4-H SKILLS FOR LIFE ANIMAL SERIES

National 4-H Curriculum
BU-06368

Shear Delight

Sheep 2

Sheep Project Activity Guide

Name _____

County _____

REVIEWED & RECOMMENDED
National 4-H Curriculum

Note to the Project Helper

If you were a project helper for one or more youth involved in completing Sheep 1 you know what a great experience this important role is. As a helper you are in a perfect position to help youth grow and develop in positive ways as they learn about sheep and about themselves. You can nurture and cultivate their interest in this project by guiding their planning, helping them carry out their projects and recognizing them for a job well done.

Your Role

- Become familiar with the material in this activity guide and the *Helper's Guide*.
- Support youth in their efforts to set goals and complete each achievement program.
- Date and initial the activities on the Sheep Achievement Program as they are completed and the two of you discuss them.
- Help youth to get to know themselves, including their strengths and weaknesses.
- Encourage the use of the experiential learning cycle described on this page.

The Sheep "Skills for Life" Series

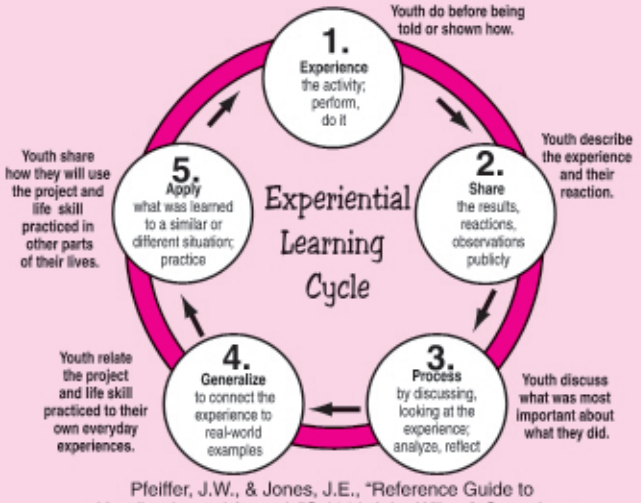
This guide, *Shear Delight* is the second in the series of three for youth, which also includes Sheep 1 *Rams, Lambs and You*, Sheep 3 *Leading the Flock* and the *Sheep Helper's Guide*. The three youth guides have been designed to be developmentally appropriate for grades 3–4, 5–7 and 6–9 respectively, but may be used by youth in any grade based on their project skills and expertise.

All activities in the guides have several parts: A description of the skills to be practiced; discussion questions, suggestions for additional activities and additional helpful information. The "Show of Success" listed for each activity is an excellent way to evaluate the youth's success. Each of the guides also includes an achievement program to encourage youth to learn more about sheep while developing important life skills. In the *Helper's Guide* you will find another evaluation piece titled "Evaluating the Impact." Complete this before the youth begins each level and after completing each level.

Each activity is designed so the young person has an opportunity to learn by doing before being told or shown how. Your challenge is to "sit on your hands" while the youth explores the activity and learns from the experience, even when it doesn't work the way it's expected to. You can most effectively help with the learning by listening as the young person considers the questions and draws conclusions. At times the activity may call for you to be a resource person for content or ideas.

The fourth publication in this series, *Sheep Helper's Guide*, provides additional learn-by-doing activities that can be adapted to the family, the classroom, after school child care, 4-H project groups, clubs or other groups. You'll also find helpful hints about characteristics of youth, life skill development, teaching experientially, meeting ideas as well answers to many of the activities in the youth guides.

Experiential Learning Model



Pfeiffer, J.W., & Jones, J.E., "Reference Guide to Handbooks and Annuals"© 1983 John Wiley & Sons, Inc. Reprinted with permission of John Wiley & Sons, Inc.

This five-step model is included in each activity in this series. As you can see, the youth first attempt the activity on their own. After the youth do as much as they can and answer the questions, you then meet together and discuss: What they did? What was important about what they did? How does what they did relate to their lives? And finally, how might they use the life and project skills practiced in the future? Sample questions are included following each experience. Your ability to ask additional thought-provoking questions and to clarify and expand the youth's ideas will add to the educational experience.

Good luck in your role as Project Helper!

