

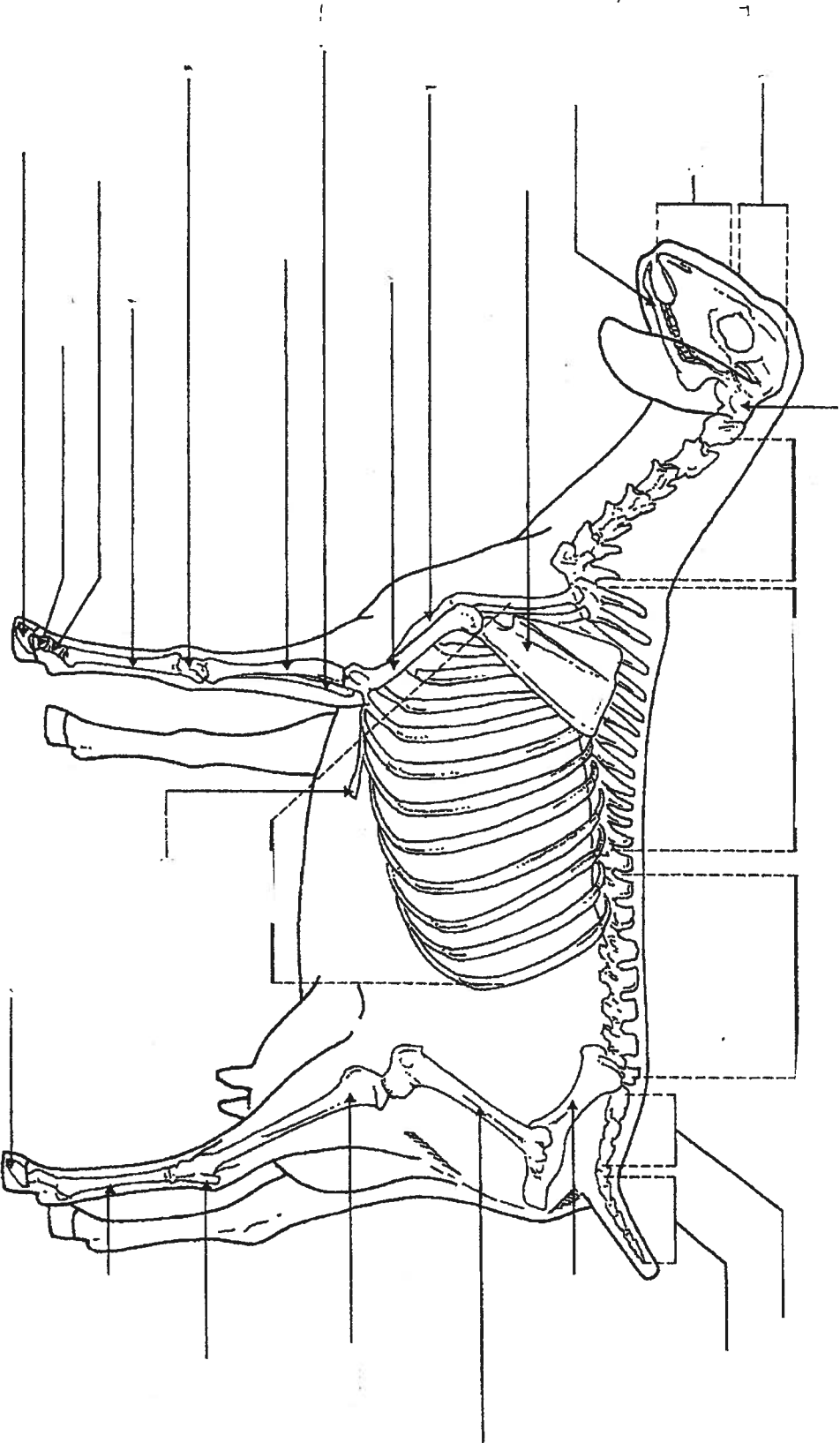
## **Goats Skill-a-thon Study Guide**

This packet contains study material for the annual skill-a-thon contest. Every member taking a livestock project is encouraged to look over this material. Not every skill-a-thon station is represented in this packet. Members are also encouraged to use other resources to study (ie. Online resources and livestock resource books). These packets are the members' to keep; they do not need returned to the Extension Office.

Feed samples are available upon request. (These will need returned to the Extension Office).

As always, if you have any questions please call the Extension Office at 419-354-9050.

# Goat Skeletal System



Goat Skillathon

Skeletal Parts



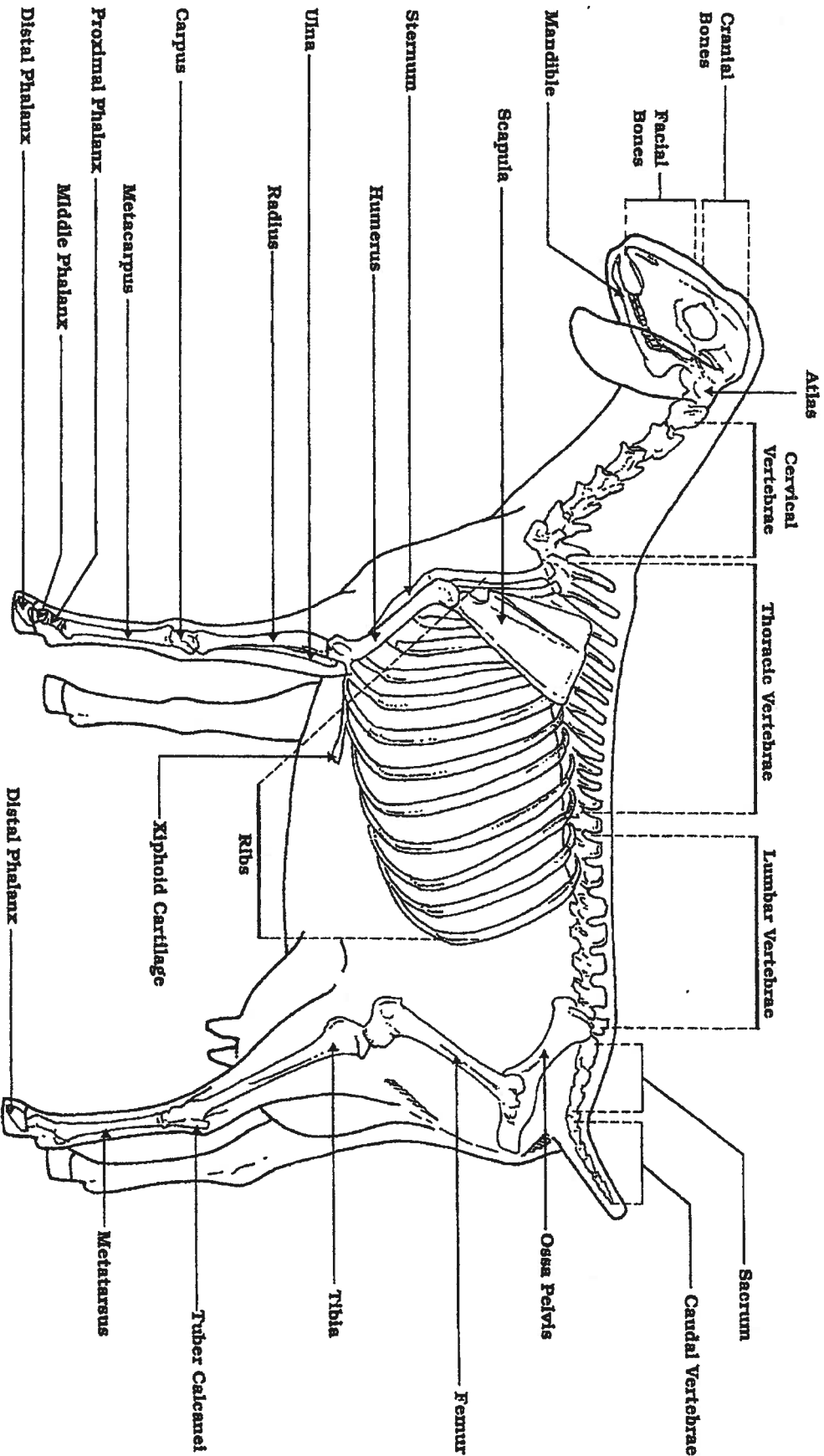
LEARNING LABORATORY KIT

Exploratory Learning: Educational Program

This component adapted from materials of the American Dairy Goat Association

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# Goat Skeletal System



Goat Skillathon

Station 1

Skeletal Parts

Station



LEARNING LABORATORY KIT

Exploratory Learning: Educational Program

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- This breed of dairy goat originated in Switzerland. These goats have a black belly and a light gray to black udder. They are known for their upright ears, straight face, and chaise color. With a minimum height of 28 inches, this breed is one of the smaller Swiss breeds.

