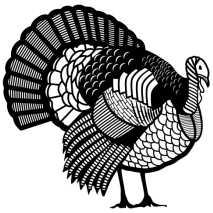
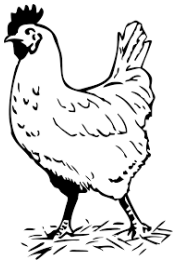




2023 Poultry Skillathon Study Guide

For market, you will also need to study feed as well as duck and goose meat cuts if you show those animals.

Junior (age 9-12)

- ☐ ***Where is the fluff?***
  -the soft feathers around the vent, cloaca, under tail
- ☐ ***How many primary flight feathers are there?***
  -10
- ☐ ***How many secondary flight feathers are there?***
  -10
- ☐ ***How many tail feathers are there?***
  -10-12
- ☐ ***What should the brooder temperature be set on 1st?***
  -95 degrees
- ☐ ***What is the incubation period?***
  -Chickens-20-21 days
  -Turkeys-28 days
  -Ducks-28 days
  -Geese-28-35 days
- ☐ ***What is the keel?***
  -flexible wedge of cartilage at tip of breastbone

Intermediate (age13-15)

- ☐ ***Where is the preen gland?***
  -near the base of tail
- ☐ ***What does OPA stand for?***
  -Ohio Poultry Association
- ☐ ***What & where is the keel?***
  -flexible wedge of cartilage at tip of breastbone
- ☐ ***Where is the vent?***
  -small opening on fluffy butt where eggs & excrement (poop) come out
- ☐ ***Where do you check for lice?***
  -near base of feathers & around vent
- ☐ ***What does NPIP stand for?***
  -National Poultry Improvement Plan

Senior (age 16-18)

- ☐ ***What is dubbing?***
  -procedure of removing the comb & wattles; helps prevent damage from freezing & fighting
- ☐ ***What does APA stand for?***
  -American Poultry Association
- ☐ ***What is the purpose of the gizzard?***
  -mechanical stomach of the bird; helps grind food
- ☐ ***Name a parasite that attacks feathers & how to treat.***
  -Lice. Dust or spray, sanitize
- ☐ ***What is the most important nutrient?***
  -Water
- ☐ ***Name a young turkey.***
  -poult
- ☐ ***Name a male turkey.***
  -Tom
- ☐ ***Name a female turkey.***
  -Hen

Showmanship Tasks to Demonstrate

Novice (1st year)

- Parts of the head
- Display the wing
- Primary flight feathers
- Secondary flight feathers
- Display the tail
- Parts of the leg (toe & hock)
- Incubation period
- Brooder temperature
- Name a disease
- Find the back
- Find the saddle
- Show the wing bar or bow

Junior (age 9-12)

- Any questions from novice list
- Where is the fluff
- Name an internal parasite & how to treat it
- Dew claw
- Display the feet
- What does NPIP stand for
- # of primary flight feathers
- # of secondary flight feathers
- Where is the keel

Intermediate (age 13-15)

- Any questions from novice & junior
- Find the preen gland
- Where do you check for lice & how to treat it
- Find the vent
- Show main tail feathers
- What does OPA stand for

Senior (age 16-18)

- Questions from previous lists
- What is dubbing
- Name a parasite that attacks feathers & how to treat
- Who administers NPIP in Ohio
- Describe artificial insemination in poultry
- Most important nutrient
- What does APA stand for
- Name 3 popular meat ducks
- Name of young turkey, male, female

Advanced (any winner from each class)

- Any questions from all classes
- Purpose of the gizzard
- Where sex feathers are on a chicken
- Name a breed with a speculum
- Purpose of the snood
- Only breed with double spurs
- Name 3 breeds named after states
- Two ways to sex chickens
- Three ways to sex a duck

Showmanship Task Answers…

Incubation period
Chickens 20-21 days
Turkeys 28 days
Ducks 28 days
Geese 28-35 days
(breed dependent)

Brooder temperature–95 degrees

NPIP-National Poultry Improvement Plan

Primary flight feathers-10
Secondary flight feathers-10
Tail feathers- 10-12

Keel–Flexible wedge of cartilage at tip of breastbone

Preen gland (uropygial)-near base of tail

Lice-check near base of feathers & around vent

Vent location–small opening on fluffy butt where eggs & excrement come Out

OPA–Ohio Poultry Association

Dubbing-Procedure of removing the comb & wattles; helps prevent damage from freezing & fighting

NPIP–administered by the Ohio Poultry Association

Most important nutrient–water

APA–American Poultry Association

Purpose of gizzard–the mechanical stomach of the bird; grinds food

Sex feather on a chicken–wings; females longer varying in size, males are all same length

Breed with a speculum–Mallards & Green Winged Teal; an iridescent patch of feathers

Purpose of a snood–to attract a mate

Breed with double spurs–Sumatra

Breeds named after states–Jersey Giant, New Hampshire, Delaware, Rhode Island Red

2 ways to sex a chicken–feathers & vent

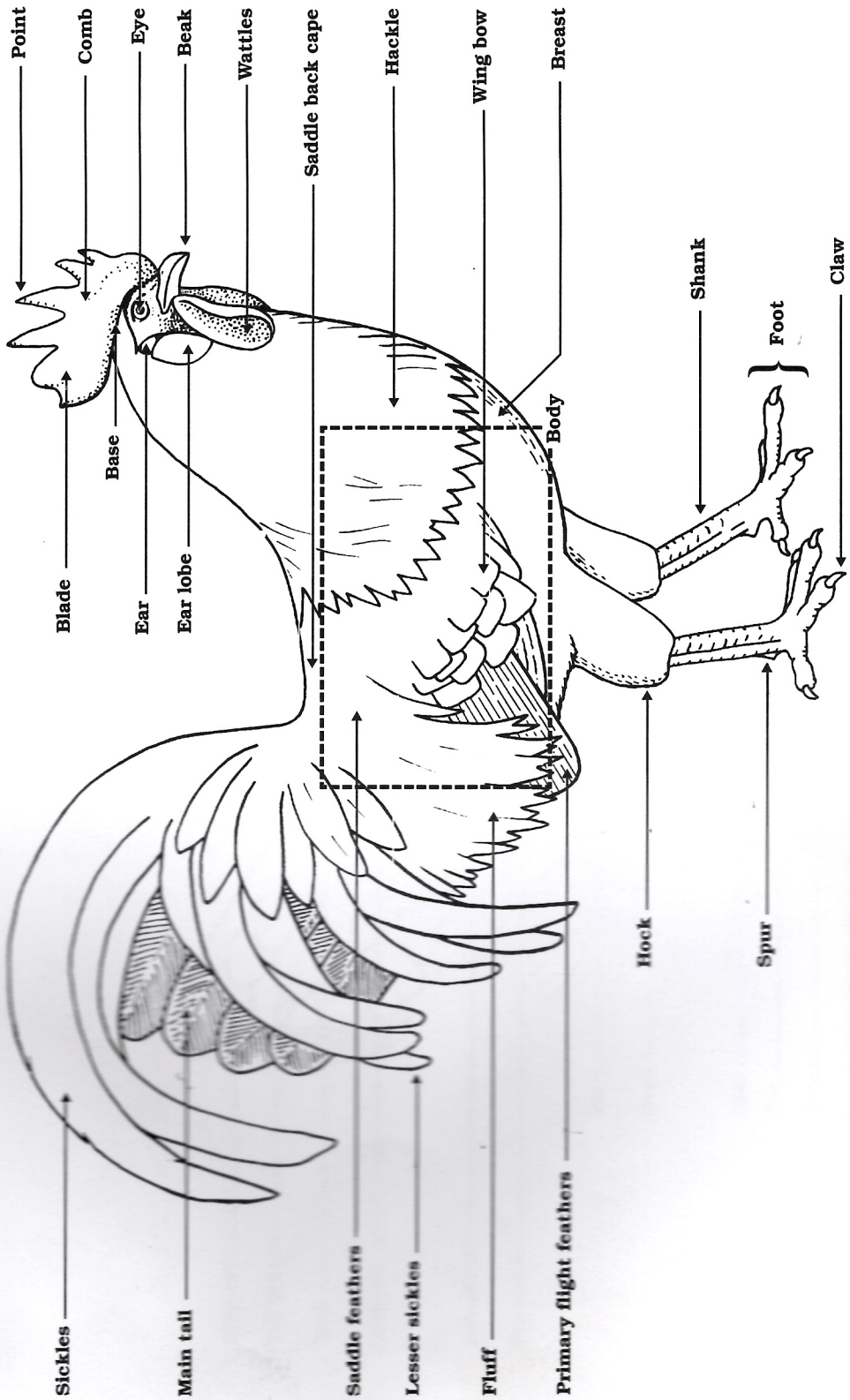
3 popular meat duck breeds–Pekin, Rouen, Muscovy