Acknowledgements

Revision Team: This revision of the four sheep activity guides was accomplished by the Sheep Design Team comprised of Joe D. Camarillo, California, Chair; Marvin Dehle, Washington; C. J. McCabe, Wyoming; Marc Horney, California; Jim Mueller, Nebraska; Rosie Nold, Nebraska; Lisa Rothenburger, New Jersey; M. J. Wylie, Wisconsin; and Tom Zurcher, Director and Editor.

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Rams, Lambs and You

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Use this pattern to make a realistic model kid or lamb.

Having Fun With the Sheep Project

Let's get started! This guide is an important part of the sheep project. Sheep 2 offers you new challenges and opportunities to explore a wide range of activities related to sheep. You'll also have fun meeting new people, becoming better acquainted with your community and expanding your interests and goals. Like Sheep 1, an achievement program is included to guide your efforts and provide you with an opportunity to be recognized for meeting your goals. Here are some of the many activities you can choose to do:

- Place a class of lambs and present reasons
- Identify parts of ruminant digestive tracts
- Name a prevention and cure for sheep health problems
- Identify different feeds and the nutrients they provide
- Demonstrate how to deliver lambs in abnormal positions
- Demonstrate how to save a weak, newborn lamb
- Do six sheep management practices
- Identify parasites that attack sheep
- Locate sheep information on the World Wide Web
- Outline a budget for a market lamb
- Discuss ethical and non-ethical behaviors in the sheep project
- Determine the yield grade of several carcasses
- Identify the important management practices during eight production periods
- Cook lamb meat

You'll be surprised at the many fun and interesting things you'll learn. Don't be afraid to jump right in, and don't give up if the activity doesn't work out the first time. You're still learning, right? The most important thing is to try. Once you try, then think or talk about what happened or didn't happen and why.

Sheep 2 Project Guidelines

- Do a minimum of seven activities in Level 2 of the Sheep Achievement Program each year and complete Level 2 within three years
- Practice and develop the life skills of making decisions, leading self and others, relating to change and planning and organizing
- Participate in a minimum of five of the learning experiences listed on the Planning Guide each year
- Keep the Planning Guide current by setting project goals and recording project highlights you experience
- Increase your sheep knowledge and skills

Sheep Achievement Program

The activities will challenge you to explore areas of the project you perhaps haven't experienced before. Do your best to complete each activity and answer the questions. Work with your helper to complete each experience. You may need additional resources to complete some of the activities. Sheep magazines, internet sites, books, tapes, commodity groups, feed and equipment manufacturers, and marketing groups are good resources. The library will also have several references to help you.

Remember this is your own personal project activity guide. As you complete the activities, answer the questions and record your project highlights you'll realize how much you have accomplished in this project. Have fun!

Your Project Helper

The choice is yours! The person you choose to be your project helper needs to be willing to support your efforts to complete Level 2 of the Sheep Achievement Program. Your helper will meet with you to set goals, plan activities, suggest resources to use, discuss each activity with you and date and initial your achievement program each time you have successfully completed an activity. Write the name, phone number and e-mail address of your project helper here:

My Project Helper _____

Phone # _____

E-mail address _____

Good Luck with Sheep 2

Sheep 2 Planning Guide

My Sheep Project Goals

Name _____

My Sheep's Name _____ Breed _____

What I want to do and learn in Sheep 2:

1. _____
2. _____
3. _____
4. _____

Sheep Project Highlights

Date and list the exciting things you do and learn.

Learning Experiences

Complete at least five of these activities each year.

Year	Year	Year	Activity
			Give a demonstration or speech
			Attend three sheep project meetings
			Help organize a sheep show
			Recruit a sheep project member
			Exhibit at a fair
			Participate in a judging contest
			Help conduct a sheep skillathon
			Participate on a sheep quiz bowl team
			Help organize a sheep showmanship contest
			Help a younger project member
			Your own activity

A picture of my project animal and me.

Shear Delight
Completion Certificate

I certify that

_____

has completed all requirements of the *Shear Delight* Achievement Program in the National 4-H Curriculum Sheep "Skills for Life" Series.

Signature_____

Date_____

Shear Delight Achievement Program

Achievement Program Guidelines

1. To pass the Sheep 2 Achievement Program complete at least 21 of the regular and More Challenges activities in this activity guide in three years. At least 11 of the 21 activities must be selected from those listed below.
2. Complete at least seven activities of either type each year.
3. Have your project helper date and initial the activities you complete and discuss.

