOUT THEMSELVES:
• The importance of setting goals

Materials Needed:
• Chalkboard or flip chart
• Sheep Member Guide and Annual Report (MG-37)
• Member Handout 1, Learning Topics

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Each year you will set several goals to accomplish during the project year. Goals help you get where you want to go.

If this is your first year, you might want to have just one goal, to select your project lamb. Remember that before you select a lamb, you must decide the purpose of the project (meat, wool, show, etc.)

List one or two goals (MAP Step 1) on page 2 for this project year.

Breaking a goal into steps (MAP Step 2) helps you better understand the action needed to make that goal a reality. Some goals have many steps, some have a few.

With each step you need to set a deadline (MAP Step 3). Deadlines are when you expect to have that step of your goal done. As you meet the deadline you set for each step, you need to use an energizer (MAP Step 4). Energizers encourage you to move toward your goals by offering a small reward for meeting your deadline.

Now complete MAP Steps 6 to 7. You have set your goals for Year 1 of your sheep project.

Leader Notes
Put participants into groups of three or four. Mix new project members with youth who have had some experience with sheep or other animal projects. Hand out Member Guide and Annual Report (MG-37) plus Member Handout 1, Learning Topics. Let them help each other decide what their goals for the year will be.

Assist members in breaking goals into steps by talking about what they will have to do to reach a goal.

Allow time for them to share their goals with a project friend and sign each other’s MAP Worksheets.
BEGINNING TO SET GOALS IN YOUR SHEEP PROJECT

**Leader Notes**

**ACTIVITY**

**DIALOGUE FOR CRITICAL THINKING:**

Share:
1. What is your first goal for the project year?
2. What goal do you like best? Why?

**PROCESS:**
3. Why are these goals important?
4. Why is it important to set goals?

**GENERALIZE:**
5. What are the advantages of working in a group when setting goals?

**APPLY:**
6. What other groups have you worked in where you needed to set goals to help you make decisions? (school, family, etc.)

**GOING FURTHER:**
- Use the goal setting process to set group goals

**REFERENCES:**

Lessons on:
- Color the Lamb Parts
- Sheep Breed Groups

**Author:**
James P. Adams, Extension Specialist, 4-H and Youth Programs, Kansas State University

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Sheep Design Team
BEGINNING TO SET GOALS IN YOUR SHEEP PROJECT
SHEEP, LEVEL I
Member Handout 1, Learning Topics

Place a check mark next to five of the most interesting topics you would like to learn about in your sheep project.

☐ Color the Lamb Parts
☐ Recognizing Sex Differences
☐ Sheep Breed Groups
☐ Is Your Lamb Sick or Well?
☐ The Five Food Groups
☐ Washing Your Lamb
☐ Training Your Lamb for Show
☐ Lamb Taste Test

Think Back:

Please write one or two things you have learned about sheep so far. What is something you have learned about yourself while studying sheep?

Learned about sheep:
1. _________________________________________________________________
2. _________________________________________________________________

Learned about self:
1. _________________________________________________________________
2. _________________________________________________________________
Recognizing Sex Differences in Sheep

What Members Will Learn . . .

ABOUT THE PROJECT:
• Recognize the different sex characteristics of sheep
• Name three basic sex types of sheep

ABOUT THEMSELVES:
• Improve observation skills

Materials Needed:
• Sheep pictures (or live animals)
• Sheep model (or live lamb)
• Member Handout 2, Ram
• Member Handout 3, Wether
• Member Handout 4, Ewe

ACTIVITY TIME NEEDED: 20 TO 30 MINUTES

ACTIVITY

We all recognize there is a difference between males and females in animals. In humans, boys and men are males and girls and women are females. But sometimes it’s difficult to tell what sex an animal is unless you know what you are looking for. We can use the reproductive organs of the animal to identify the sex. These are the parts of the body used in mating and having babies. One of the first things a member who wants to raise sheep should learn is how to tell a ewe from a wether or a wether from a ram.

Let’s talk about rams and wethers. These are the males in sheep. When a male lamb is born, it is a ram lamb. When a ram lamb becomes one year old, it may be called a ram or a buck. The male organs are the testes that are located in the scrotum (a sack-like structure that hangs between his back legs), and the sheath located on the underside of his belly. The sheath contains the penis and this is what the ram uses to breed a ewe and to urinate.

But, members do not show rams in a market show. So, how does a ram become a wether? Let’s look at the difference between a ram and a wether. The wether has a scrotum, but it is smaller than the ram’s scrotum. This is because the testes have been removed. This process is called castration and can be done a number of ways, but when the ram is castrated, he is then considered a wether.