- This is the only breed developed in the United States. Its distinctive characteristic is gopher (less than 1 inch) or elf (less than 2 inches) ears. Gopher ears are preferred. Any color or combination is acceptable. Mature does are a minimum of 28 inches; mature bucks are a minimum of 30 inches.

- This breed has a straight or dished face with a medium-length horizontal, or slightly drooping ears held close to the face. Any color combination is acceptable. Most of these goats are horned and bucks can develop remarkable racks. Does are fertile breeders. The udder tends to be smaller and held more tightly against the body than that of their dairy cousins

- This goat breed originated in India and Egypt. They have a strong convex facial profile and long, bell-shaped ears. Any color or pattern is acceptable. These goats have a long breeding cycle, and their milk is known for its high protein and butterfat content.

- This medium-sized breed originated in Switzerland. These goats have upright ears and a dished or straight face. Their coat is a solid color, varying from, light fawn to dark chocolate. There are distinctive white markings on the ears, legs, face, and tail. These goats are known for their high milk productivity.

- This breed originated around the late 1950's and is characterized by excellent early growth rates, high waning mothering qualities and kidding is possible every eight months. Their sturdy legs allow them to move easily through rugged terrain and to withstand a wide range of climatic conditions. They are best known for the production of low-fat meat.

- This sturdy-boned breed originated in Switzerland. Their hair is short and fine. Although white is preferred, coat color can also be light cream. Their face is straight or dished with erect ears. These goats are medium to large (over 30 inches) and known for their high milk productivity.

- This dwarf breed originated in Africa and the Caribbean. They are short-legged and small (16 to 22 inches), with a compact body. Their various coat colors are white caramel, caramel, gray agouti, black agouti, and charcoal agouti. The head has a dish profile and a broad, well-muscled jaw. These goats are hardy and alert.

## Goat Skillathon

### Breed Traits

**Oberhasli**- This breed of dairy goat originated in Switzerland. These goats have a black belly and a light gray to black udder. They are known for their upright ears, straight face, and chaise color. With a minimum height of 28 inches, this breed is one of the smaller Swiss breeds.

**Lamancha**- This is the only breed developed in the United States. Its distinctive characteristic is gopher (less than 1 inch) or elf (less than 2 inches) ears. Gopher ears are preferred. Any color or combination is acceptable. Mature does are a minimum of 28 inches; mature bucks are a minimum of 30 inches.

**Spanish**- This breed has a straight or dished face with a medium-length horizontal, or slightly drooping ears held close to the face. Any color combination is acceptable. Most of these goats are horned and bucks can develop remarkable racks. Does are fertile breeders. The udder tends to be smaller and held more tightly against the body than that of their dairy cousins

**Nubian**- This goat breed originated in India and Egypt. They have a strong convex facial profile and long, bell-shaped ears. Any color or pattern is acceptable. These goats have a long breeding cycle, and their milk is known for its high protein and butterfat content.

**Toggenburg**- This medium-sized breed originated in Switzerland. These goats have upright ears and a dished or straight face. Their coat is a solid color, varying from, light fawn to dark chocolate. There are distinctive white markings on the ears, legs, face, and tail. These goats are known for their high milk productivity.

**Boer**- This breed originated around the late 1950's and is characterized by excellent early growth rates, high weaning mothering qualities and kidding is possible every eight months. Their sturdy legs allow them to move easily through rugged terrain and to withstand a wide range of climatic conditions. They are best known for the production of low-fat meat.

**Saanen**- This sturdy-boned breed originated in Switzerland. Their hair is short and fine. Although white is preferred, coat color can also be light cream. Their face is straight or dished with erect ears. These goats are medium to large (over 30 inches) and known for their high milk productivity.

**Pygmy**- This dwarf breed originated in Africa and the Caribbean. They are short-legged and small (16 to 22 inches), with a compact body. Their various coat colors are white caramel, caramel, gray agouti, black agouti, and charcoal agouti. The head has a dish profile and a broad, well-muscled jaw. These goats are hardy and alert.

## Goat Skillathon

### Breed Traits

Up to 50 pounds live weight, basically milk-fed, castrated

Over 50 pounds, up to one year of age, castrated

Over one year of age, castrated. Considered low-quality meat and not a good way to make friends for chevon

One whose parents are both of the same breed and registered with the same breed association

Result of mating a purebred doe of one breed, such as Nubian, to a purebred buck of another breed, such as Sannen

One whose sire (father) or dam (mother) was a purebred and whose other parent was not

An animal of unknown or unimproved ancestry

Goat Skillathon

Meat and Dairy Terms

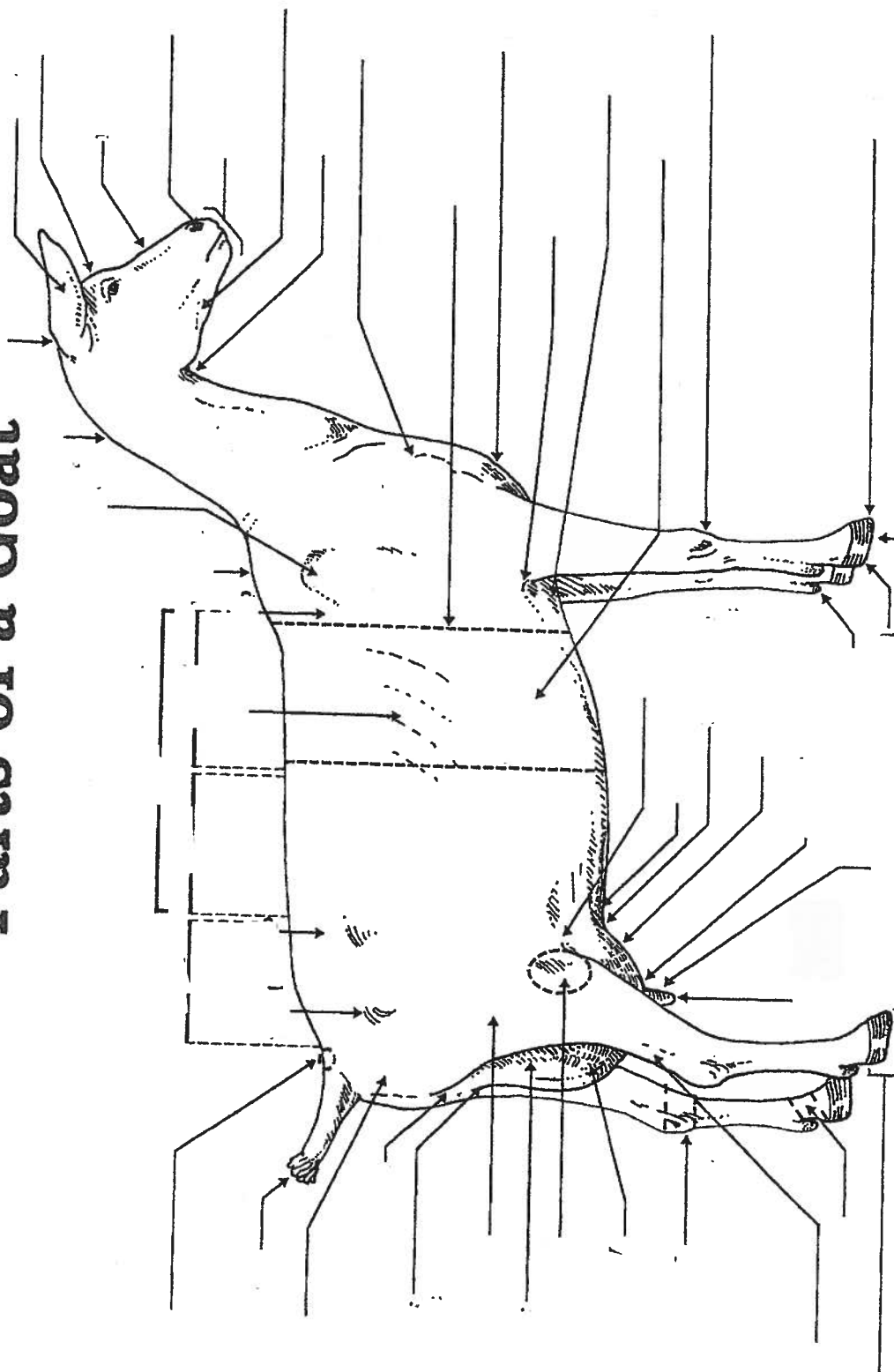
Cabrito	Up to 50 pounds live weight, basically milk-fed, castrated
Meat Goats	Over 50 pounds, up to one year of age, castrated
Mutton	Over one year of age, castrated. Considered low-quality meat and not a good way to make friends for chevon

Purebred Dairy Goat	One whose parents are both of the same breed and registered with the same breed association
Crossbred Goat	Result of mating a purebred doe of one breed, such as Nubian, to a purebred buck of another breed, such as Sannen
Grade Dairy Goat	One whose sire (father) or dam (mother) was a purebred and whose other parent was not
Scrub	An animal of unknown or unimproved ancestry