3 ways to sex a duck–feathers, vent, voice

Terms for young turkey, male, female–Poult, tom, hen

Use this poster in conjunction with **Anatomy: Match Part with Location** *situation/task statement and* **Parts of a Chicken (Cockerel)** *identification tags.*

Parts of a Chicken (Cockerel)

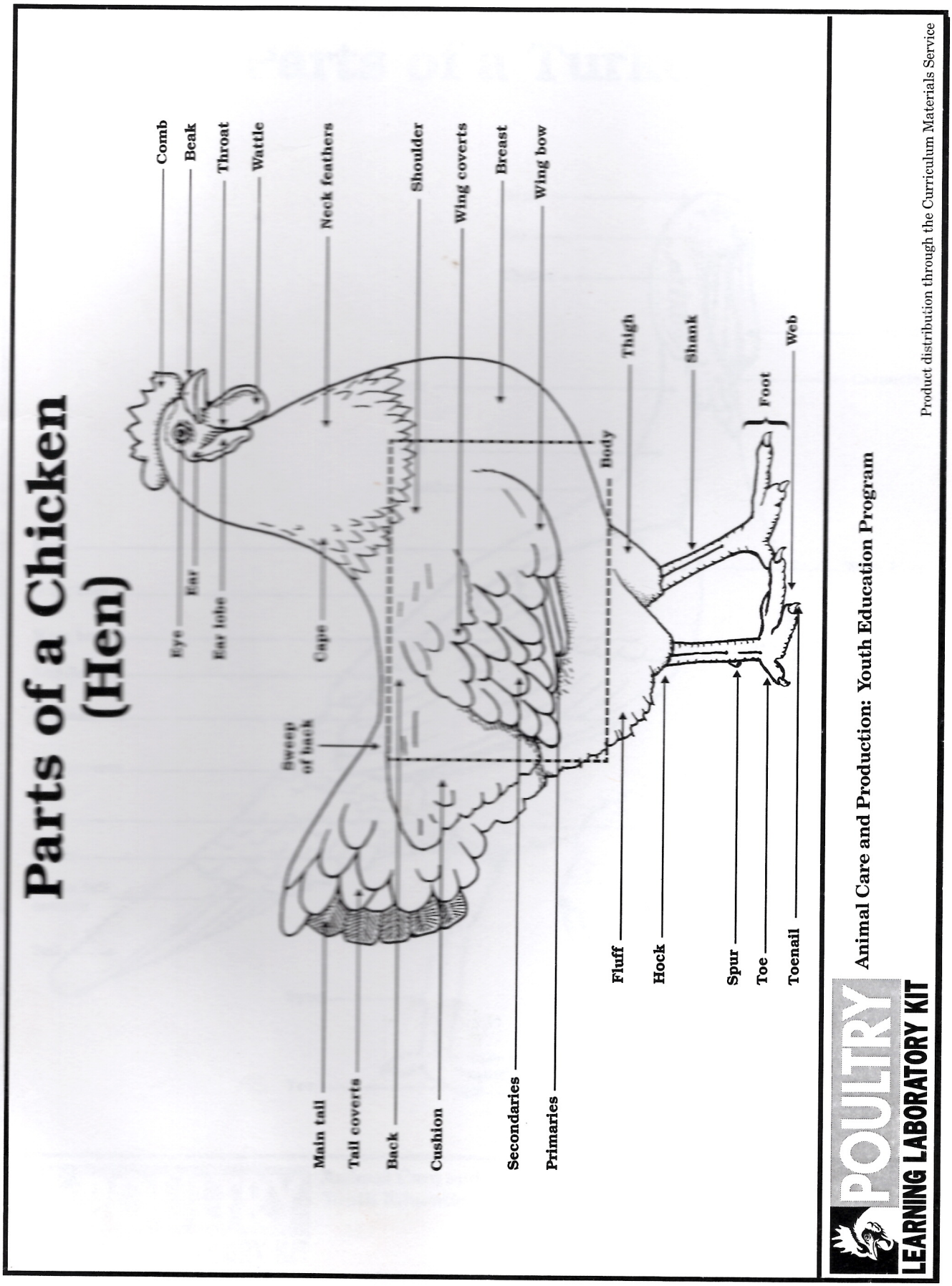


POULTRY LEARNING LABORATORY KIT

Animal Care and Production: Youth Education Program

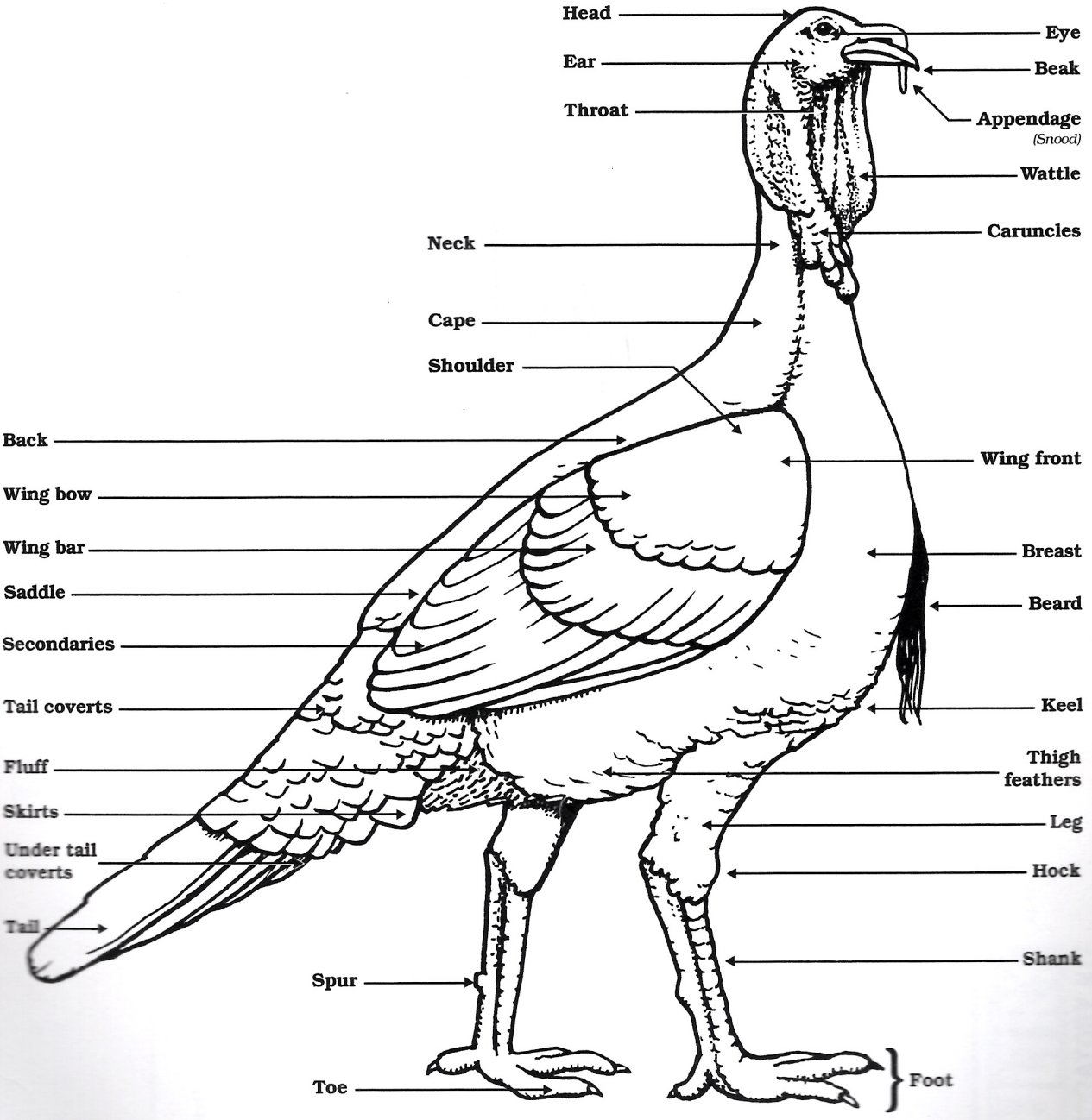
Product distribution through the Curriculum Materials Service