Leader Notes
Use Member Handout 2, Ram. Show a picture of a ram or use a live ram. Point out the structures.
Now, let’s talk about the differences between a wether and a ewe lamb. This has nothing to do with which one has horns. Either sex may have horns in some breeds. Ewe lambs are young female sheep. Most of a ewe lamb’s reproductive organs are on the inside of her body, so you can’t see them. That is an easy way to tell the difference between the male and female. Also, remember, the wether has a sheath on the underside of his belly where urine leaves the body. But the ewe lamb has no sheath. She urinates from her vulva which is located under her tail or dock. This is also the opening to the reproductive organs located inside the ewe lamb.

After a ewe lamb becomes one year old or has had a baby lamb it is simply called a ewe. Until you have had some practice it is hard to tell the difference between a ewe lamb and a ewe, but it can be done.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**
1. What is a male lamb called when it is born?
2. What are the two most visible sexual parts of a ram?
3. What is a female lamb called when it is born?

**Process:**
4. How does a ram become a wether?
5. Why is it important to make a ram a wether when it is young?
6. When does a ewe lamb become a ewe?

**Generalize:**
7. Why is it important to know the difference between a ram and a wether? Ewe lamb and ewe? or ewe lamb or wether?
8. What is the main use of wethers?
9. What is the main use of ewes?

**Apply:**
10. Why is the sex of the lamb important when choosing your project animal?

**GOING FURTHER:**
- Visit a local sheep flock to see the differences between ewe lambs and ewes.
- Study the reproductive organs of both sexes.
- Observe ram lambs being castrated.
REFERENCES:

Author:
This lesson was modified from beef material authored by Brian A. Swisher, County Extension Agent, 4-H, Kansas, and Deborah K. Lyons-Blythe, former County Extension Agent, Agriculture, Kansas, with adaptation by:
James P. Adams, Extension Specialist, 4-H and Youth Programs, Kansas State University

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Sheep Design Team
RECOGNIZING SEX DIFFERENCES IN SHEEP
SHEEP, LEVEL I
Member Handout 2, Ram

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RECOGNIZING SEX DIFFERENCES IN SHEEP
SHEEP, LEVEL I
Member Handout 3, Wether
RECOGNIZING SEX DIFFERENCES IN SHEEP
SHEEP, LEVEL I
Member Handout 4, Ewe
Is Your Lamb Sick or Well?

*Sheep, Level I*

What Members Will Learn . . .

ABOUT THE PROJECT:
- Recognize early signs of a sick lamb
- Develop good diagnostic skills
- Recognize a normal animal
- Observe closely and make comparisons

ABOUT THEMSELVES:
- Improve observation skills

Materials Needed:
- Activity Sheet 4, Sick Signs Puzzle
- Leader’s Key, Activity Sheet 4, Sick Signs Puzzle
- Slips of paper with characteristics of sick animals
- Flip chart and markers

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY

Today we are going to talk about how to recognize a sick lamb, and how to tell if a lamb looks healthy. To be able to care for your lamb, or any other animal, you must know its behavior so well that you can tell if the lamb is not acting normally. You should become very good at watching your lamb, and understanding what you see. It’s a good idea to spend a little time each day observing your lamb. A good time to do this is after the lambs have been fed; because you are already out doing chores anyway.

Healthy animals act differently from sick animals. Have you ever seen a sick animal? How does a sick animal look?

Let’s compare some possible characteristics of a sick sheep to those of a healthy one. Remember, a sheep does not have to have all the symptoms to be sick. What are some symptoms of a sick lamb?

Leader Notes

Begin lesson by role playing a person that “feels sick” and a healthy energetic person.

List symptoms of sick and healthy sheep on a flip chart. Contrast any signs the members think of with the behavior of a healthy lamb. Go through the list provided for any signs that the members missed and relate those to the healthy lamb. If pictures or illustrations of the sick vs. normal sheep are available, they should be used so members can get a visual idea of the signs.
Leader Notes

ACTIVITY

Sick lamb
1. droopy ears
2. down headed
3. dull, watery eyes
4. coughing
5. loss of appetite, not eating
6. slow moving, listless
7. labored breathing
8. gaunt (off feed and water)
9. diarrhea
10. foaming at the mouth
11. falls or stumbles frequently
12. kicks at stomach, strains
13. snotty nose

Healthy
1. erect, alert ears
2. head up, observant
3. clear, attentive eyes
4. not coughing
5. eats with other sheep
6. active
7. easy, quiet breathing
8. full stomach
9. solid feces
10. not foaming
11. coordinated
12. acts comfortable
13. dry nose

Play charades! On slips of paper that you have already prepared, write normal or abnormal behaviors on each piece of paper. (omit diarrhea) Have each member draw a behavior to act out. The rest of the group attempts to identify the behavior, if it is normal or abnormal, and what it might mean about the lamb. Give each member Activity Sheet 4, Sick Signs Puzzle, as a review and a record for their record books.