## Goat Skillathon

### Meat and Dairy Terms

# Parts of a Goat



Goat Skillathon

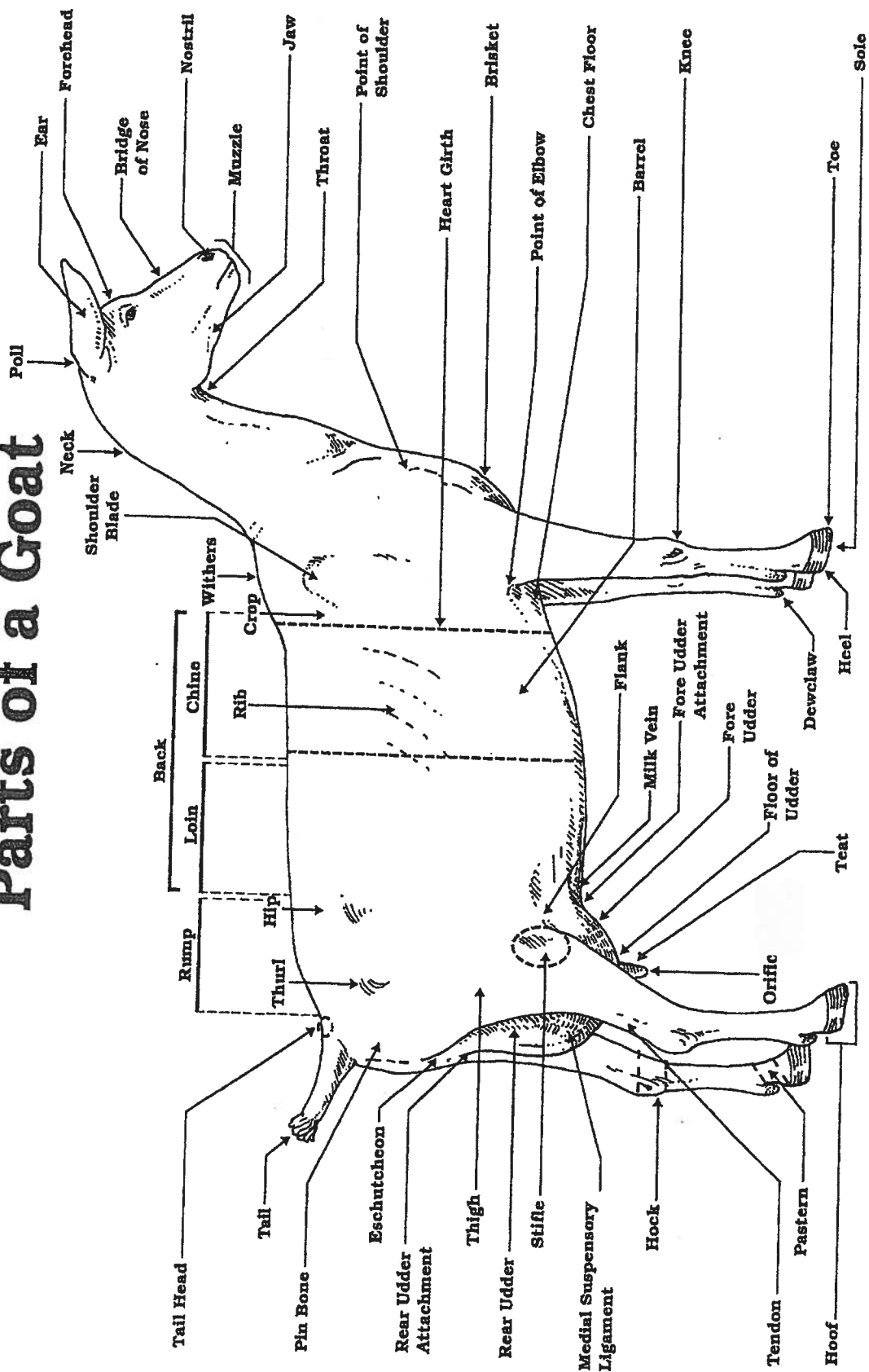


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# Parts of a Goat



Goat Skillathon

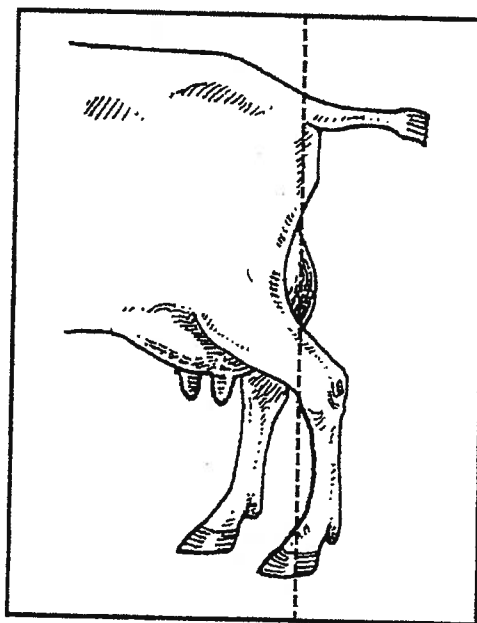
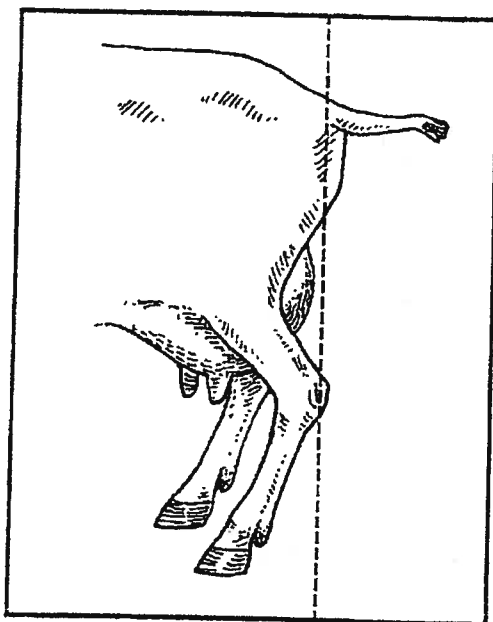
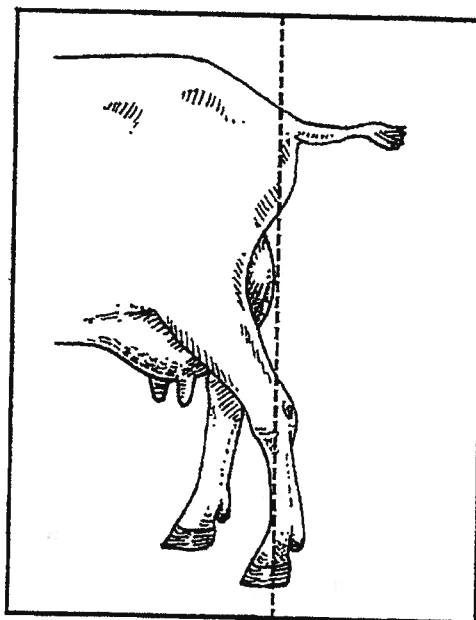
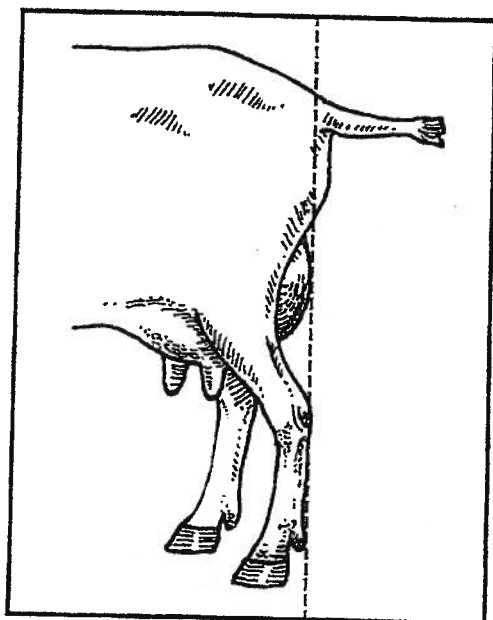
Parts  
Caption



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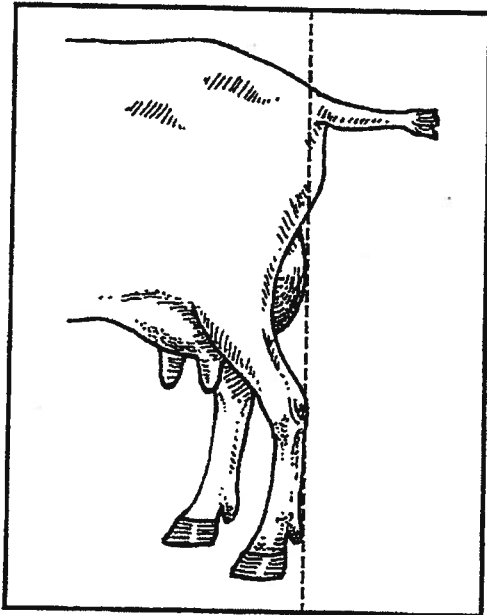
# Goat Feet and Leg Structure (Part II)