Use this poster in conjunction with **Anatomy: Match Part with Location** *situation/task statement and* **Parts of a Chicken (Hen)** *identification tags.*



Use this poster in conjunction with **Anatomy: Match Part with Location** *situation/task statement and* **Parts of a Turkey** *identification tags.*

Parts of a Turkey

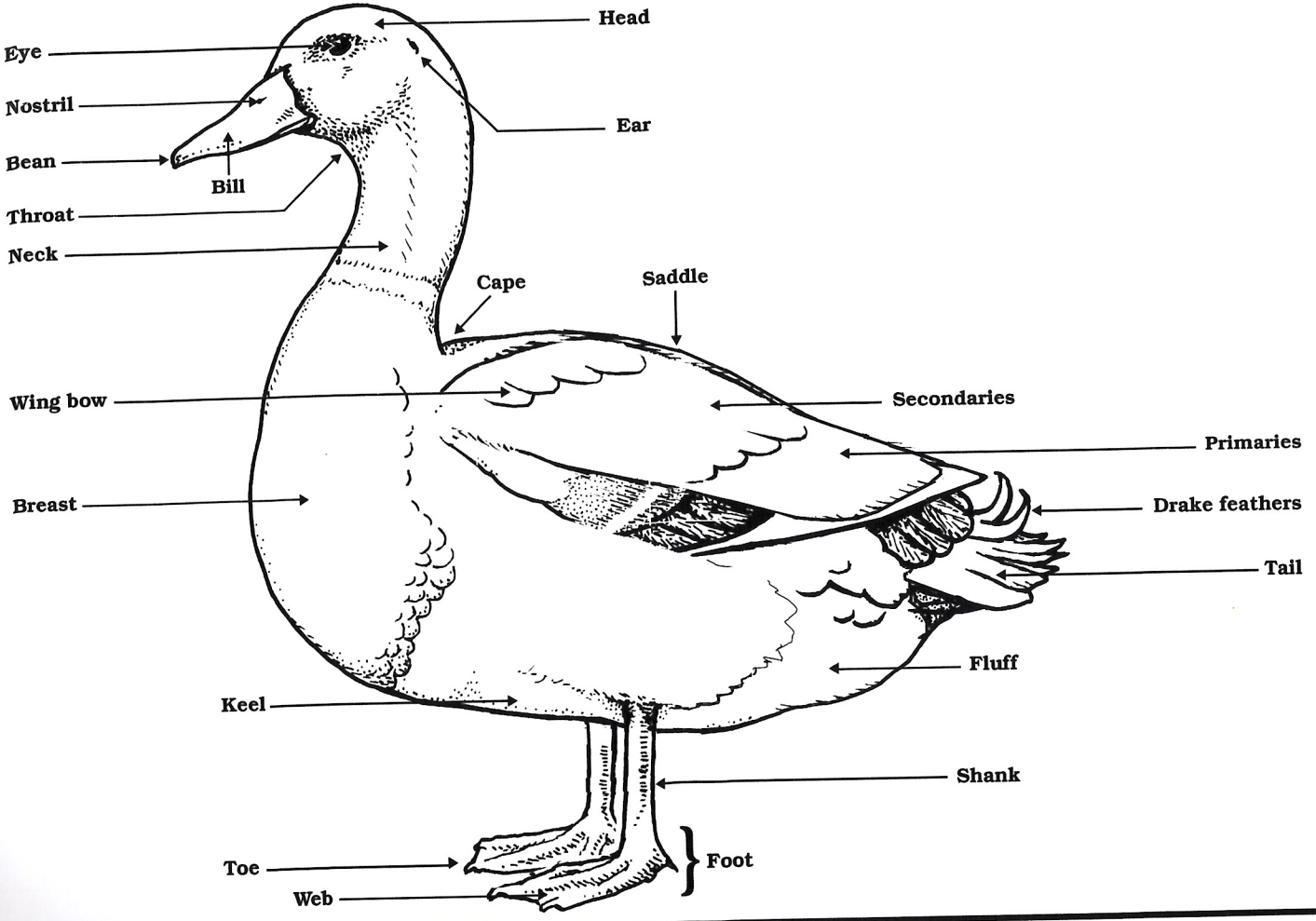


POULTRY
LEARNING LABORATORY KIT

Animal Care and Production: Youth Education Program

Product distribution through the Curriculum Materials Service

Parts of a Duck



POULTRY
LEARNING LABORATORY KIT

Animal Care and Production:
Youth Education Program

Product distribution through the Curriculum Materials Service

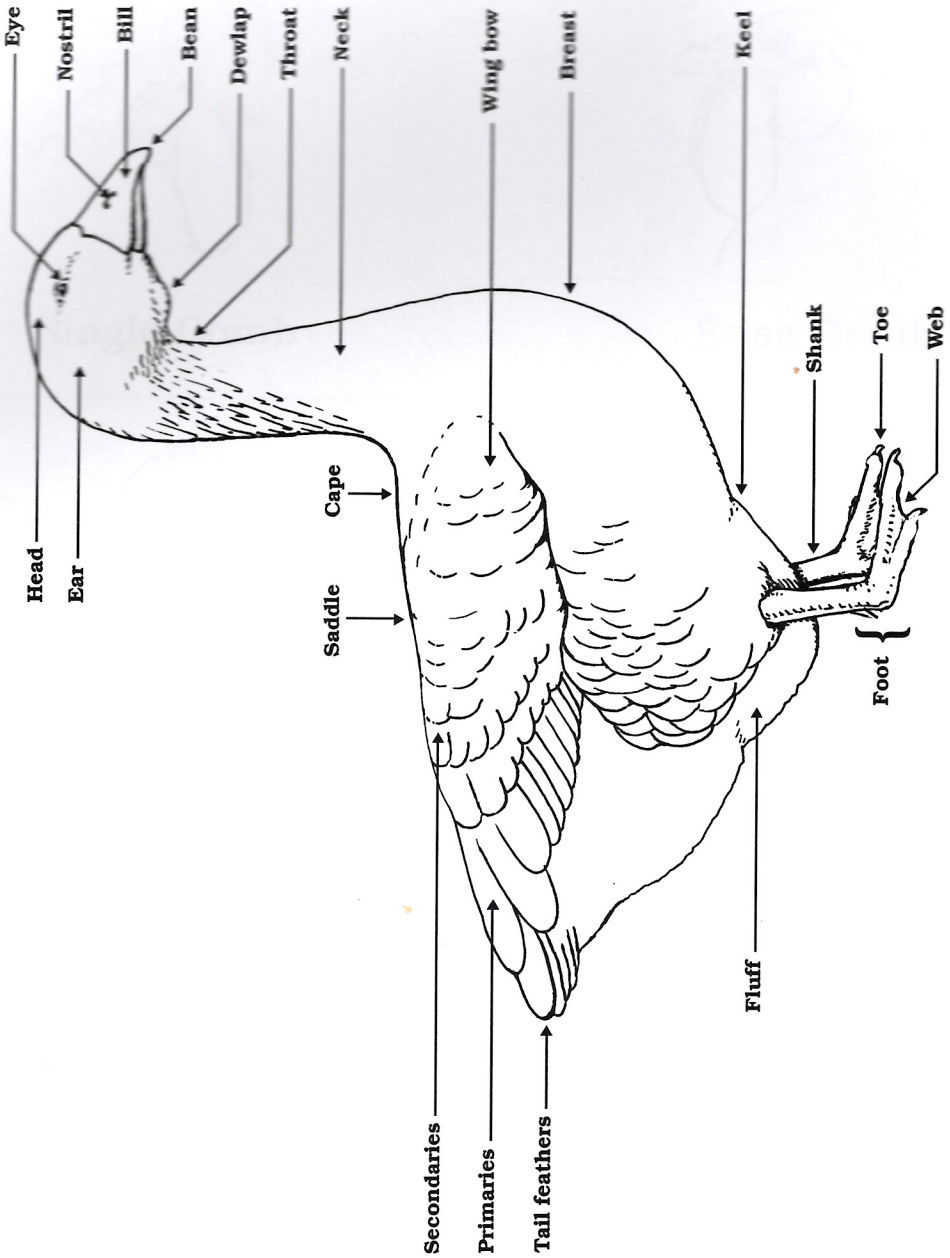
Use this poster in conjunction with **Anatomy: Match Part with Location** *situation/task statement and* **Parts of a Duck** *identification tags.*