Shear Delight Activities

	Date Completed	Helper's Initials
Chapter 1 Selection and Nutrition		
Talking Sheep		
Meating the Grade		
Rumen Along		
Feed Tag Fun		
Chapter 2 Sheep Management		
Planning Ahead		
Buy Low, Sell High		
Chapter 3 Sheep Health		
Heads or Tails?		
Save That Lamb		
From Deworming to Docking		
Call the Vet		
Sheep Freeloaders		
Assuring Quality		
Chapter 4 Lamb and Ethics		
Serving Luscious Lamb		
Practicing Ethical Decision Making		

More Challenges

Select and do any of the More Challenges activities in *Shear Delight* or make up your own. Record the page and number of each one you complete and discuss with your helper.

Page	#	Date Completed	Helper's Initials

Write your own activity here.

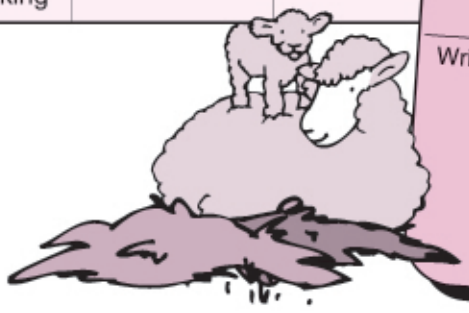
Date_____ Helper's Initials_____

Write your own activity here.

Date_____ Helper's Initials_____

Write your own activity here.

Date_____ Helper's Initials_____



Chapter 1 Selection and Nutrition

Talking Sheep

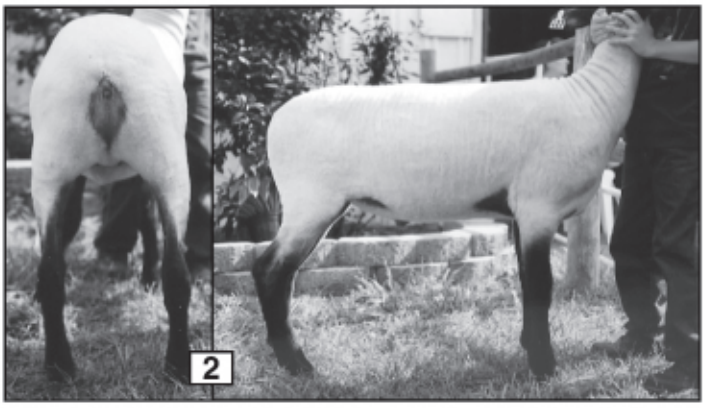
Sheep Project Skill:	Judging and presenting reasons
Life Skill:	Communicating with others
Show of Success:	Judges a class of market lambs and presents reasons for your ranking.

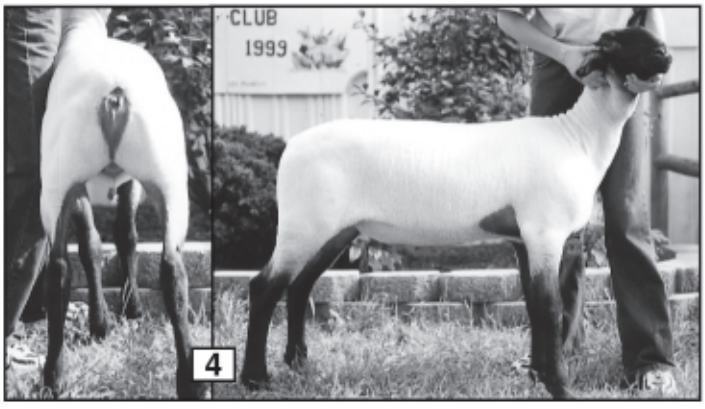
In the first level of the sheep project you learned about sheep body parts and what they should look like. No sheep is perfect, with all of the parts exactly as you would like them. That means you need to know how to choose between animals that aren't perfect. This is known as "judging."

This activity will give you an opportunity to practice judging sheep and then presenting reasons for your decisions.

Your Challenge

Look at the class of market lambs and place each animal. Take notes on your placing and present your reasons to your helper. Ask your helper to give you feedback on the accuracy, delivery, completeness and length of your reasons.





My Placing: ____ . ____ . ____ . ____

Reasons Note Card

Class _____

I placed this class of _____ ___ - ___ - ___ - ___

I placed _____ over _____ in my top pair because

_____

_____

I grant _____ was _____

_____

_____

Going to the middle pair, I placed _____

over _____ because _____

_____

_____

I admit _____ was _____

_____

_____

I placed _____ over _____ in my bottom pair

because _____

_____

_____

I realize _____ was _____

_____

However, I faulted _____ and

placed it last in this class because

_____

_____

_____

_____

Oral Reasons Hints

How you placed the class is not nearly as important as the reasons for your placing. Here are some guidelines to help you improve your reasons and your scores.