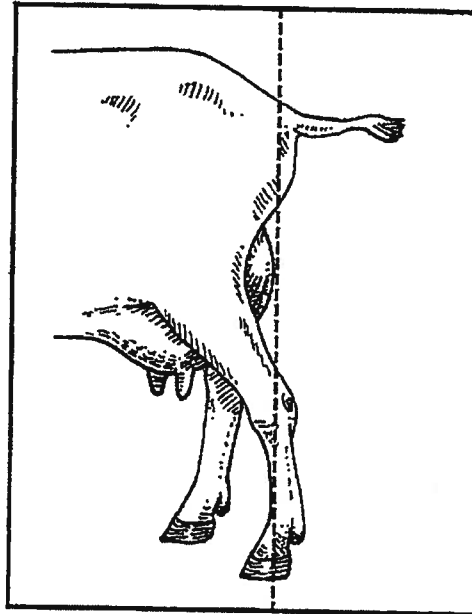
Goat Skillathon

Foot/ Leg Structure

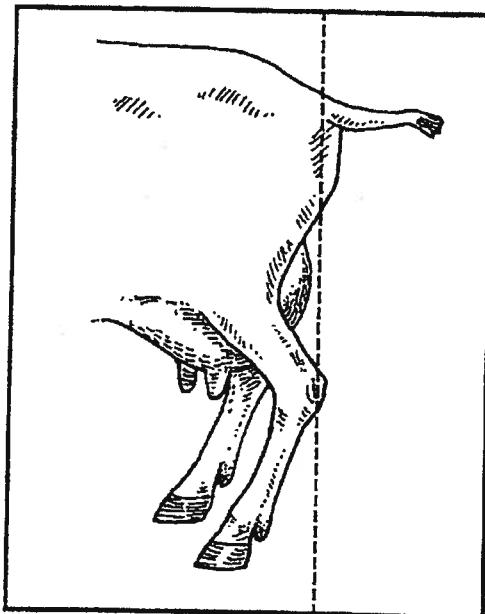
# Goat Feet and Leg Structure (Part II)