Cards, Charts, Diagrams, Posters, and Prints

Anatomy 12

Use this poster in conjunction with **Anatomy: Match Part with Location** *situation/task statement and* **Parts of a Goose** *identification tags.*

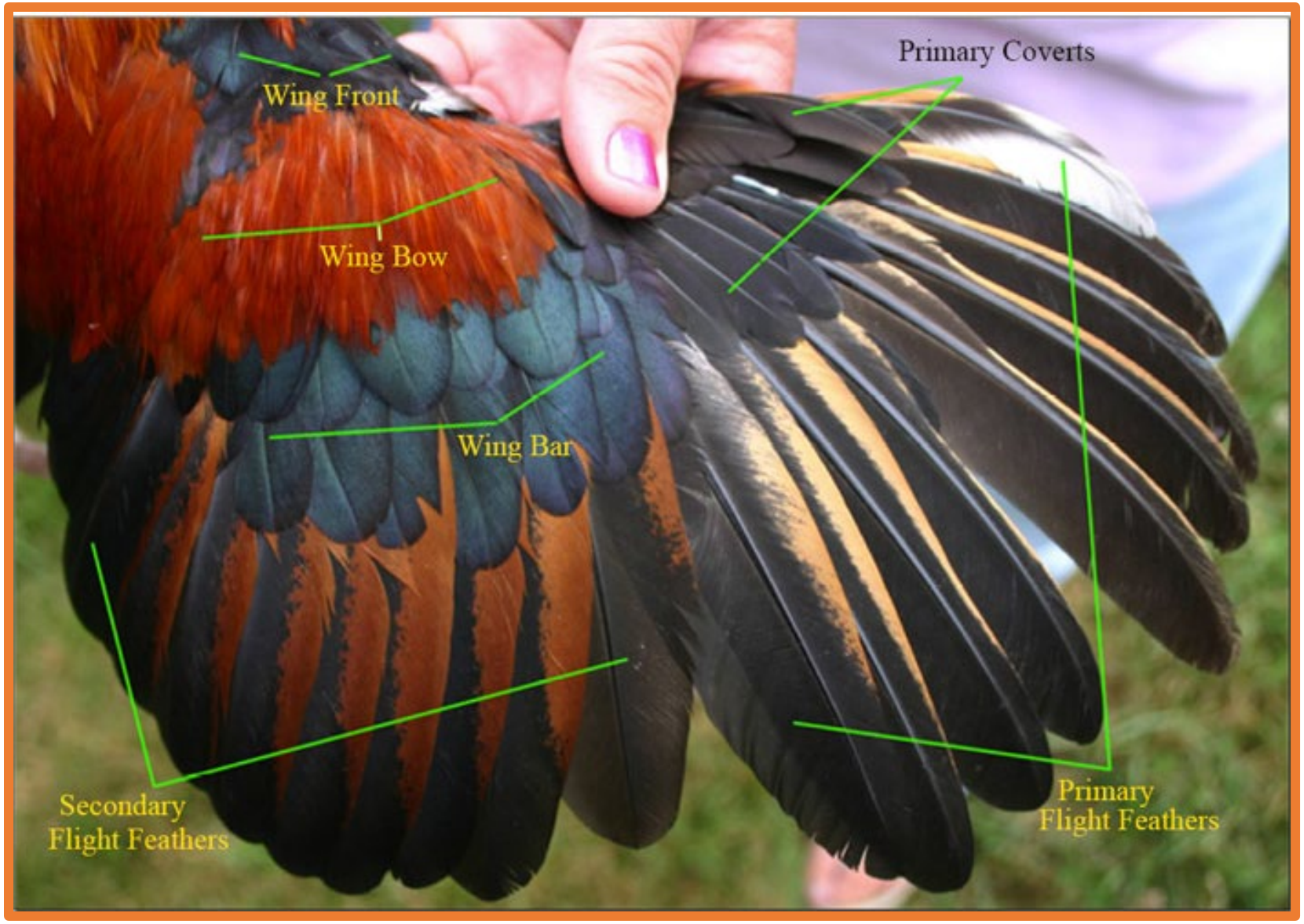
Parts of a Goose



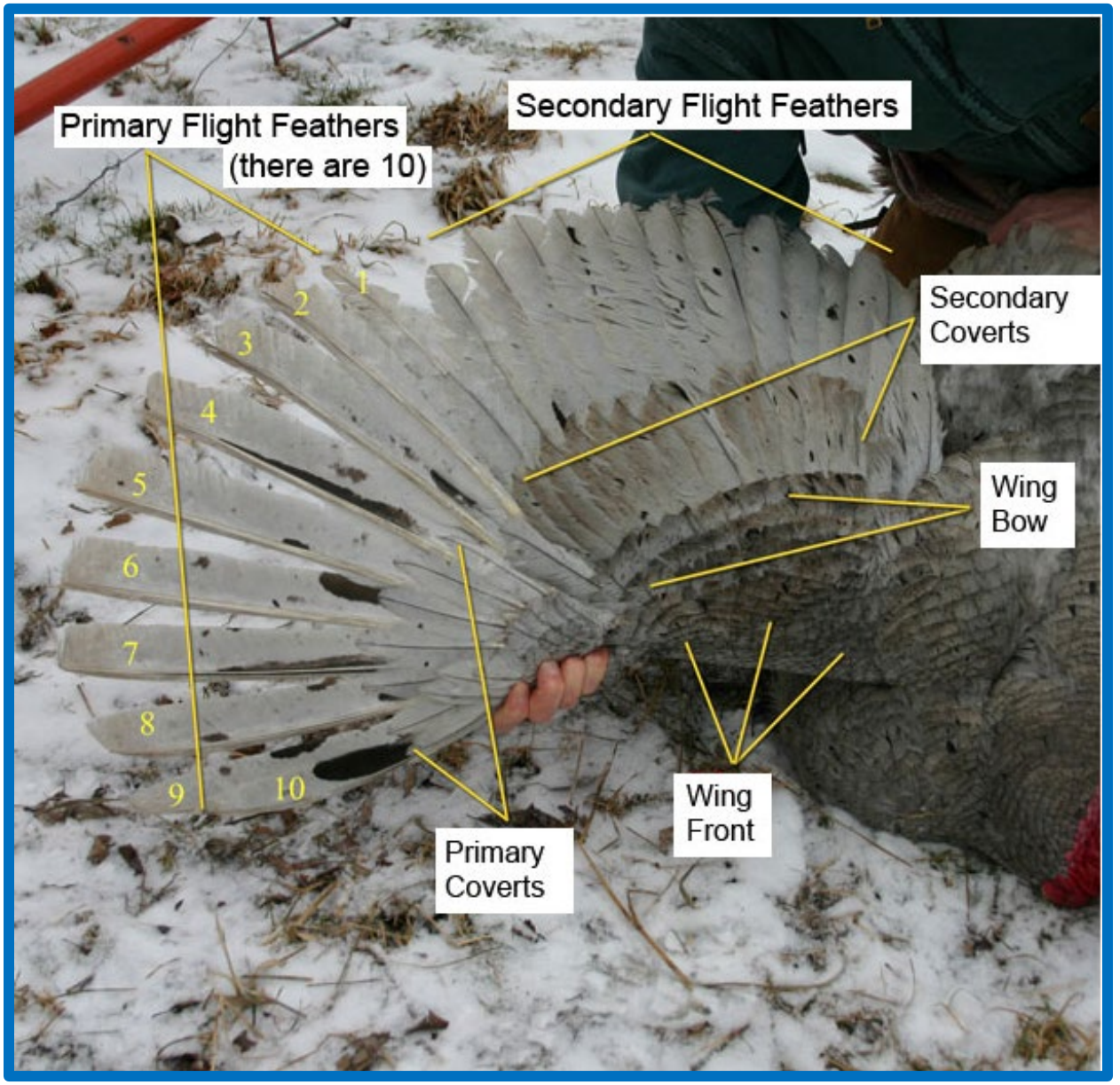
POULTRY
LEARNING LABORATORY KIT

Animal Care and Production:
Youth Education Program

Chicken Wing Parts



Turkey Wing Parts



Poultry Diseases / Parasites

DISEASE	Symptoms	Transmission	Treatment
Avian Influenza (all poultry)	usually no symptoms, (sometimes respiratory problems); sudden death	viral; transmission from wild birds (esp water fowl), bird droppings, bird to bird	eradication (to prevent, practice strict biosecurity measures)
Blackhead (all poultry)	decreased appetite, increased thirst, droopiness, diarrhea, darkening of the head	protozoan parasites in worms; birds eat infected worms or soil that contains it	sanitation, medication
Blue Comb or Turkey Coronavirus (turkeys)	low appetite, lethargy, diarrhea, death	Viral; bird droppings	eradication (to prevent, keep birds warm/dry
Bumblefoot (all poultry)	hot swollen footpads, black or brown scabs on bottom of foot	bacterial; enters the foot through a cut or scrape in skin then walking on dirty wet bedding	sanitation, medication
Botulism (all poultry)	weakness, limp neck muscles, paralysis, death	bacterial; consumption of decaying matter like old, wet food or decaying food scraps	clean/disinfect water & food bowls regularly, remove rotten food, feed only clean, dry food
Coccidiosis (all poultry)	pale droopy birds, diarrhea, huddling, foul odor	protozoan parasites; contact with droppings	sanitation, medication
Duck Virus Enteritis or Duck Plague (ducks)	diarrhea, thirst, hemmorrhages throughout body, death	bird to bird, contaminated water/food, infected litter	vaccination
Duck Virus Hepatitis (ducks)	sudden death	Viral; bird droppings or in brooder, affects ducks 2 days - 4 wks of age	vaccination (to prevent, strict sanitation and practice biosecurity measures)
Fowl Cholera (all poultry)	swollen wattles, darkening of head & unfeathered parts, difficulty breathing, lethargy, sudden death	bacterial; bird droppings and contiminated bedding, feed, water	eradication of infected birds & strict sanitation
Fowl Pox, Avian Pox (all poultry)	lesions on comb, wattles, mouth, throat; drop in egg production	viral; bird to bird and by infected misquitoes	vaccination
Infectious Bronchitis (all poultry)	respiratory distress like coughing & gasping	viral; bird to bird	vaccination