Accuracy
Point out the obvious and most important points in the class.

Delivery
Present your reasons confidently and sincerely standing about six to eight feet from the judge with your hands behind your back.

Organization
Bring out the more important and general points first.

Completeness
Bring out all the major differences.

Length
Never go over two minutes for a class of four.

Comparative Terms

Use terms acceptable to sheep breeders. Use comparative terms when comparing pairs of sheep.

Frame and Scale
- Longer bodied, stretchier
- Taller fronted
- Later maturing
- Greater capacity and higher volume

Structural Correctness
- Squarer, stronger leg structure
- Leveler, stronger top
- Tighter, stronger shoulder

Muscle
- Thicker, more muscular
- Greater muscle volume
- Greater loin expression

Trimness
- More correct fat cover
- Produce a trimmer carcass
- Leaner with less fat trim

Carcass
- Longer, leaner carcass
- Higher % lean
- Heavier muscled, higher cutting

Lead in Granting Terms
- However, I will grant …
- On the other hand …
- I did recognize that …
- Admittedly …

Talk *It Over*

Share with your helper

- What differences did you see in the lambs?
- How did you feel when you gave reasons?

Tell what's important

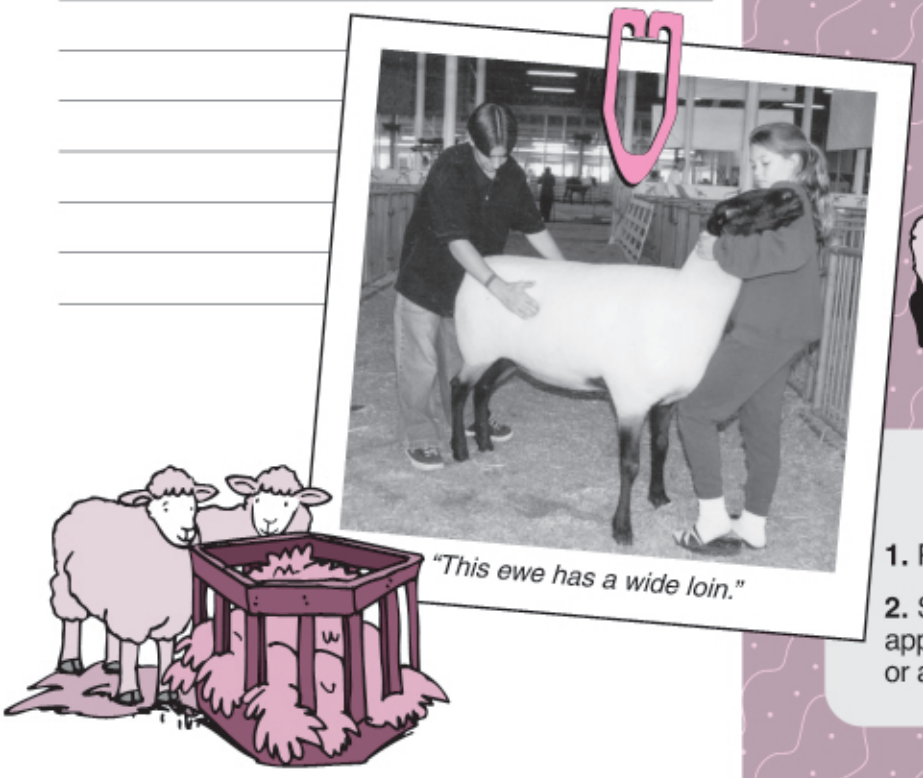
How does giving reasons help you communicate your thoughts more clearly?

Explore what you learned

What other times have you given reasons for doing or believing something?

Imagine what's next

What can you do to help yourself become a smooth and organized speaker?



"This ewe has a wide loin."

Facts Basic Sample Reasons

I placed this class of Hampshire ewes 1–2–3–4. I started with 1 as she was the largest framed, longest bodied, most feminine ewe in the class. I realize she wasn't the highest capacity ewe.