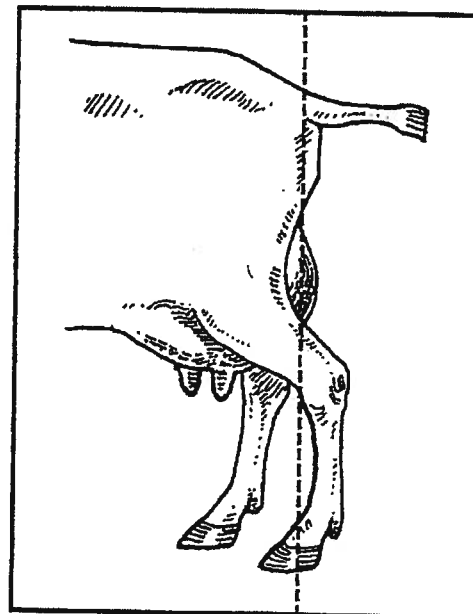
Ideal Rear Legs



Post-Legged



Sickle-Hocked

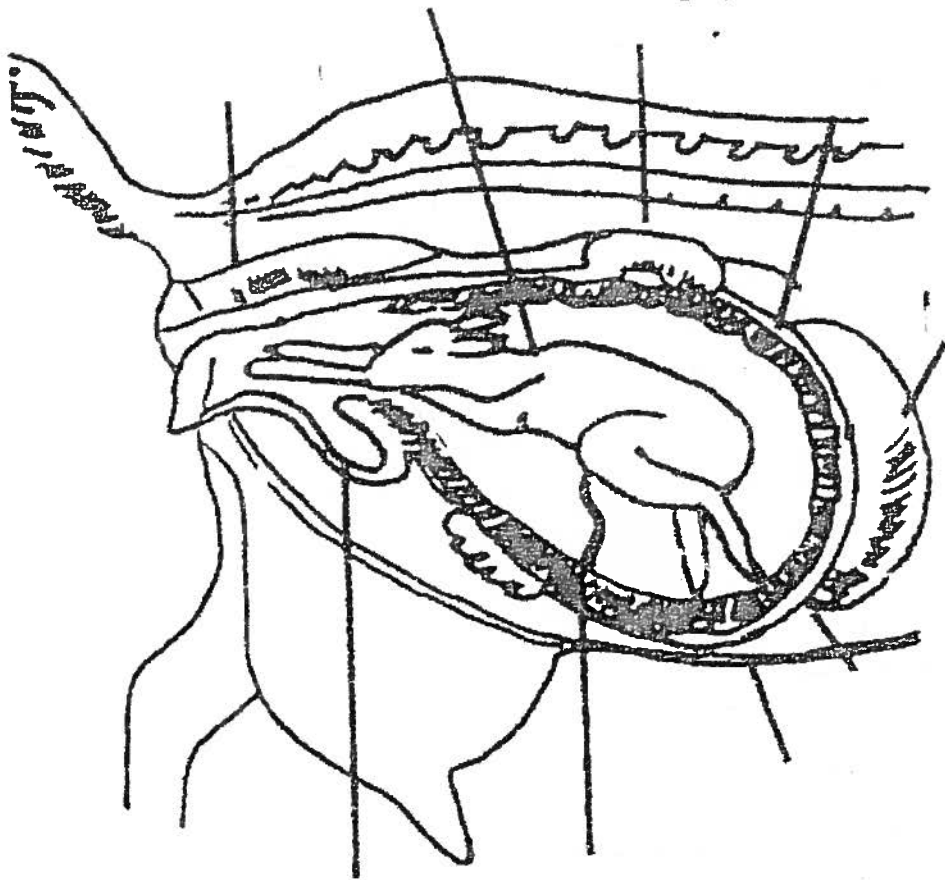


Weak Pasterns

Goat Skillathon

Foot/ Leg Structure

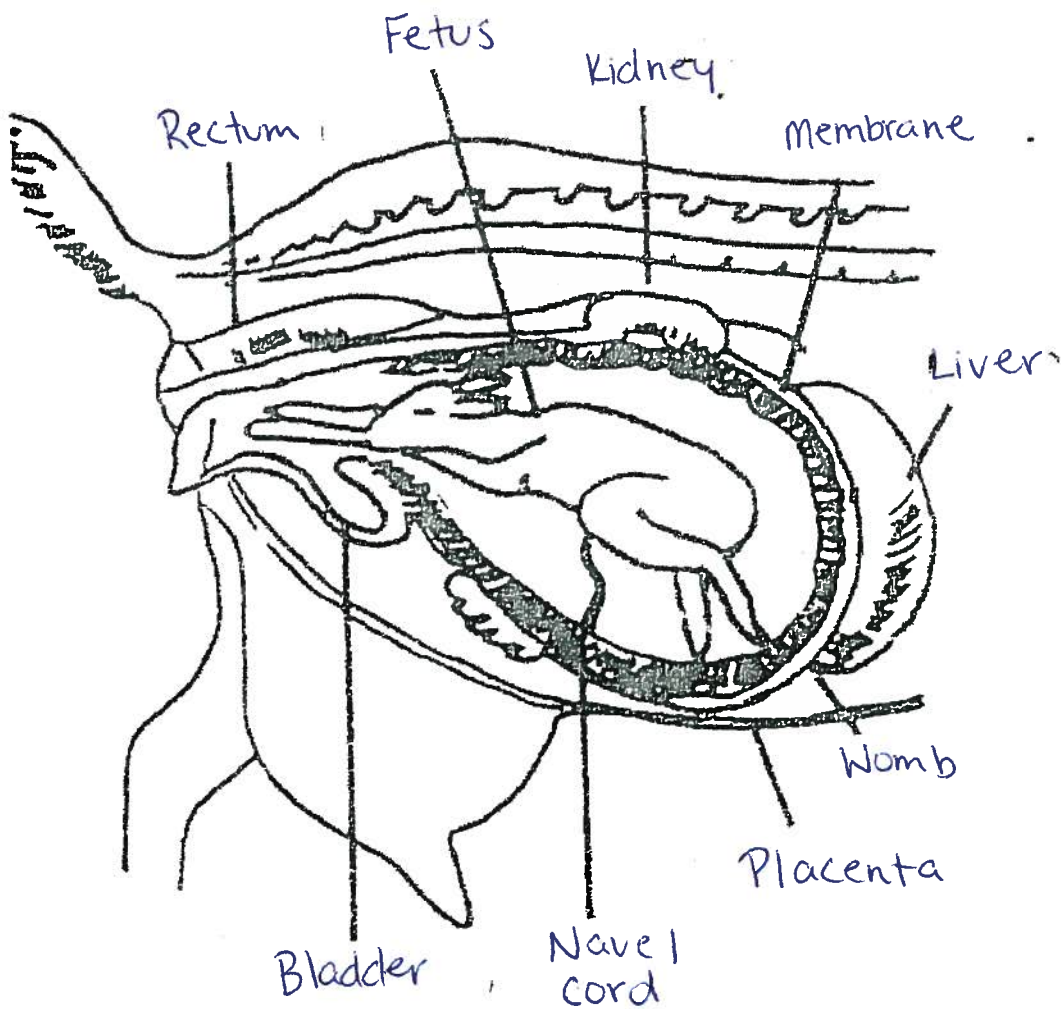
# Female Reproductive System



Goat Skillathon

Female Reproductive System

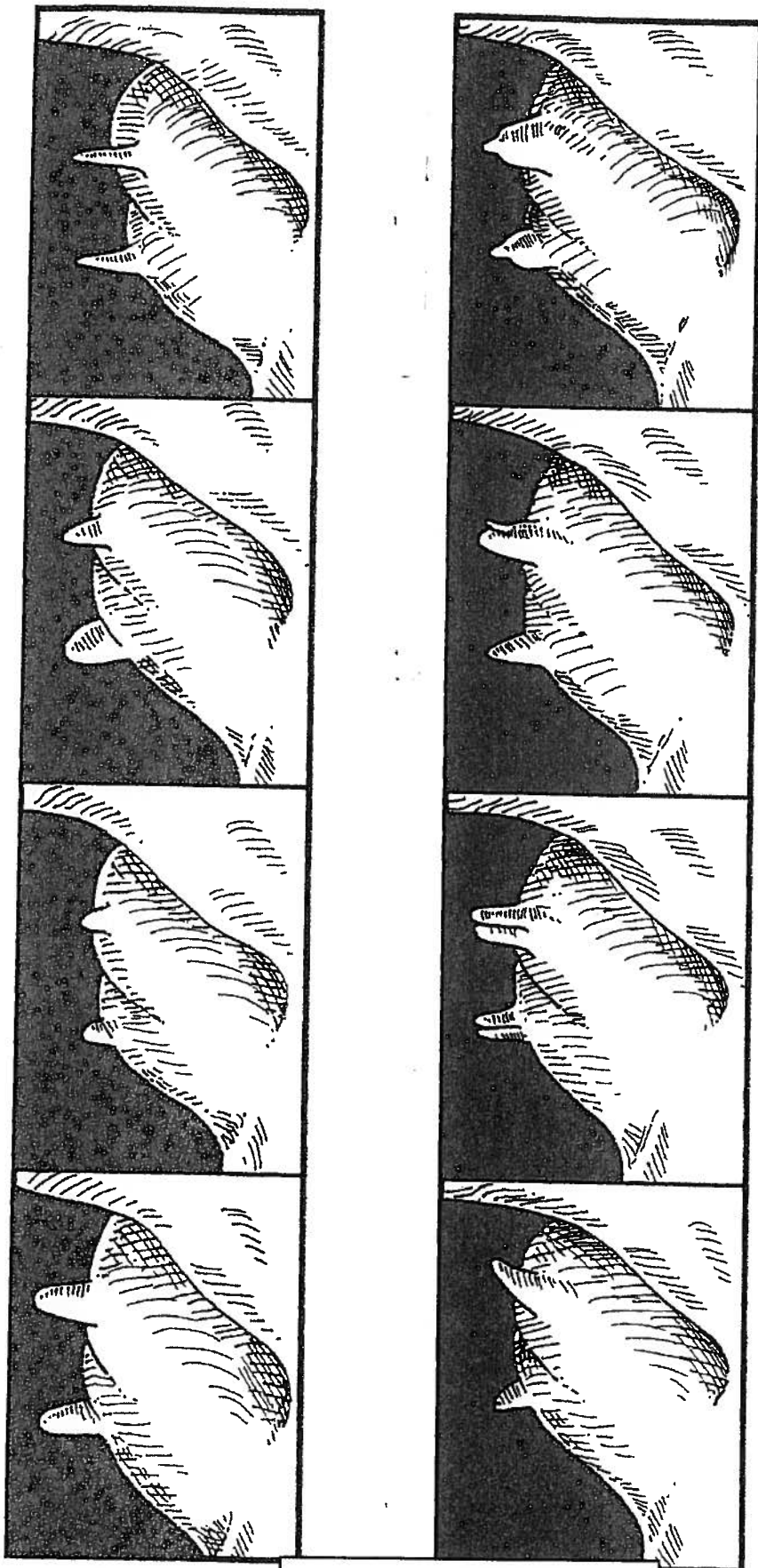
# Female Reproductive System



Goat Skillathon

Female Reproductive System

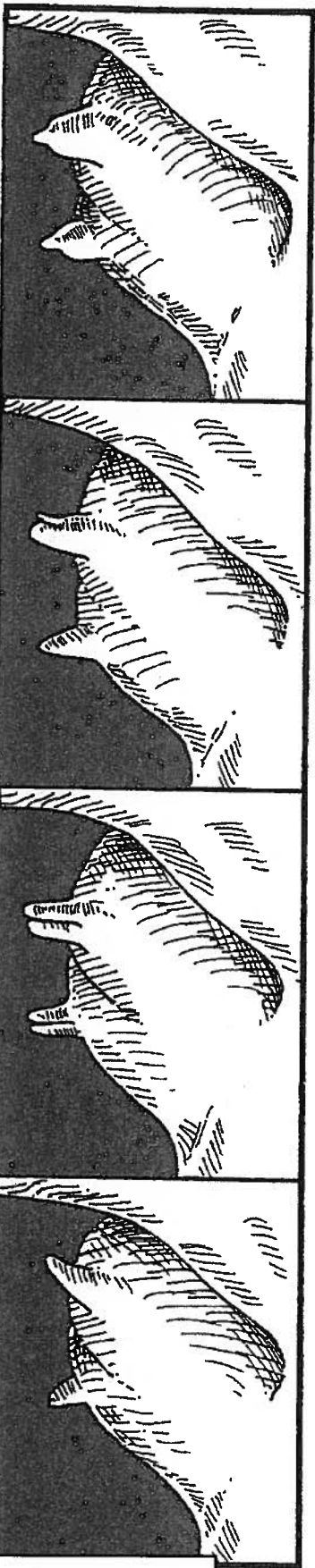
# Goat Mammary Structure (Teats)



Goat Skillathon

Goat Mammary Structure

# Goat Mammary Structure (Teats)

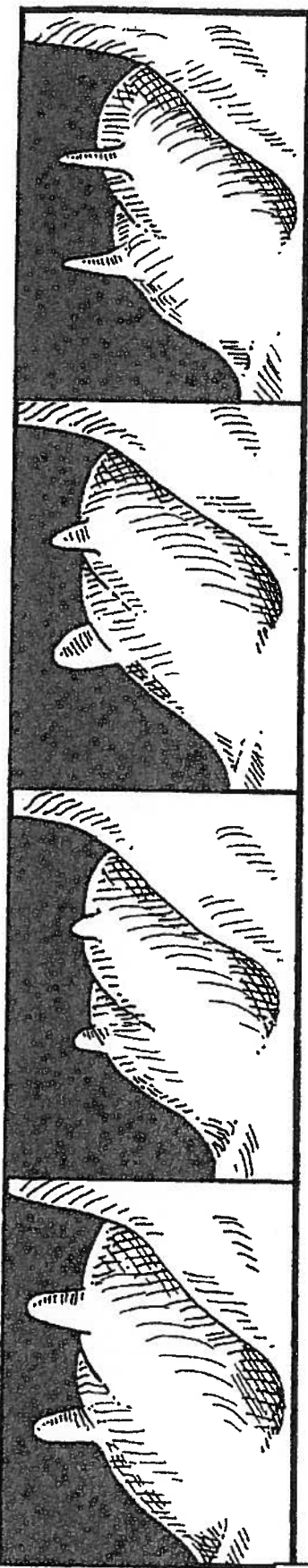


Bottle-Shaped Teats

Spur Teat

Double Teats

Teats that Point Sideways



Pencil-Shaped Teats

Uneven Teats

Extremely Small Teats

Ideal Teats

Goat Skillathon

Goat Mammary Structure

# Medication Insert

## OMNIBIOTIC

(Hydrocillin in Aqueous Suspension)

For use in Beef Cattle, Lactating and Non-Lactating Dairy

Cattle, Swine and Sheep

*Read Entire Brochure Carefully*

*Before Using This Product*

**For Intramuscular Use Only**

**Active Ingredients:** Omnibiotic is an effective antimicrobial preparation containing hydrocillin hydrochloride. Each ml of this suspension contains 200,000 units of hydrocillin hydrochloride in an aqueous base.