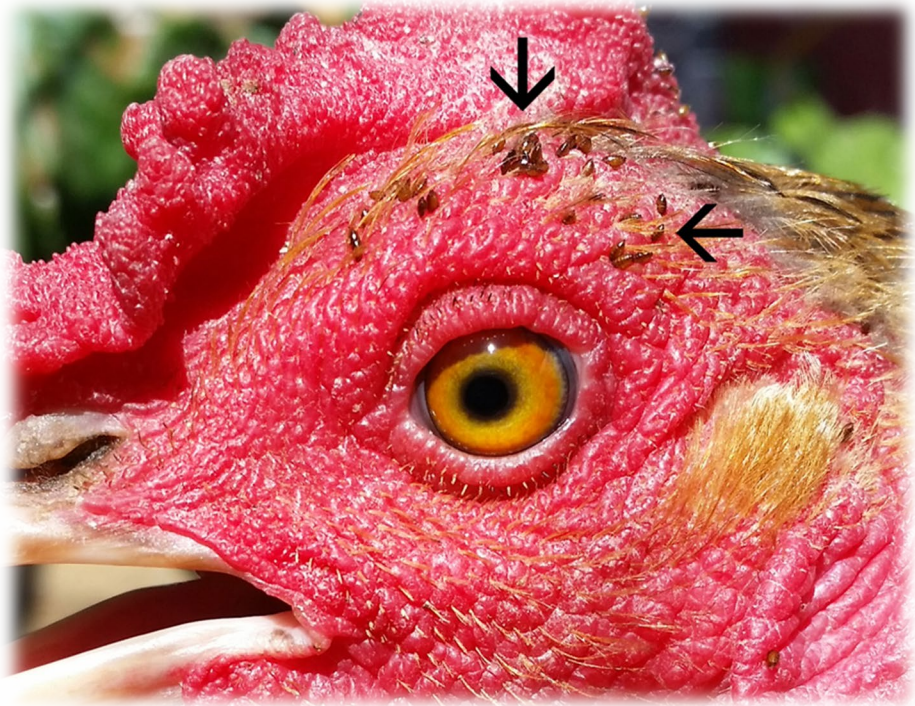
Infectious Sinusitus (turkeys)	swelling under the eye, will swell shut, coughing, sneezing, stunted growth	bacterial (mycoplasma gallisepticum); bird to bird, droppings, contaminated materials, transmitted into eggs from infected hens	eradication (to prevent, vaccination & practice strict biosecurity measures)
Fowl Thyphoid (now mostly chickens, has been found in ducks/turkeys)	lethargy, yellow diarrhea, sporadic mortality	bacterial (salmonella gallinarum); affects adult birds,transmitted into eggs from infected hens or if adult chicken eats eggs	strict sanitation, (to prevent, practice strict biosecurity measures)
Note: fowl typhoid & pullorum are closely related; you may see the names interchangeably			
Pullorum/Bacillary White Diarrhea (now mostly chickens, has been found in ducks/turkeys)	droopiness, white diarrhea, pasted vent,	bacterial (salmonella pullorum); affects birds up to 3 wks old,transmitted into eggs from infected hens or cannibalism	eradication (to prevent, practice strict biosecurity measures)

PARASITES	Symptoms	Transmission	Treatment
Ascarid, round worm	droopiness, diarrhea, 1 1/2 inches to 3 inches long	birds eat worm eggs passed through bird droppings; worms live in intestine but may migrate into oviduct and become incorporated into hen's egg	
Cecal worms (all poultry)	small white worms up to 1/2 inch, normally do not affect bird's health themselves, but are carriers of bacteria	birds eat worms in droppings or earthworms; cecal worms can contain bacteria that causes blackhead	medication (levamisole & fenbendazole)
Lice (all poultry)	small insects, 6 legs, larger than mites; look along shaft of feather for insect, will lay eggs in clusters	bird to bird	dust or spray, strict sanitation
Mites (all poultry)	very small insects, usually first around vent, then spreading to comb, wattle, rest of bird	bird to bird	dust or spray, strict sanitation
Thread worms, capallaria worms (all poultry)	reduced growth, reduced egg production, death; found in crop/esophagus	worms lay eggs in esophagus and are passed in droppings	preventative measures (clean bedding, strict sanitation)

#1

#2

#3



#4

#5

#6

#7

#8

A type of internal parasite (small in size, white in color) that infest the ceca. They are extremely common and thrive on the ground or litter of overcrowded bird enclosures. Eggs are also ingested by earthworms, which are then consumed by the chicken who becomes infected through the earthworm.