IS YOUR LAMB SICK OR WELL?

Sick lamb
1. droopy ears
2. down headed
3. dull, watery eyes
4. coughing
5. loss of appetite, not eating
6. slow moving, listless
7. labored breathing
8. gaunt (off feed and water)
9. diarrhea
10. foaming at the mouth
11. falls or stumbles frequently
12. kicks at stomach, strains
13. snotty nose

Healthy
1. erect, alert ears
2. head up, observant
3. clear, attentive eyes
4. not coughing
5. eats with other sheep
6. active
7. easy, quiet breathing
8. full stomach
9. solid feces
10. not foaming
11. coordinated
12. acts comfortable
13. dry nose

DIALOGUE FOR CRITICAL THINKING:
Share:
1. What are some of the signs of a sick lamb?
2. What are some of the signs of a healthy lamb?

Process:
3. When is a good time to watch your lamb to see if it is sick?
4. Why is it so important to observe your lamb even when it is healthy?

Generalize:
5. What other things do you do that require good watching skills?

Apply:
6. How and when will your watching skills help you in the future?

GOING FURTHER:
- Ask each member to make a sick/healthy symptoms chart for a pet or a farm animal.
- Visit a farm or zoo.
- Visit a veterinarian.
KANSAS 4-H and Youth Programs

ACTIVITY

REFERENCES:
Kansas 4-H Beef Leader Notebook (LN-1), 2nd ed.

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Sheep Design Team
IS YOUR LAMB SICK OR WELL?
SHEEP, LEVEL I
Activity Sheet 4, Sick Signs Puzzle

Fill in the blanks to form the signs of a sick sheep. Some of the letters have been provided.

D U L L  W _ _ _ E _ S
LABORED  B _ _ _ I _
             C _ _ G _ _ G
               K I C K S  S _ _ _ _
                   S L O W  M _ V _ _
          DOWNH _ _ D _
D _ _ R _ _ E _
NOT  E _ T _ _
_ _ _ P E A R S
IS YOUR LAMB SICK OR WELL?
SHEEP, LEVEL I
Leader’s Key, Activity Sheet 4, Sick Signs Puzzle

Fill in the blanks to form the signs of a sick sheep. Some of the letters have been provided.

DULL WATERY EYES
LABORED BREATHING
COUGHING
KICKS STOMACH
SLOW MOVING
DOWNHEADED
DIARRHEA
NOT EATING
DROOP Y EARS
IS YOUR LAMB SICK OR WELL?
ABOUT THE PROJECT:
• Identify the five major types of feed nutrients
• Categorize feeds into roughages or concentrates
• Identify feed nutrient sources

ABOUT THEMSELVES:
• Identify five to eight human foods and whether they are a primary source for protein, energy, mineral, vitamin or water
• The importance of a balanced diet

Materials Needed:
• Five paper plates
• Various index cards with feed ingredients written on them
• Samples of feed ingredients in small jars or plastic bags
• Chalkboard, flip chart or overhead projector
• Activity Sheet 5, Sheep Feed Match
• Leader’s Key, Activity Sheet 5, Sheep Feed Match
• Pencils and paper

ACTIVITY TIME REQUIRED: 60 MINUTES

ACTIVITY
Proper animal nutrition is the key to a successful livestock business and a livestock project. Animals also require proper nutrition for growth and development. In the same way, if we don’t get the proper nutrition by eating right, we can have health problems and our growth and development may be affected in a negative way.

Members in the sheep project should know the types of feed ingredients and how to identify various samples. Learning about the basic feed nutrients is an excellent way to prepare members to learn more about animal feed requirements.

Generally, feeds are classified into two broad categories: roughages and concentrates. Roughages are typically the leafy green plants such as alfalfa and grasses, crop residues like straw from the production of grains, and silages which are green leafy plant materials that have been chopped and stored wet. Roughages are higher in fiber and less digestible than concen-
THE FIVE FOOD GROUPS

Leader Notes

ACTIVITY

trates—meaning it takes longer for the material to pass through the animal’s stomach. But young and rapidly growing animals do not have the capacity to consume enough low-quality roughage to achieve normal growth and, thus, need other nutrient sources.

Concentrates include grains (corn, wheat, barley, oats and milo), oilseed meals, (like soybean meal, linseed meal, and cottonseed meal), fish meal, molasses, and dried milk products. Concentrates are high in energy, low in fiber, and highly digestible—easily used by the lamb.