**Indications:** **Cattle** - bronchitis, foot rot, leptospirosis, mastitis, metritis, pneumonia, wound infections; **Swine** - erysipelas, pneumonia; **Sheep** - foot rot, pneumonia, mastitis; and other infections in these species caused by or associated with hydrocillin-susceptible organisms.

### Recommended Daily Dosage

The usual dose is 2 ml per 100 lb of body weight given once daily. Maximum dose is 15 ml/day.

Body Weight	Dosage
100 lb	2 ml
300 lb	6 ml
500 lb	10 ml
750 lb or more	15 ml

Continue treatment for 1 to 2 days after symptoms disappear.

**Caution:** 1. Omnibiotic should be injected deep within the fleshy muscle of the neck or thigh. Do not inject this material in the hip or rump, subcutaneously, into a blood vessel, or near a major nerve because it may cause tissue damage. 2. If improvement does not occur within 48 hours, the diagnosis should be reconsidered and appropriate treatment initiated. 3. Treated animals should be closely observed for at least 30 minutes. Should a reaction occur, discontinue treatment and immediately administer epinephrine and antihistamines. 4. Omnibiotic must be stored between 2° and 8° C (36° to 46° F). Warm to room temperature and shake well before using. Keep refrigerated when not in use.

**Warning:** Milk that has been taken from animals during treatment and for 48 hours (4 milkings) after the last treatment must not be used for food. The use of this drug must be discontinued for 30 days before treated animals are slaughtered for food.

**How Supplied:** Omnibiotic is available in vials of 100 ml.

TAKE TIME



OBSERVE LABEL  
DIRECTIONS



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Goat Skillathon

Med Insert



# Medication Insert

Name of Drug

**OMNIBIOTIC**

(Hydrocillin in Aqueous Suspension)

Active Ingredients

For use in Beef Cattle, Lactating and Non-Lactating Dairy  
Cattle, Swine and Sheep

Species and  
Animal Class

Read Entire Brochure Carefully

Before Using This Product

**For Intramuscular Use Only**

**Active Ingredients:** Omnibiotic is an effective antimicrobial preparation containing hydrocillin hydrochloride. Each ml of this suspension contains 200,000 units of hydrocillin hydrochloride in an aqueous base.

Approved  
Uses

**Indications:** **Cattle** - bronchitis, foot rot, leptospirosis, mastitis, metritis, pneumonia, wound infections; **Swine** - erysipelas, pneumonia; **Sheep** - foot rot, pneumonia, mastitis; and other infections in these species caused by or associated with hydrocillin-susceptible organisms.

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Dosage

Body Weight	Dosage
100 lb	2 ml
300 lb	6 ml
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Continue treatment for 1 to 2 days after symptoms disappear.

Cautions  
and Warnings

**Caution:** 1. Omnibiotic should be injected deep within the fleshy muscle of the neck or thigh. Do not inject this material in the hip or rump, subcutaneously, into a blood vessel, or near a major nerve because it may cause tissue damage. 2. If improvement does not occur within 48 hours, the diagnosis should be reconsidered and appropriate treatment initiated. 3. Treated animals should be closely observed for at least 30 minutes. Should a reaction occur, discontinue treatment and immediately administer epinephrine and antihistamines. 4. Omnibiotic must be stored between 2° and 8° C (36° to 46° F). Warm to room temperature and shake well before using. Keep refrigerated when not in use.

Route of  
Administration

Storage  
Requirements

**Warning:** Milk that has been taken from animals during treatment and for 48 hours (4 milkings) after the last treatment must not be used for food. The use of this drug must be discontinued for 30 days before treated animals are slaughtered for food.

Withholding  
Times

Sizes  
Available

**How Supplied:** Omnibiotic is available in vials of 100 ml.



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Goat Skillathon

1

Med Insert

## Nutritional Diseases 2015

Also known as overeating disease. Can avoid by gradually increasing grain in the diet and to avoid feeding large amounts of grain. Vaccination is effective in preventing.

- Most likely to occur after kidding, usually due to a rapid increase of grain in the diet. Can lead to laminitis. Usually, animals are off feed and slightly depressed.

- Leg muscles are usually affected first, it can affect cardiac muscles and cause death. Animals have stiffness and swollen hindquarters; kids are usually down. Animals are alert and will still eat.

## Goat Skillathon

### Nutritional Diseases

## Nutritional Diseases 2015

**Enterotoxaemia-** Also known as overeating disease. Can avoid by gradually increasing grain in the diet and to avoid feeding large amounts of grain. Vaccination is effective in preventing.

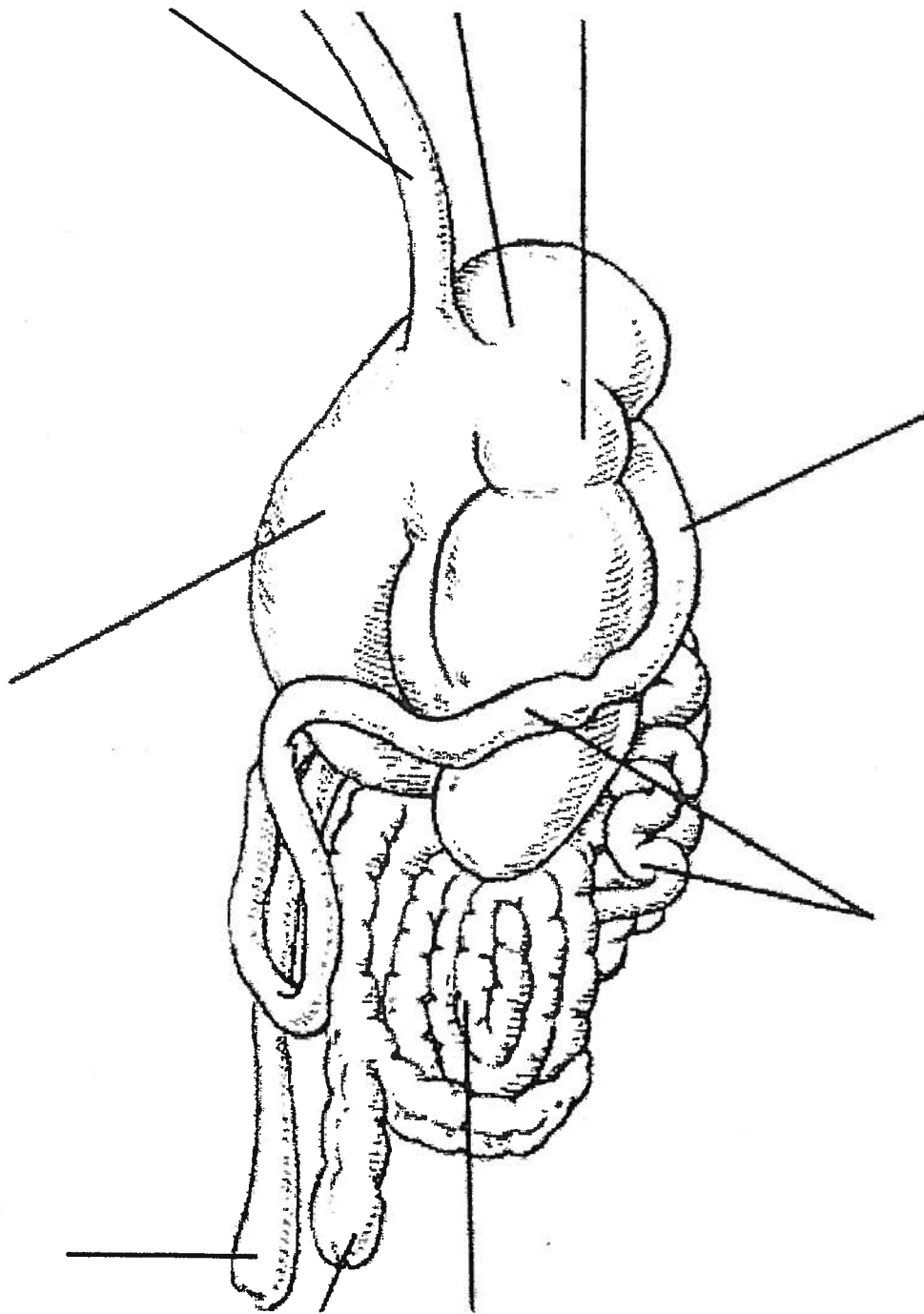
**Ruminal Acidosis-** Most likely to occur after kidding, usually due to a rapid increase of grain in the diet. Can lead to laminitis. Usually, animals are off feed and slightly depressed.

**White muscle disease-** Leg muscles are usually affected first, it can affect cardiac muscles and cause death. Animals have stiffness and swollen hindquarters; kids are usually down. Animals are alert and will still eat.