In the top pair, I placed 1 over 2. One was a more upstanding, nicer balanced ewe with a more angular front and straighter topline. I grant 2 was a deeper ribbed and higher volumed ewe, yet I criticized her and placed her second as she was coarser shouldered and had more slope to her rump.

In the middle pair, I placed 2 over 3. two was a larger framed, higher capacity, heavier muscled ewe that was wider chested and thicker topped. I grant 3 was nicer patterned, but I criticized her and placed her third as she was a flat ribbed, shallow bodied ewe that was flatter muscled in her leg.

In the bottom pair I placed 3 over 4. Three was a larger framed, longer bodied growthier ewe that was longer in her head, neck and cannon bone than 4. I grant 4 was a heavier muscled female, but I criticized her and placed her last as she was the earliest maturing, smallest framed, shortest bodied ewe in the class.

More *Challenges*

1. Participate as a member of a judging team.

2. Serve as the official judge or as an apprentice judge for a judging contest or a sheep show.

Meating the Grade

Sheep Project Skill:	Determining lamb yield grades
Life Skill:	Making decisions
Show of Success:	Calculates the yield grade and matches the live animal views with the corresponding carcass photos.

When in the showring, you may hear the judge refer to the "end product" of your market lamb. The end product is the lamb meat that comes from the market lambs you raise. Many of the factors that affect how a market lamb places in the showring, also affect the value of the lamb meat. Consumers are interested in lamb meat that has a small amount of fat and bone in comparison to the amount of meat.

Your Challenge

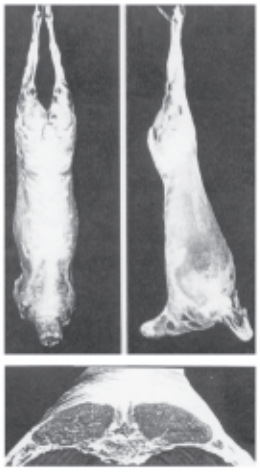
From the information given in Sheep Facts, determine the yield grade of lambs A and B. Then match the pictures of the lamb carcasses with the picture of the lamb that would most likely produce each carcass.

Lamb A

Lamb A is very heavy muscled and has only about a tenth of an inch (0.1) of fat cover. It would probably place very well in the showring. What is Lamb A's yield grade?_____

Lamb B

Lamb B is an average lamb with average muscling and a fat cover of about two-tenths of an inch (0.2). It would probably place near the middle of a group in the showing. What is Lamb B's yield grade?_____



Yield Grade 1 carcass
This lamb carcass would likely come from Lamb # _____.

Yield Grade 2 carcass
This lamb carcass would likely come from Lamb #_____.

Yield Grade?_____
What yield grade do you think this carcass is?

Talk*It Over*

Share with your helper

- What differences did you see in the lambs and carcasses?

Tell what's important

What are the main differences between a yield grade 1 and a yield grade 4 animal?

Explore what you learned

What things do judges do to help them determine the fat and muscling on a lamb?

Imagine what's next

How will you use this information in selecting your next market lambs?

Talk*Words* • Yield grade • cutability • fat thickness

Relationship between Yield Grade, Fat Thickness and Cutability

Yield Grade	Fat Thickness, inches	% Cutability
1	0.15 or less	51.0
2	0.16 – 0.25	49.7
3	0.26 – 0.35	48.4
4	0.36 – 0.45	47.1
5	Over 0.45	45.8

Written by Rosie Nold.

Facts

Yield Grade and Cutability

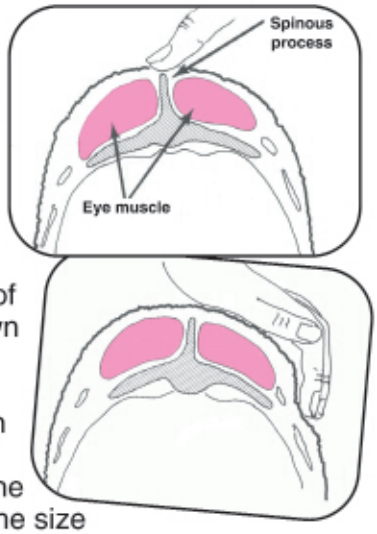
The standards for determining yield grades are determined by the United States Department of Agriculture (USDA). The numbers 1, 2, 3, 4 and 5 identify the USDA yield grades for lamb. The yield grade is a simple way of estimating the cutability of the lamb carcass. Cutability is the yield of closely trimmed retail cuts from major wholesale cuts of the lamb carcass, expressed as a percentage of carcass weight. This means that if a lamb carcass has a 50% cutability, one-half, or 50%, of the weight of that carcass will become retail cuts, such as lamb chops, that consumers will eat. A yield grade 1 carcass has better cutability than a yield grade 5 carcass.