Regardless of feed type, all feeds are sources for some of the six basic types of nutrients: protein, energy sources (carbohydrates and fats), minerals, vitamins, and water. Knowing what combination of these nutrients your feed supplies is critical to a good feeding program.

Show an example of a protein source. **Proteins** supply the materials necessary to make body tissues. They are the building blocks of which lamb bodies are made. Proteins make up muscle, internal organs, bones and the blood. They also make up the skin, wool, hooves, and horns of a lamb’s body. If you feed more protein to your lamb than it needs, the extra protein is used as energy—for body heat, cooling, movement, producing milk in females or for other functions. Grains such as corn, oats, and milo supply part of the protein your lamb needs to grow. **Protein supplements** such as soybean, cottonseed, or linseed meal are used to balance your lamb’s ration. (what they eat each day).

Show an example of an energy source. **Energy** is supplied to your lamb from two types of feed nutrients—carbohydrates and fats. These nutrients are to a lamb what gasoline is to a car. They provide energy for growth and maintenance. These nutrients also help the animal produce heat to keep the body warm. Energy fed in excess of what the animal needs for maintenance is stored as fat until the body needs it.

Show an example of a mineral source. **Minerals** build bones and teeth and support other life functions in the lamb. Livestock need a total of 16 different minerals in their diet. Calcium, phosphorus and salt make up the largest percentage of the minerals needed by the lamb. Calcium and phosphorus are usually added to the lamb ration for growth of bones and teeth. Many producers use ground limestone, bone meal or dicalcium phosphate as feed ingredients to supply these necessary minerals. Sodium, chlorine, and iodine are also critical minerals for your lamb and are usually added in the form of iodized salt. Minerals that are needed only in very small amounts are called **trace minerals** and are often added to salt.

Show a good vitamin source. **Vitamins** are just as important as other feed nutrients, but they are needed in smaller amounts. Vitamin A is required for the health of skin, eyes, nose, and lungs. For strong bones and healthy blood, vitamin D is needed. Other vitamins are required for numerous body functions. The lamb’s body produces some vitamins while others must be added to the ration.
**ACTIVITY**

**Water** is not always considered to be a nutrient, but without it, life would not be possible. Many people consider water to be the most important part of the lamb’s diet. Moreover, it is the cheapest part of an animal’s diet, but it is often the most neglected part, too. Water is also necessary in digestion and for carrying food nutrients to the rest of the body. Water carries away waste products through the urine, functions as the body’s built-in cooling system, and helps joints move. Your lamb can live longer without feed than without water.

Now that we have learned something about the two feed categories (concentrates and roughages) and nutrients, let’s see how well you can classify some of the major feed ingredients according to their type.

On this table are five paper plates, each one labeled as either PROTEIN, ENERGY, MINERALS, VITAMINS, or WATER.

Alongside these paper plates are index cards with the names of various feed ingredients written on them. As a group, I would like you to work together to sort through these various feed ingredient cards and decide which plate they should be placed on. When you have finished, let me know and we will discuss your classification.

**Primary Protein Sources**: Cottonseed meal, soybean meal, linseed meal, corn gluten meal.

**Primary Energy Sources**: corn, milo, wheat, oats, barley.

**Primary Mineral Sources**: bone meal, dicalcium phosphate, salt, trace mineralized salt, ground limestone.

**Primary Vitamin Sources**: vitamin supplements, green pasture, alfalfa hay.

**Primary Water Sources**: cool, clean water. (Snow does not provide enough water to meet an animal’s daily needs for water.)

Energy and protein are required in large amounts and are found in varying degrees in all feedstuffs. Vitamins and minerals are also found in most feedstuffs and are required in low amounts. A mixture of grain and roughage that contains energy, protein, vitamins and minerals is called feed. If a feed contains all the nutrients that a lamb needs, then it is considered a balanced ration. The amount of feed a lamb needs depends on the concentration of nutrients in that feed. As a general rule of thumb, a 100 pound lamb will eat approximately 2 to 4 pounds of feed per day.

Water consumption is usually 2 to 3 times as much as feed consumption. Good drinking water is important to maintain healthy, productive sheep. Lambs do their best when clean, fresh drinking water is available at all times.

**Leader Notes**

Ask members what makes “good” water? Emphasize the importance of clean, cool and fresh water by having one glass of good water, one glass of dirty water and one glass of warm water. Which one would they want to drink? Why?

Optional: You may want to get some actual feed samples from either your own supply or ask your feed dealer for some samples and have the members classify these rather than the index cards.