Health Key:

1. Bumblefoot
2. Coccidiosis
3. Mites
4. Lice
5. Fowl Pox
6. Blackhead
7. Fowl Cholera
8. Cecal Worms

The Nine Different Comb Types

Buttercup

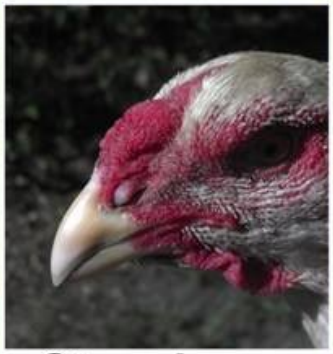
Carnation

Cushion

Pea

Single

Rose



Strawberry

V comb

Walnut

www.BackYardChickens.com

Medication Label

Trade Name of Drug — **Carramycin-152**

(oxytetracycline HCl) — *Active Ingredients*

DIRECTIONS FOR USE:

See package indications and directions for use.

Cautions and Warnings —

Warning: The use of this drug must be discontinued for 5 days before treated animals are slaughtered for food. Exceeding the highest recommended dosage level may result in antibiotic residues in meat beyond the withdrawal time.

Withholding Times

Store below 77°F (25°C).
Keep dry and keep away from light.

Storage

Quantity of Contents — Net contents: 4.78 oz. packet

Distributed by

Livestock Health, Inc. — *Name of Distributor*

Use this diagram in conjunction with the **Medication Directions** *task and answer key and* **Medication Directions Parts** *identification tags.*

Medication Directions

Drug Name

Carramycin-152

Active Ingredients

(oxytetracycline HCl as soluble powder)

Species and Animal Class

For control and treatment of specific disease in poultry, cattle, swine, and sheep.

CAREFULLY READ ALL DIRECTIONS BEFORE USING THIS PRODUCT.

Soluble Powder for Use in Drinking Water Only.

Active Ingredients: Carramycin-152 is a broad-spectrum **antibiotic**. This 4.78 oz packet contains 102.4 grams oxytetracycline HCl (after mixing with clean, fresh water - 512 gallons containing 200 mg oxytetracycline HCl per gallon; 256 gallons containing 400 mg oxytetracycline HCl per gallon; 128 gallons containing 800 mg oxytetracycline HCl per gallon).

Approved Uses

Indications: For control of **poultry** diseases caused by organisms susceptible to oxytetracycline.

Recommended Dosage

Add the following amount to two (2) gallons of fresh, clean water to make the stock solution.
Mix one (1) ounce of stock solution per one (1) gallon of drinking water.

Dosage

		Dosage	Packs/2 Gallons Stock Solution
Chickens	Infectious synovitis	200mg/gal	1/2
	Chronic respiratory disease	800mg/gal	2
	Fowl cholera	800mg/gal	2
Turkeys	Infectious synovitis	400mg/gal	1
	Hexamitiasis	200mg/gal	1/2

Route of Administration

Cautions and Warnings

Cautions: 1. Carramycin-152 is for use in flock drinking water only. 2. Medicate continuously at the first clinical signs of disease and continue for 7 to 14 consecutive days. If improvement is not noted within 24 to 48 hours, consult a veterinarian or diagnostic laboratory to determine diagnosis and advice on dosage. 3. Use as sole source of oxytetracycline. Do not use for more than 14 consecutive days in chickens and turkeys or five (5) consecutive days in cattle, sheep, or swine. 4. Carramycin-152 is to be stored below 77° F (25° C). 5. The concentration of drug required in medicated water must be adequate to compensate for variations in age of the animal, feed consumption rate, and the environmental temperature and humidity – each of which affects water consumption.

Storage Requirements

Withholding Times

Warning: Do not administer to chickens, turkeys, swine, cattle, or sheep within five (5) days of slaughter. Do not administer to chickens or turkeys producing eggs for human consumption.

Available Sizes

How Supplied: Carramycin-152 soluble powder is available in packets of 4.78 oz.

Livestock Drug – *Not For Human Use*
KEEP OUT OF CHILDREN'S REACH

Distributed by
Livestock Health, Inc.

TAKE TIME

OBSERVE LABEL DIRECTIONS

Answer Key

a. How many packs of soluble powder Carramycin-152 do you mix with two (2) gallons of water to make the stock solution?

You mix 2 packs of Carramycin-152 with 2 gallons of water.

b. How much stock solution do you mix with one (1) gallon of drinking water?

You mix 1 ounce of stock solution with 1 gallon of water.

c. How many packs of soluble powder Carramycin-152 must you purchase to treat your broilers for 10 days?

You must purchase 20 packs of Carramycin-152.

d. How many ounces of stock solution will you use per day?

You will use 256 ounces of stock solution per day.

e. How many milligrams of oxytetracycline will each broiler receive?

Each broiler will receive 64 mg.

f. What is the first day your broilers can safely be sold for food?

June 23, XXXX – 5 days after the treated drinking water was last given on June 18th.

Carramycin-152

(oxytetracycline HCl as soluble powder)

For control and treatment of specific disease in poultry, cattle, swine, and sheep.

CAREFULLY READ ALL DIRECTIONS BEFORE USING THIS PRODUCT.

Soluble Powder for Use in Drinking Water Only.

Active Ingredients: Carramycin-152 is a broad-spectrum **antibiotic**. This 4.78 oz packet contains 102.4 grams oxytetracycline HCl (after mixing with clean, fresh water - 512 gallons containing 200 mg oxytetracycline HCl per gallon; 256 gallons containing 400 mg oxytetracycline HCl per gallon; 128 gallons containing 800 mg oxytetracycline HCl per gallon).

Indications: For control of **poultry** diseases caused by organisms susceptible to oxytetracycline.

Recommended Dosage

Add the following amount to two (2) gallons of fresh, clean water to make the stock solution. Mix one (1) ounce of stock solution per one (1) gallon of drinking water.

		Dosage	*Packs/2 Gallons Stock Solution*
Chickens	Infectious synovitis	200mg/gal	1/2
	Chronic respiratory disease	800mg/gal	2
	Fowl cholera	800mg/gal	2
Turkeys	Infectious synovitis	400mg/gal	1
	Hexamitiasis	200mg/gal	1/2

Cautions: 1. Carramycin-152 is for use in flock drinking water only. 2. Medicate continuously at the first clinical signs of disease and continue for 7 to 14 consecutive days. If improvement is not noted within 24 to 48 hours, consult a veterinarian or diagnostic laboratory to determine diagnosis and advice on dosage. 3. Use as sole source of oxytetracycline. Do not use for more than 14 consecutive days in chickens and turkeys or five (5) consecutive days in cattle, sheep, or swine. 4. Carramycin-152 is to be stored below 77° F (25° C). 5. The concentration of drug required in medicated water must be adequate to compensate for variations in age of the animal, feed consumption rate, and the environmental temperature and humidity – each of which affects water consumption.

Warning: Do not administer to chickens, turkeys, swine, cattle, or sheep within five (5) days of slaughter. Do not administer to chickens or turkeys producing eggs for human consumption.

How Supplied: Carramycin-152 soluble powder is available in packets of 4.78 oz.

TAKE TIME

OBSERVE LABEL DIRECTIONS

Livestock Drug – *Not For Human Use*

KEEP OUT OF CHILDREN'S REACH

Distributed by

Livestock Health, Inc.

Parts Identification

Identifying common poultry parts found in a retail store is important to the consumer. Prepackaging has allowed poultry to be sold in many forms. The consumer should know the parts of the carcass that are usually prepackaged for sale at the meat counter. Below are photographs and definitions for 17 of the more common broiler parts found in retail stores. *Figures 29-45* show the parts mentioned above and will assist you in their proper identification.