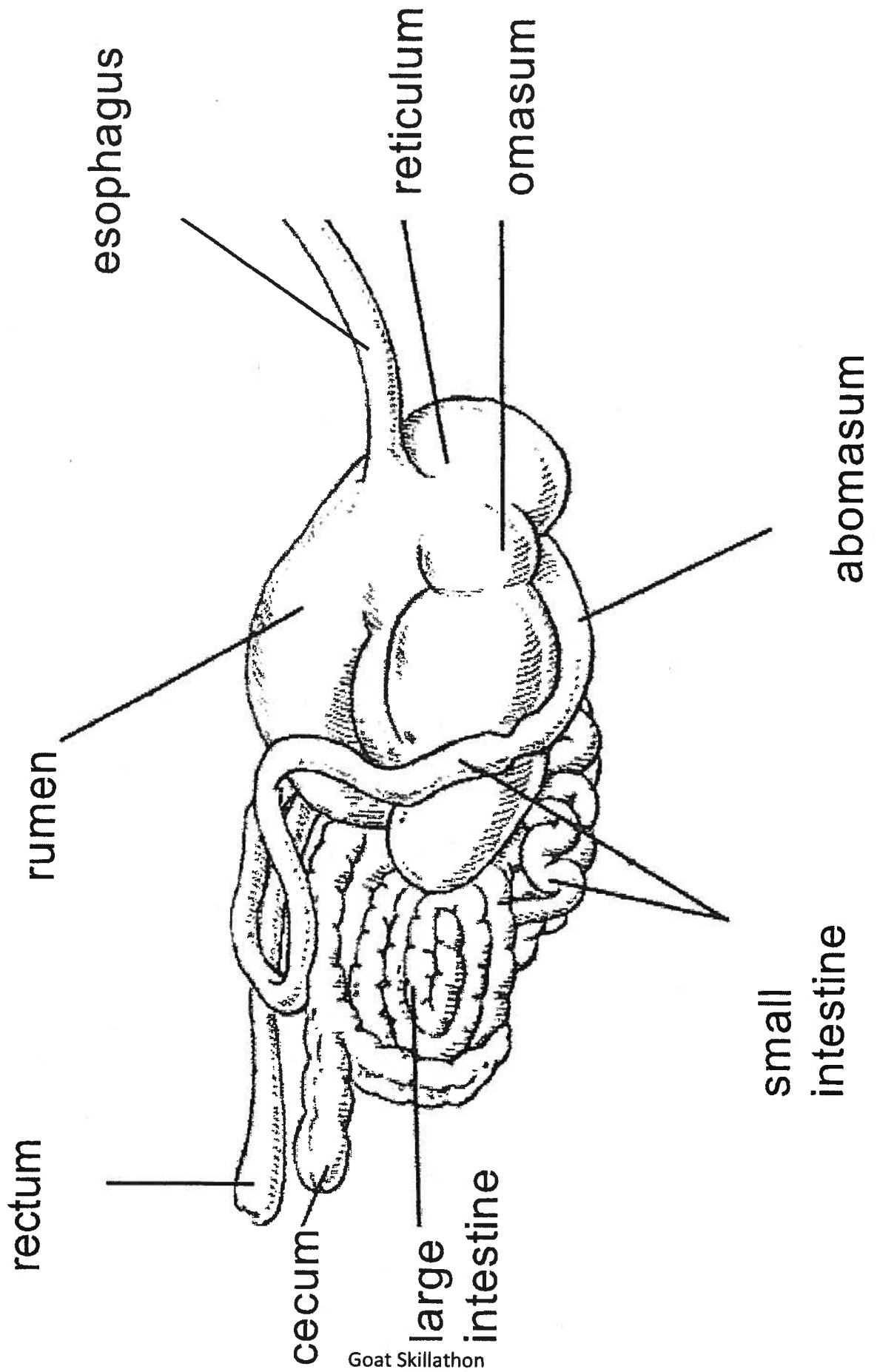
Goat Skillathon

Nutritional Diseases

# Ruminant Digestive Tract Parts ID



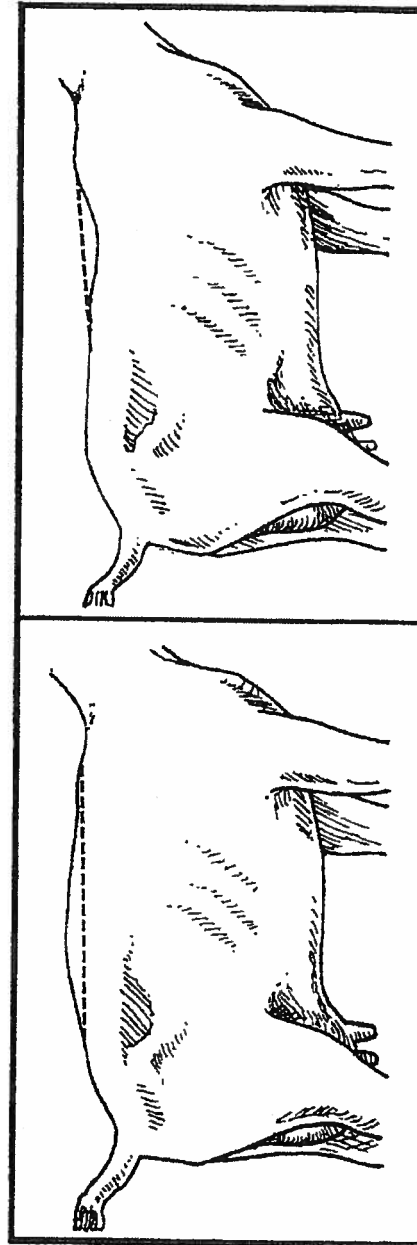
# Ruminant Digestive Tract Parts ID



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Digestive Tract

# Goat Topline Structure



Goat Skillathon

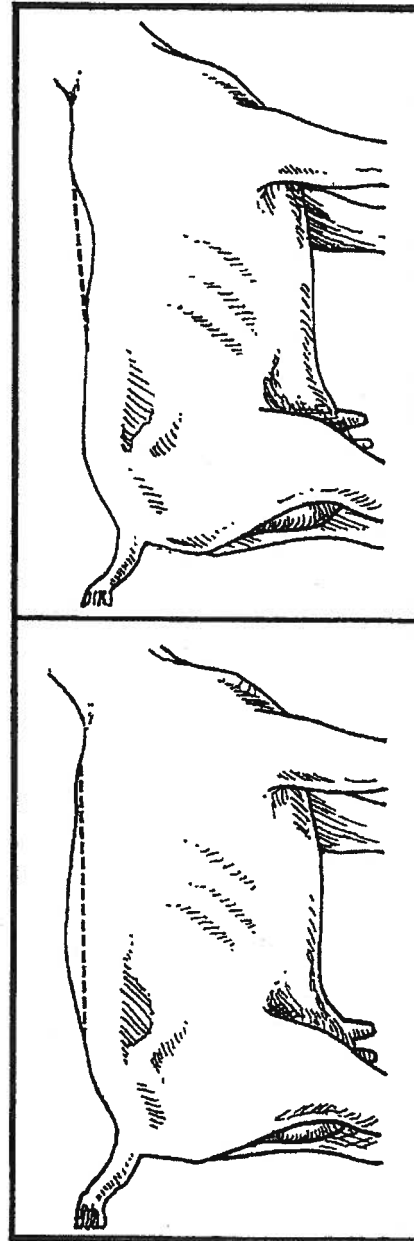
# Goat Topline Structure



Wavy Back

Ideal Back

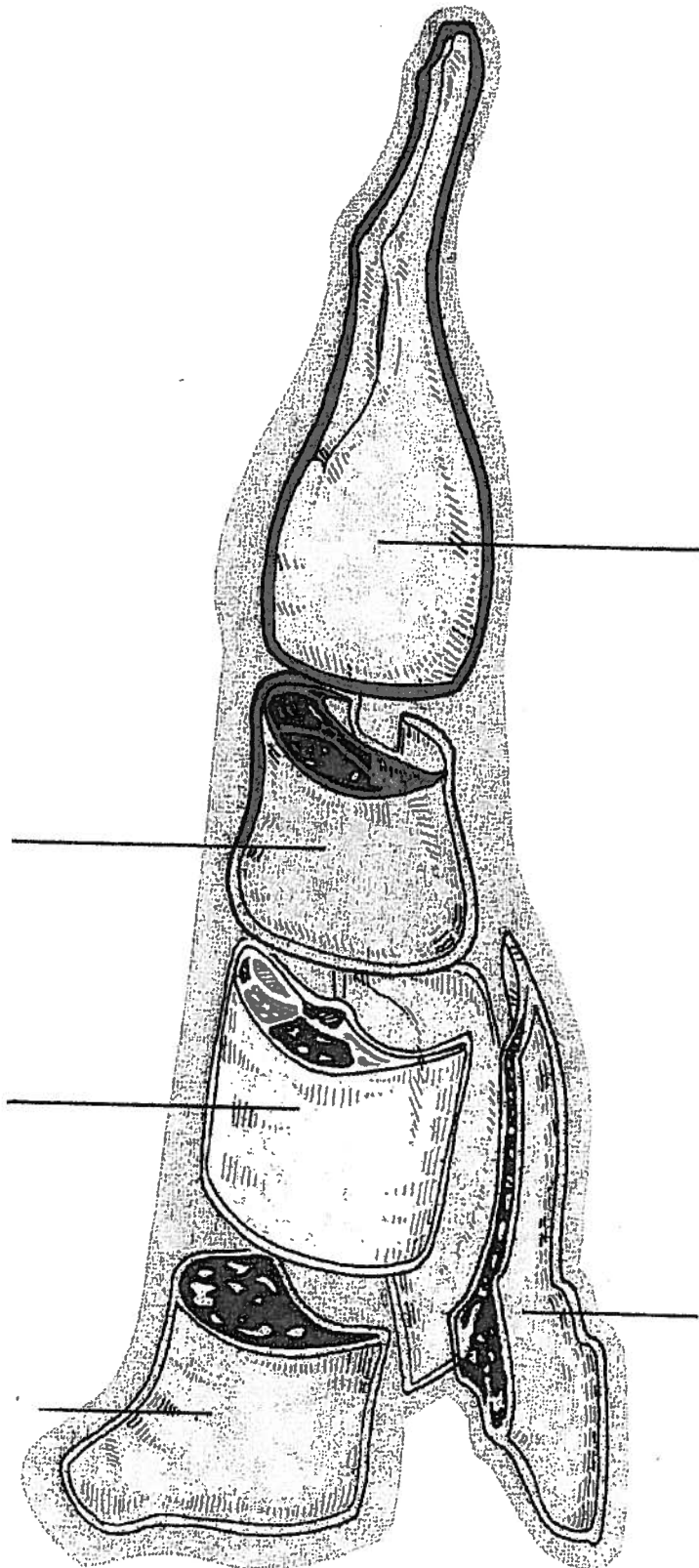
Sway Back



Roached Back

Weak in the Chine

# Wholesale Cuts of Chevron

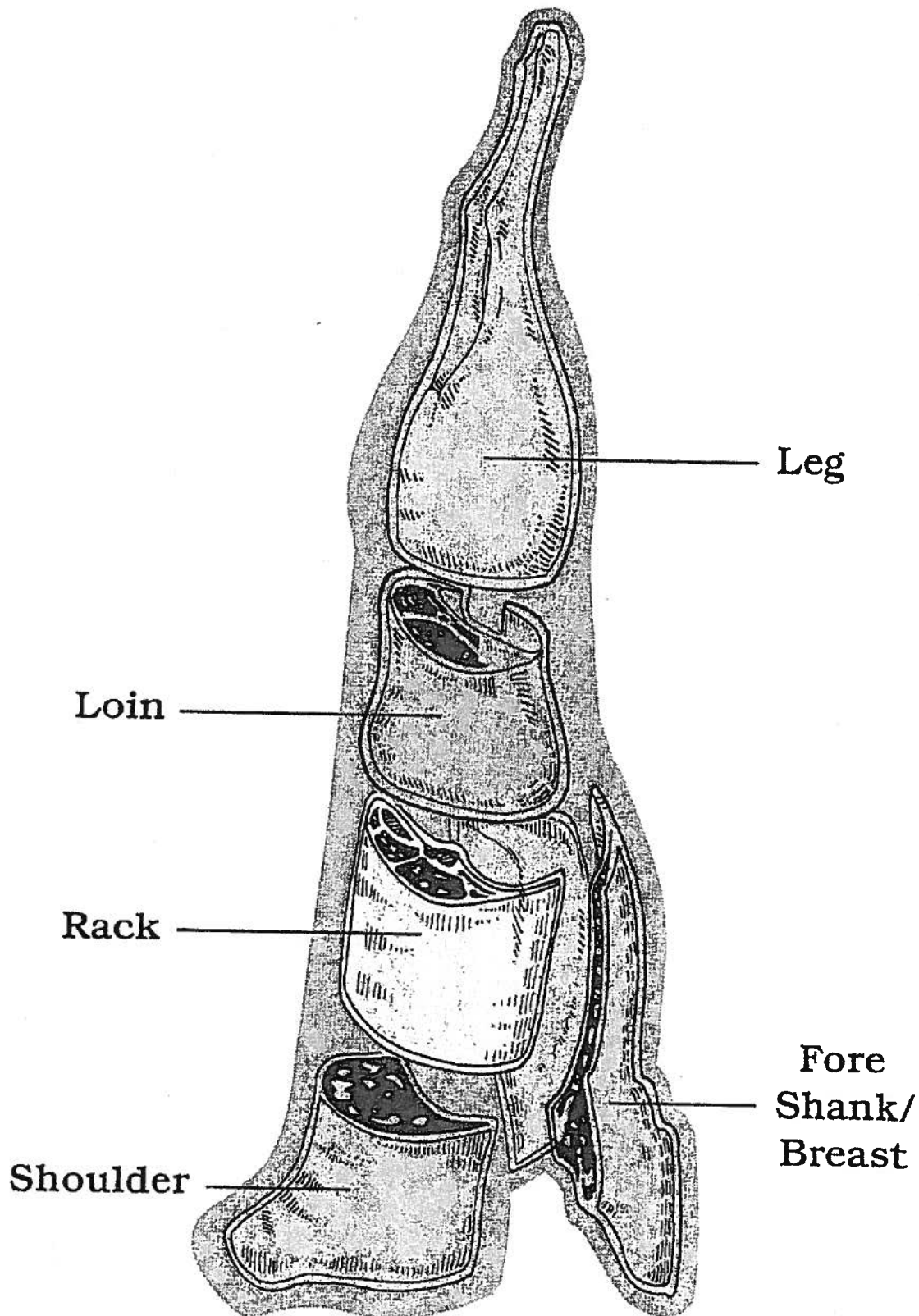


Goat Skillathon

Wholesale cuts



# Wholesale Cuts of Chevron



Goat Skillathon

Wholesale cuts

# Answer Key

- 1) The herd tattoo and the individual animal tattoo belong in which ears?

**As you stand behind your goat, the herd tattoo goes in the goat's right ear; the animal tattoo goes in the goat's left ear. A letter represents the birth year and one or more numbers represent the individual animal number.  
(for ADGA 1997 = K, 1998 = L, 1999 = M, and so on)**

- 2) Where is the earless Lamancha goat breed usually tattooed?  
**It is tattooed on either or both sides of the tail web. The skin on the side of the tail is pulled out tightly to the side and tattooed in the same manner as the ear.**

- 3) How many letters or numbers may be put in the ear?  
**The tattoo pliers hold up to four (4) letters or numbers.**

- 4) What are some potential problems if tattooing is not done carefully?  
**You might hit the large vein in the upper part of the ear; the ear may tear; the tattoo may be upside down; or the tattoo may fade over time.**

- 5) How can you make sure the digits will be transferred into the ear correctly?  
**Before applying the tattoo pliers to the ear, test them by pushing the pins into a piece of cardboard.**

- 6) What letters of the alphabet are not used to represent the birth year?  
**G, I, O, Q, and U**

1994 = F
1995 = H
1996 = J
1997 = K
1998 = L
1999 = M
2000 = N
2001 = P
2002 = R
2003 = S
2004 = T
2005 = V
2006 = W
2007 = X
2008 = Y