Following their efforts, review their classifications with them. Remember to ask questions about the reasons for their choices rather than being critical of their decisions. Try to discover why they placed the feed ingredients the way they did. At the same time, you can also ask them which are concentrates and which are roughages.

Pass out Activity Sheet 5, Sheep Feed Match, for review.
Leader Notes

ACTIVITY

DIALOGUE FOR CRITICAL THINKING:

Share:
1. What does your lamb eat each day?
2. How much water does your lamb drink each day?

Process:
3. What are two feed types?
4. What are the five food groups?
5. What is the purpose of each food group?

Generalize:
6. Which food groups do you need for your diet?

Apply:
7. How can you make sure you eat a balanced diet everyday?

REFERENCES:

Author:
This lesson was modified from original material adapted from Identifying and Classifying Feed Ingredients, Thomas D. Zurcher, University of Minnesota, by Kirk A. Astroth, Extension Specialist, 4-H Youth Programs, Montana State University, with further adaptation by:
Gerry L. Kuhl, Extension Beef Nutrition Specialist, Kansas State University
James P. Adams, Extension Specialist, 4-H and Youth Programs, Kansas State University

Reviewed by:
Dr. Clifford Spaeth, Extension Specialist, Animal Sciences and Industry, Kansas State University
Sheep Design Team
THE FIVE FOOD GROUPS  
SHEEP, LEVEL I  
Activity Sheet 5, Sheep Feed Match

Match the term with the correct statement.

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roughage</td>
<td>Carbohydrates and fats that provide for body growth and maintenance.</td>
</tr>
<tr>
<td>Proteins</td>
<td>Grains that are high in energy, low in fiber and easily used by the lamb.</td>
</tr>
<tr>
<td>Concentrates</td>
<td>Leafy green plants such as alfalfa and grasses.</td>
</tr>
<tr>
<td>Energy</td>
<td>The building blocks of which most lamb body tissues are made.</td>
</tr>
<tr>
<td>Minerals</td>
<td>Just as important as other feed nutrients, but are needed in smaller amounts.</td>
</tr>
<tr>
<td>Vitamins</td>
<td>The most important part of a lamb's diet.</td>
</tr>
<tr>
<td>Water</td>
<td>Nutrients that build bones and teeth and support other life functions.</td>
</tr>
</tbody>
</table>
THE FIVE FOOD GROUPS
SHEEP, LEVEL I
Leader’s Key, Activity Sheet 5, Sheep Feed Match

Match the term with the correct statement.

- Roughage: Carbohydrates and fats that provide for body growth and maintenance.

- Proteins: Grains that are high in energy, low in fiber and easily used by the lamb.

- Concentrates: Leafy green plants such as alfalfa and grasses.

- Energy: The building blocks of which most lamb body tissues are made.

- Minerals: Just as important as other feed nutrients, but are needed in smaller amounts.

- Vitamins: The most important part of a lamb’s diet.

- Water: Nutrients that build bones and teeth and support other life functions.
Training Your Lamb for Show
Sheep, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:
• Methods to use in halter breaking a lamb
• How to teach a lamb to lead
• How to set up a lamb for show

ABOUT THEMSELVES:
• Patience is needed when working with animals
• Differences between positive and negative re-enforcement

Materials Needed:
• Member Handout 5, Setting up a Lamb
• Halters
• Gentle, well trained lamb

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

The idea behind showing a lamb is to make the lamb look it’s best at all times. To accomplish this takes hard work in three areas. The first step is training the lamb to act properly when shown. The second step is the proper fitting of the lamb, which will be discussed in another lesson. And third is for you, the member, to know the proper technique for showing a lamb.

The purpose of training a lamb is to be able to show the lamb to it’s best advantage. The lamb must be willing to let the judge handle it. The judge will not favor a lamb that doesn’t stand still. It takes a lot of patience to train a lamb properly.

Training the lamb should begin shortly after the lamb is weaned. The lamb will need time to get used to you. If the lamb is in a small pen, stand quietly in the corner. If you don’t scare the lamb, it will become curious and come up and sniff you. After a few days of spending time with the lamb, it will get used to you and not be nervous when you are around.

Next, halter break the lamb and teach it to lead. A common method of halter breaking is to tie the lamb to a post in the fence line. Height of the tie should be lamb eye level. As the lamb pulls back, the halter tightens, and as the lamb moves forward, the halter releases pressure. The lamb

Leader Notes
The leader or a parent should demonstrate the proper methods of haltering, leading and showing a lamb. Then have the members participate in a simulated show with the leader playing the role of the judge. The leader can coach the members on how to respond to a judge’s requests and questions.
learns that in order to stop the pressure on the back of it’s head, it must move forward. Once the lamb accepts this, you will be able to lead it around the ring by simply placing a hand on the back of it’s head.