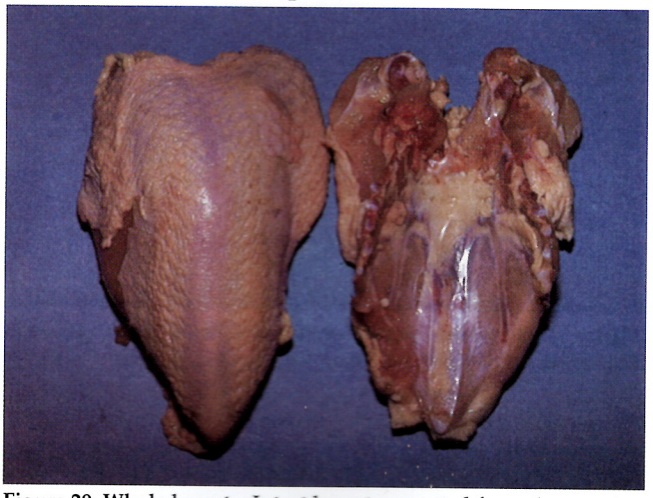


Figure 29. Whole breast—Intact breast separated from the remainder of the chicken at the junction of the vertebral and sternal ribs. The sternal ribs remain attached to the breast bone and the vertebral ribs are attached to the back. May be displayed with skin side up or skin side down.

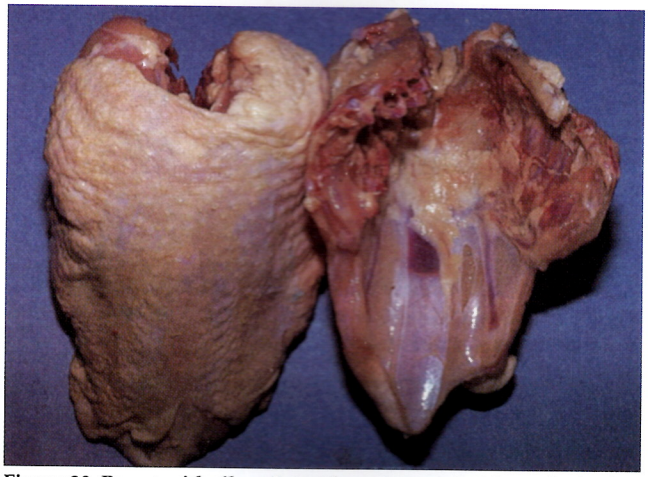


Figure 30. Breast with ribs—Intact breast separated from the backbone at the juncture of the back. The entire rib cage is attached to the breast. May be displayed with skin side up or skin side down.

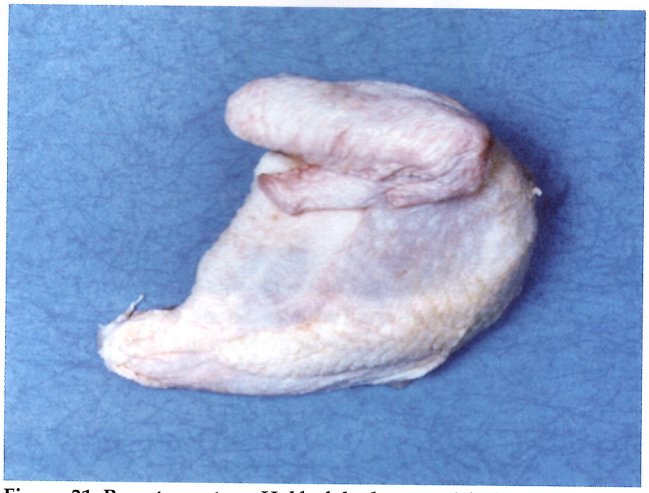


Figure 31. Breast quarter—Half of the breast with the wing and back portion attached.

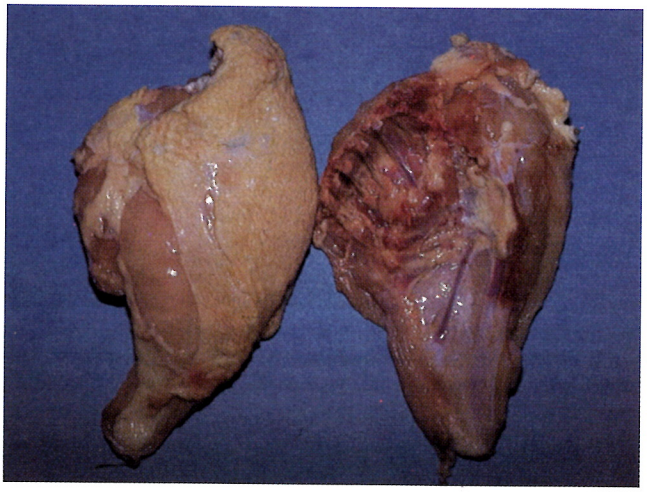


Figure 32. Split breast—Breast with ribs cut in half parallel to breast bone to approximately two equal halves. One or both halves may be displayed.

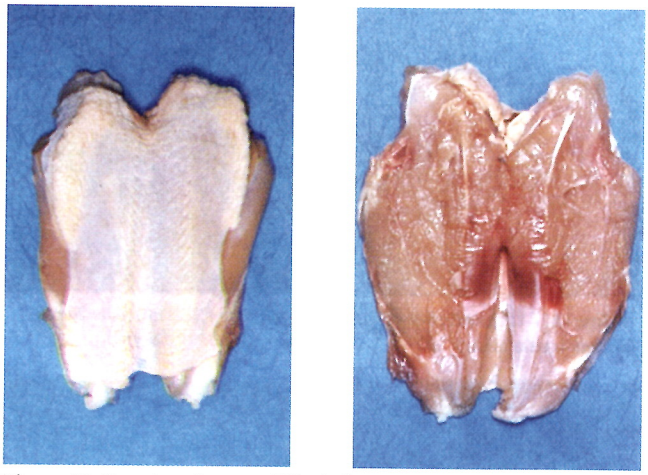


Figure 33. Boneless breast—Whole breast with bones removed. Skin can be attached or removed.

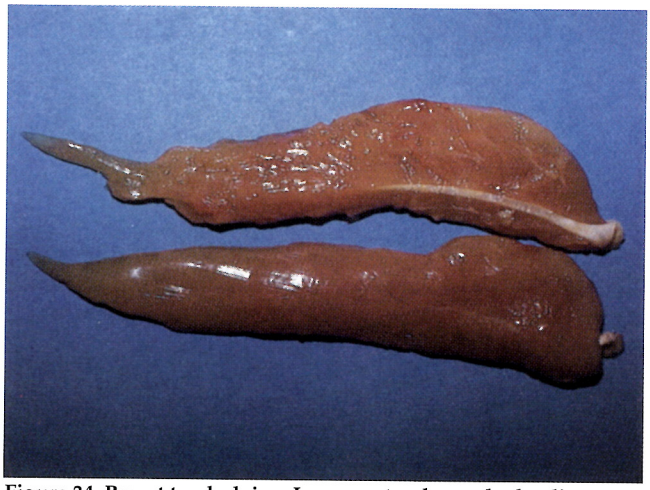


Figure 34. Breast tenderloin—Inner pectoral muscle that lies up against the keel bone. It is the long slender muscle that is removed from the inner portion of the breast meat.

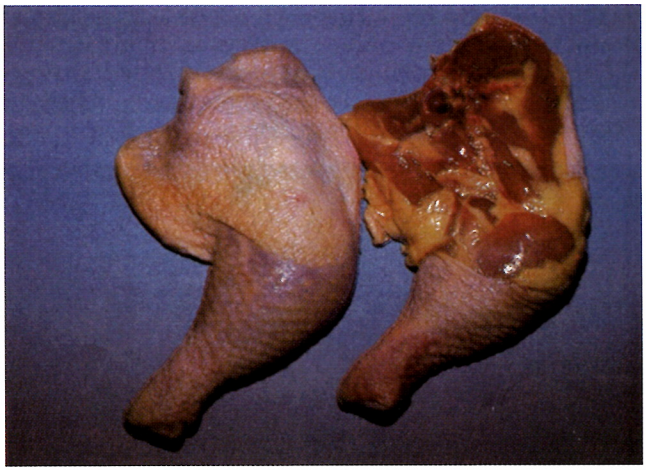


Figure 35. Whole leg—Thigh and drumstick attached with back portion removed. The oyster can be attached. The oyster is the piece of meat on the back that lies just in front of the hip joint.