2009 = Z



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Goat Skillathon

Tattooing

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# Answer Key

## Clipping:

- 1) In which direction should the goat hair be clipped?  
***Always clip from the rear toward the head and neck against the hair.***
- 2) Where are the small clippers used?  
***On the udder and other small parts which are hard to reach with the larger clippers.***
- 3) How should the tail be trimmed?  
***Leave a brush-like effect at the tip with approximately one inch of hair remaining beyond the tip of the tail.***
- 4) How far ahead of a show should your animal be clipped?  
***This mainly depends on the color of the animal. White animals should be done about a week ahead of time; the darker animals should be trimmed two weeks ahead of time. The udder should be done the day before show along with any touch ups that should be done.***
- 5) What size clippers should be used?  
***The body should be clipped with a size 10 blade; the udder should be clipped with a size 30 blade.***

## Showing in the Ring

- 1) Where should the doe be in relation to you and the judge?  
***Always between you and the judge.***
- 2) Which direction do you go when you move from one side of the goat to the other?  
***Around the front of your goat.***
- 3) Describe how exhibitors should move their goats around the ring.  
***Single file clockwise around the circle with approximately three feet between the animals in the ring.***
- 4) What do you do when the judge changes your placing while standing in a side-by-side line?  
***Lead the animal forward out of the line, down or up to the new position, continue through the line, finally making a wide graceful U-turn to get into position.***
- 5) What is the proper dress when showing a dairy goat?  
***Clothes and person should be neat and clean. White clothes are preferred.***



### Exploratory Learning: Educational Program

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Goat Skillathon

Showmanship