For several days, the lamb should be tied between feeding and exercise periods. If the lamb has to be left unattended for short periods of time, the rope should be long enough for the lamb to eat and lie down, but not long enough for it to get tangled up. It doesn’t hurt to spend a little time with the lamb when it is tied up. The more time you spend, the more comfortable your lamb will become and the easier it will be to train.

When you teach a lamb to walk, you are teaching it to lead. After the lamb is halter broke, begin training it to lead. Pull the lead rope, then give it some slack so the lamb comes forward. Do not apply constant pressure. Always pull then release pressure as the lamb responds. The lamb will learn that the rope loosens when he walks forward. Often, it is a good idea to have someone else walk behind the lamb to keep it moving instead of always having to pull on it’s head. This will help the lamb learn more quickly. Reward the lamb by petting it when it does what you want. Some lambs are very stubborn, and it will be difficult to train them. Just be patient. If you get discouraged and beat the lamb, it will only make things worse. A lamb that is constantly struggling with it’s handler will not impress the judge.

As soon as the lamb begins to lead, start a daily exercise routine and practice proper show ring technique. Daily exercise is not only good for you and the lamb, but it is also important in teaching the lamb to respond to your movements.

Start teaching the lamb to stand correctly. All four feet should be set squarely, one under each corner of the lamb. If the back legs are set too far back, too far under the body, too close together or too far apart, the lamb will look unnatural and incorrect. The most important step in showing a lamb is to always have the feet set properly. The lamb may move around from time to time, but patiently and gently put its feet back in the right spot. Eventually, the lamb will get used to it and practically set it’s own feet without your help. When the lamb’s feet are set properly, gently rub its belly with your fingers. This will have a calming effect on the lamb and also help keep its back straight.

Now that the lamb knows what to do, the showman has to learn the proper way to handle the lamb. Always hold the lamb with your left hand under its chin. Don’t hold the lamb by its neck, because it could choke. The lamb will be under control as long as you have a firm grip on it’s chin. Use your right hand to set the legs. Usually the showman should stand or crouch on the left side of the lamb. When the judge comes up to handle your lamb, stand up and move to the front of your lamb. By doing this, it will be easier to keep the lamb under control.
As the showman, your first concern is that the lamb be set properly, to look its best. But at the same time, you must also pay attention to the judge.

Remember, you may not always have the best lamb at every show, but you can always have a well-trained, well-shown lamb. A well-trained, well-shown lamb always impresses the judge.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**
1. How did you get your lamb used to a halter?
2. Was it easy or hard for your lamb to lead? What happened?
3. What happened when you tried to teach your lamb to stand correctly?

**Process:**
4. Why should you train your lamb by being kind?
5. Did positive or negative methods work best for you? Why?

**Generalize:**
6. What did you learn about yourself while training your lamb?
7. How do you like to learn new things?

**Apply:**
8. What will you do differently next time you train a lamb?
9. What did you learn while training your lamb that can be used in your other projects?
10. If you could enter a contest where other animals are being judged, or a fitting and showing class where what you do is judged, which would you choose and why?

**GOING FURTHER:**
1. Attend a sheep show and watch how well trained the lambs are.
2. Bring in an untrained sheep to demonstrate just how unruly sheep can be.
REFERENCES:
Author:
Jeremy Geske, former Extension Assistant, Kansas State University
James P. Adams, Extension Specialist, 4-H and Youth Programs, Kansas State University

Reviewed by:
Dr. Clifford Spaeth, Extension Specialist, Animal Sciences and Industry, Kansas State University
Sheep Design Team
TRAINING YOUR LAMB FOR SHOW
SHEEP, LEVEL I
Member Handout 5, Setting up a Lamb
Washing Your Lamb

Sheep, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:
• How to wash a lamb
• The equipment needed to wash a lamb

ABOUT THEMSELVES:
• Importance of following directions and sequence

Materials Needed:
• Activity Sheet 6, Washing Procedure
• Leader’s Key, Activity Sheet 6, Washing Procedure
• Lamb
• Livestock soap
• Rag
• Wash Bucket
• Spray nozzle
• Water hose
• Wash rack (or suitable place to wash lamb)
• Fly repellant
• Sheep blanket
• Curry comb

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

Washing your lamb before shearing or fitting removes the dirt and grease (lanolin) from the wool, making it easier to clip. Washing also improves the appearance of the lamb for the show. If you have a breed where wool is a major criteria for the judge (Rambouillet, Columbia etc.) do not wash your lamb. The natural fleece with grease is necessary for the judge to determine the quality of the fleece. However, market lambs and meat breeds should be washed before the show.