Cutability

The major factor that affects cutability is fatness of the lamb carcass. A lamb carcass that is leaner will have a higher cutability than a carcass that is fatter. A fat carcass will produce more waste than a lean carcass. Fat thickness is the measurement that is used to determine the yield grade of a carcass.

Fat thickness

Fat thickness is measured at the twelfth rib, over the rib eye muscle. Lambs have 13 ribs, so on a live lamb, this area would be very close to the front of the loin. The rib eye is the major muscle that lies on both sides of the backbone, down the top and loin of the lamb. Judges usually feel the loin area on a lamb to help them determine fat thickness and the size of the rib eye muscle.



More*Challenges*

1. Visit a farm or feedlot that has a variety of market lambs and estimate the yield grade on five different animals.

2. Visit a local locker plant and look at a lamb about to be processed. Estimate its yield grade and then look at the carcass when it is hanging on the rail.

Rumen Along

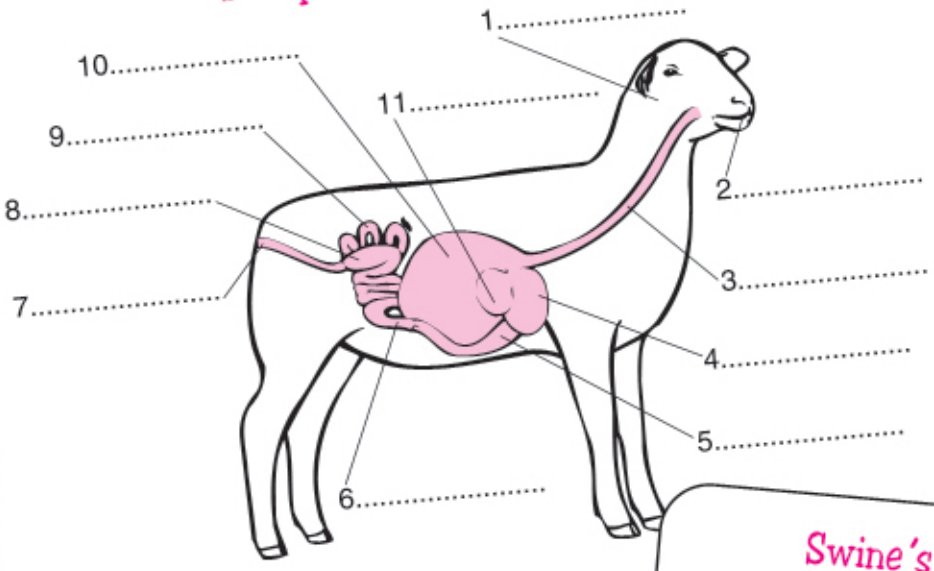
Sheep Project Skill:	Exploring the digestive process
Life Skill:	Communicating with others
Show of Success:	Identifies the parts and differences of a sheep's and pig's digestive system.

Why are sheep, cattle and horses fed hay and grass while pigs are fed primarily grain? The answer lies in the differences in their digestive systems. In this activity you'll compare how feed moves through the digestive systems of sheep and pigs.

Your Challenge

Identify the parts of both the sheep's and pig's digestive system. Then prepare and make a presentation on how feed moves through each species' digestive system. Include a brief description of what happens as the feed moves through each part.

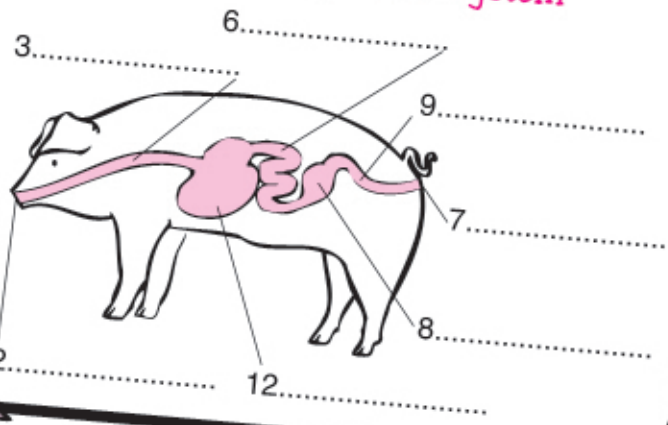
Sheep's Digestive System

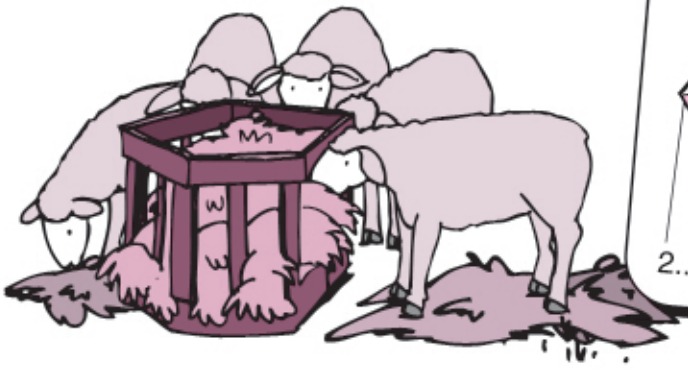


Digestive System Word Bank

a. Abomasum
b. Cecum
c. Esophagus
d. Large Intestine
e. Mouth
f. Omasum
g. Rectum
h. Reticulum
i. Rumen
j. Salivary Glands
k. Small Intestine
l. Stomach

Swine's Digestive System





Talk *It Over*

Share with your helper

- How does feed move through each species' digestive system?
- What differences are there between the two systems?
- How did you learn the parts of each digestive system?

Tell what's important

What organs from page 10 does feed pass through on its trip through a lamb's and a pig's digestive system?

What differences are there between the two digestive systems?

Explore what you learned

What do you consider your strengths when giving presentations to others?

Imagine what's next

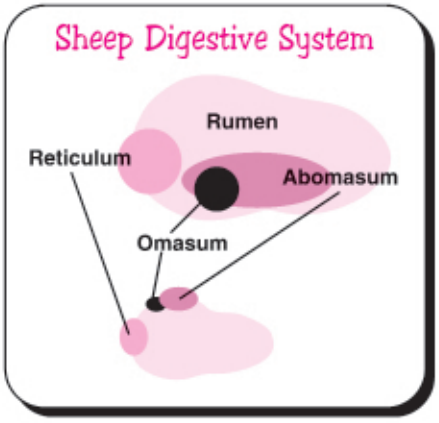
Besides using good speaking skills, how could you improve your presentations to make them interesting and easy for listeners to follow?

Revised by Marc Horney.

Facts

Digestive System Differences

Before you did this exercise did you know that some animals have different organs for digesting their food? Sheep, cattle and goats have a large compartment in front of their stomach (abomasum) called a 'rumen'. Animals that have this kind of digestive system are called 'ruminants'. What makes the rumen special? It is home to millions of bacteria and protozoa that help to digest plant fibers. Without them, your sheep could digest grass no better than you. Not all animals that eat plants have a rumen, though. Horses have a digestive system similar to a pig's or a person's, except that horses have a much larger cecum. Like the rumen, the cecum is also home to microorganisms. In most animals, the cecum is too small to be much help in digestion.



Digestive System Parts

Each part of an animal's digestive system serves a purpose. Here is a quick overview.

Teeth - Breaks the feed into small particles.

Salivary glands - Secrete fluid to moisten food and make it easier to swallow. In ruminants saliva functions to maintain consistency of the cud and to neutralize acids formed by many microorganisms.

Esophagus - Moves the food from the mouth to the stomach. In ruminants it allows the food to be moved from the rumen back to the mouth for further chewing (rumination).

Small Intestine - Very long complex tube composed of duodenum, jejunum and ileum. More nutrients are absorbed here than anywhere else.

Cecum - Sometimes called the 'blind gut' because it doesn't really go anywhere. This is another place in the digestive tract where microorganisms live. It is large enough in horses to allow them to digest fibrous foods, but it is very small in most other animals (including pigs and people).

Large Intestine - Its main function is to absorb water and water-soluble nutrients (like B-vitamins).

Rectum - Organ through which the undigested portion of the food is eliminated.

More *Challenges*

1. Make a game by drawing the digestive system of a sheep and cutting it into pieces. Have your family put the parts in the correct order and then identify each part.

2. Look for books that have pictures of the digestive systems of a horse and a chicken. In what way are their digestive systems similar to and different from a sheep or a pig's?