Step 1. Washing your lamb can be fun, but safety is important, especially if the lamb is bigger than you. Halter the lamb tightly to the wash rack, leaving only a few inches of rope so you can wash the lamb’s neck and chest. This will help keep the lamb from moving around.

Step 2. With the hose or wash bucket, wet down the lamb’s wool. Never point the hose directly at the lamb because it forces the dirt closer to the

Leader Notes

Display equipment on a table and ask members to give you three reasons to wash a lamb.

Talk about each piece of equipment and how it will be used.

If possible, go through a demonstration of the following steps of washing a lamb where the members can participate.
Leader Notes

skin and makes the lamb harder to clean. Always point the hose at an angle, as this forces the dirt out of the wool.

**Step 3.** A curry comb may be used to remove the larger chunks of dirt, straw and manure from the fleece. Lather the lamb’s fleece with livestock soap. Some dish soaps may be used, but they generally don’t work as well. They may irritate the skin or remove too much grease causing the wool to lose its texture.

**Step 4.** Rinse the lamb, preferably with warm water if it’s available. It is important to get all the soap out so it doesn’t irritate the skin. The washing should occur in a front to rear and top to bottom direction. Start at the lamb’s head and wash towards the dock. Next, wash the lamb’s chest, and then the sides. You’ll be able to see a definite line of dirt separating the clean top from the unwashed sides. Start at the top of the shoulder and wash at a back and down angle toward the rear leg. Repeat until the whole side, from the top of the shoulder to the bottom of the rear leg, is clean. Then do the same to the other side. Finally, rinse off the belly. Remember, don’t spray directly at the lamb.

**Step 5.** Using a rag and bucket of clean, non-soapy water, wash the lamb’s face, nose, ears and legs. Spraying the lamb lightly with fly repellant now will reduce the number of fly attacks on your lamb, and make it easier to handle.

**Step 6.** If available, blanket the lamb to keep it clean and allow it time to dry. If the lamb must be dried immediately for fitting, a calf blower works well. Run the blower over the lamb in the same direction as washing. Again, do not point the blower directly at the lamb because that will not clean out any dirt, and it will make the lamb more difficult to fit. If available, and used properly, the blower will make your lamb look cleaner and whiter, but it is not a necessity.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**
1. What happened when you or your group began getting the lamb wet?
2. What were the easiest/hardest parts of the lamb to wash?

**Process:**
3. Why do you need to use a washrack when washing your lamb?
4. Why is it important to use the correct type of soap?
5. Why do you think you were told to wash the lamb by doing things in a special way or order?

**Generalize:**
6. Why is it important to follow directions closely when doing something important?

Give each member Activity Sheet 6, Washing Procedure. Let members work in pairs to complete the activity sheet as a review.
ACTIVITY

Apply:
7. What other times is it important to do things in a specific order? Why?

GOING FURTHER:
• Attend a sheep show and observe sheep being washed, sheared or clipped.

REFERENCES:
Kansas Beef Leader Notebook (LN-1), 2nd ed.

Author:
Jeremy Geske, former Extension Assistant, Kansas State University
James P. Adams, Extension Specialist, 4-H and Youth Programs, Kansas State University

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Sheep Design Team
Number the washing steps in the correct order.

_____ Wash the lamb from front to rear and top to bottom direction.

_____ Use curry comb to remove large chunks of dirt or straw.

_____ Wash lamb’s face, nose, ears and legs with a rag and clean water.

_____ Blanket lamb to keep it clean and allow to dry.

_____ Lather the lamb’s fleece with livestock soap.

_____ Halter the lamb tightly to the wash rack.

_____ Rinse all soap from wool with warm water, if possible.

_____ Spray lamb lightly with fly repellant.

_____ Wet down the lamb’s wool with hose or bucket of water.
WASHING YOUR LAMB
SHEEP, LEVEL I
Leader’s Key, Activity Sheet 6, Washing Procedure

Number the washing steps in the correct order.

5. Wash the lamb from front to rear and top to bottom direction.

3. Use curry comb to remove large chunks of dirt or straw.

7. Wash lamb’s face, nose, ears and legs with a rag and clean water.

9. Blanket lamb to keep it clean and allow to dry.

4. Lather the lamb’s fleece with livestock soap.

1. Halter the lamb tightly to the wash rack.

6. Rinse all soap from wool with warm water, if possible.

8. Spray lamb lightly with fly repellant.

2. Wet down the lamb’s wool with hose or bucket of water.
Lamb Taste Test
*Sheep, Level I*

What Members Will Learn . . .

**ABOUT THE PROJECT:**
- To taste the difference between lamb, beef, and pork
- Appearance compared to beef and pork
- How to cook lamb

**ABOUT THEMSELVES:**
- The importance of meat in their diets
- The importance of making decisions

**Materials Needed:**
- Pictures of the different cuts of lamb, pork, and beef
- Different cuts of lamb, pork, and beef to show members
- Ground lamb, pork, and beef to make burgers
- Three skillets (or grill), spatula, hot pads
- Hamburger bun and “fixings”
- Leader or parent who has cooked lamb before
- Activity Sheet 7, Burger Data Sheet

**ACTIVITY TIME NEEDED:** 45 MINUTES

**ACTIVITY**

Let everyone look at the posters revealing the different cuts of meat. Which cuts are unique to one species? Which ones are common to all three? Many cuts are the same since they come from the same areas of the animal. However, for today’s demonstration we will be using ground meat, since everyone loves a burger!

Look at these three ground meats. What are the differences? Similarities? The color may be different because of different fat contents in the meat. For instance when hamburger is fat it appears lighter because fat is white in color and meat is red. However, pork and lamb meat are typically lighter red than the beef, so just because it is slightly lighter doesn’t mean it is higher in fat content.

**Leader Notes**

The leader should poll the entire club (including parents) and record how many people like and dislike lamb. Record those figures then ask how many have tried lamb and record that. Don’t be surprised if some people claiming to not like lamb have never tried it.

Pass around the ground meat of the three species. Ask if they can tell which is which without telling them. How can you tell a difference?
Leader Notes

Have the members wash their hands and form the meat into patties, 1/3 of the members form a patty from lamb, 1/3 form a patty from pork, and 1/3 form a patty from beef. Place all the lamb in one skillet or grill section, pork in another, and beef in a third. Wash hands, dishes and utensils after forming patties and placing in a skillet.

Give each person a copy of Activity Sheet 7, Burger Data Sheet, to record their opinions.

ACTIVITY

When the burgers are done (try to cook each the same), place each on a bun and cut into thirds. Have each member take 1/3 of a burger from each meat and sample it.

The “chef” should keep the identities of each burger a secret while administering a taste test. Have all members and parents sample each burger and record whether they liked or disliked each one and to rank the three in order of preference. Also, have the members try to guess which is the lamb burger, pork burger, and beef burger and record their answers.

After the test, collect the results of the participants and determine how many ranked the lamb burger as their favorite or least favorite. Have the “chef” reveal the identities of each roast. Go back to the results of the pre-test poll. Did any opinions change? How many of the members guessed the lamb burger correctly?

Members who eat and enjoy lamb should be encouraged to make copies of their favorite lamb recipe(s) to bring to the next meeting for other families who would like to try them.

DIAGLOGUE FOR CRITICAL THINKING:
Share:
1. Which meat did you like the best? Least?

2. Could you tell which meat was the lamb? How?

Process:
3. Which burger left the most grease in the skillet or flamed the most on the grill? Why?

4. How could cooking methods affect the taste of any burger?

Generalize:
5. Why do we want leaner meat to eat?

6. How do you know if you are buying leaner meat?

7. What helps you make decisions when buying other items? (Select a specific item)

Apply:
8. What will you do to help purchase food items the next time you go to the food store?

9. What can you do to help your family choose a healthy diet?
GOING FURTHER:

• Have members bring their favorite lamb recipes to share at the next meeting.
• Visit a grocery store to see what lamb products are available.
• Compare prices of lamb chops, pork chops and beef rib steaks (price per pound).

REFERENCES:

Author:
Jeremy Geske, former Extension Assistant, Kansas State University
James P. Adams, Extension Specialist, 4-H and Youth Programs, Kansas State University

Reviewed by:
Dr. Clifford Spaeth, Extension Specialist, Animal Sciences and Industry, Kansas State University
Sheep Design Team
### LAMB TASTE TEST
**SHEEP LEVEL I**
Activity Sheet 7, Burger Data Sheet

<table>
<thead>
<tr>
<th>Sequence or Color Code</th>
<th>Burger # 1 (Red)</th>
<th>Burger # 2 (Yellow)</th>
<th>Burger # 3 (Green)</th>
</tr>
</thead>
<tbody>
<tr>
<td>How did it taste?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How juicy was it?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rate Overall Taste (1-5)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1—Very Good</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5—Terrible</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What kind of burger is it? (beef, lamb or pork)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What kind of burger was it? (from leader)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

54–Sheep, Level I