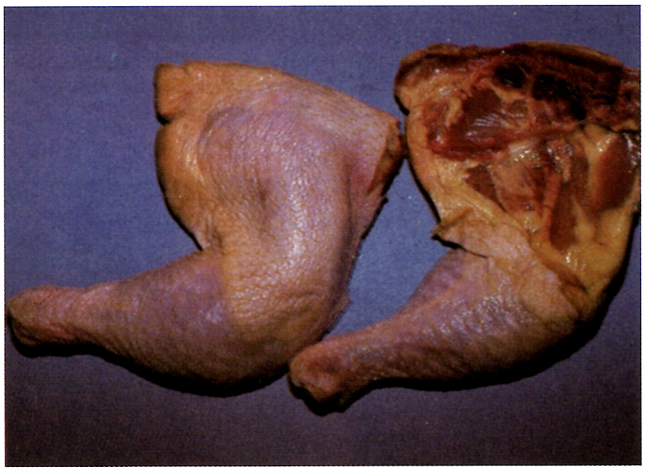


Figure 36. Leg quarter—Thigh and drumstick with a portion of the back attached.

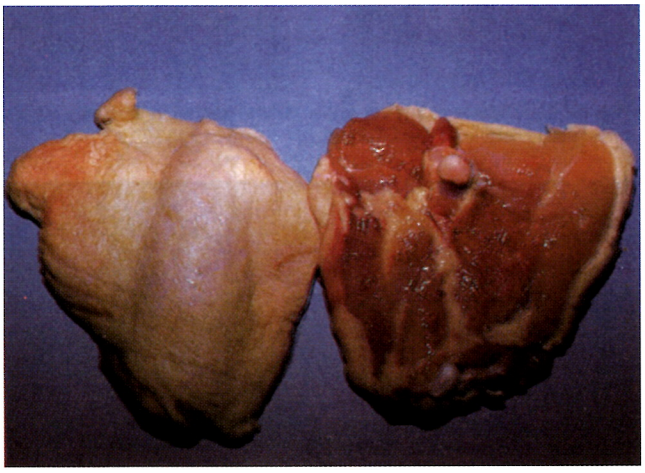


Figure 37. Thigh—Upper portion of the whole leg that is separated at the knee and hip joint.

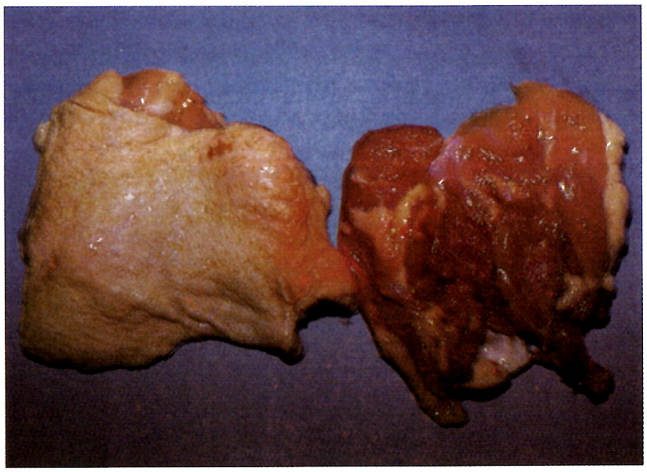


Figure 38. Boneless thigh—Whole thigh with bone removed. Skin may or may not be attached.

Figure 39. Drumstick—Lower portion of the leg that is separated at the knee and hock joints.

Figure 40. Wings—Entire wing with all muscle, bone and skin attached except that the wing tip, or portions of the wing tip, may be removed.

Figure 41. Giblets—Heart, gizzard and liver. Can display all or one in contest.

Figure 42. Neck—The neck bones with flesh attached. The skin may or may not be present.

Figure 43. Back—The back of the carcass beginning at the base of the neck and extending backward to the tail. It includes the vertebral ribs, hip bones and attached flesh. All or portions of the oyster may also be attached.

Figure 44. Flat—The part of the wing between the first and second joints of the wing. This is the part of the wing with two bones between the wing tips and the drummette.

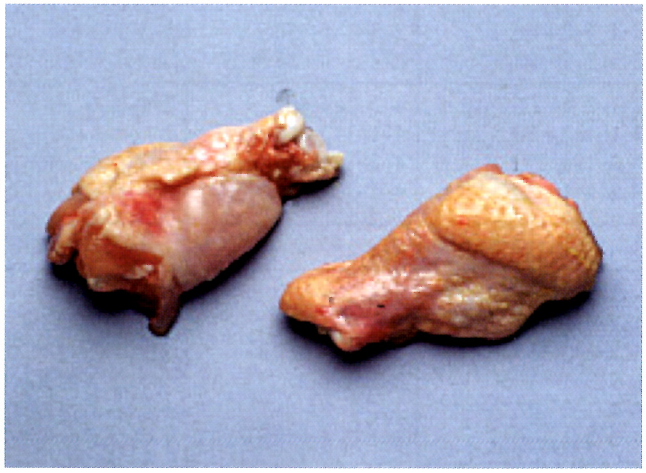
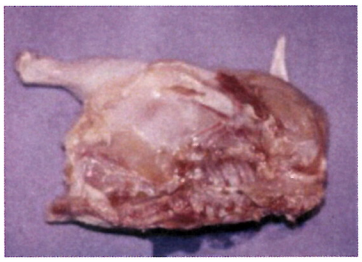


Figure 45. Drummette—The part of the wing between the second and third joint (shoulder).

Chicken Carcass Parts Identification

Half (external view)



Half (internal view)

Front half (dorsal view)

Front half (ventral view)

Rear half (external view)

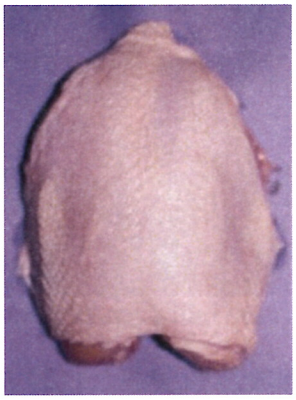
Rear half (internal view)

Whole breast with ribs (external view)

Whole breast with ribs (internal view)

Boneless, skinless whole breast with rib meat
(external view)

Boneless, skinless whole breast with rib meat
(internal view)



Whole breast
(external view)

Whole breast
(internal view)

Boneless, skinless, whole breast
(external view)

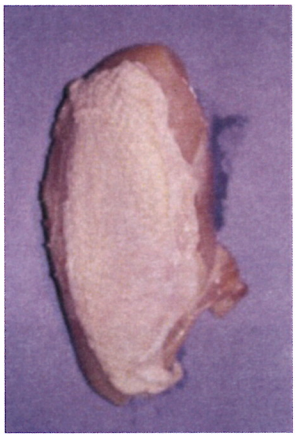
Boneless, skinless, whole breast
(internal view)

Split breast with ribs
(external view)

Split breast with ribs
(internal view)

Boneless, skinless split breast with rib meat
(external view)

Boneless, skinless split breast with rib meat
(internal view)



Split breast
(external view)

Split breast
(internal view)

Boneless, skinless split breast
(external view)

Boneless, skinless split breast
(internal view)

Breast quarter (external view)

Breast quarter (internal view)

Breast quarter without wing (external view)

Breast quarter without wing (internal view)

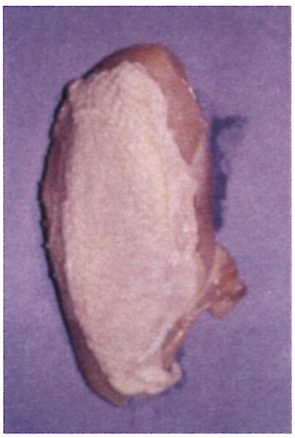
Tenderloin

Wishbone (external view)

Wishbone (internal view)

Boneless, skinless split breast with rib meat
(external view)

Boneless, skinless split breast with rib meat
(internal view)



Split breast
(external view)

Split breast
(internal view)

Boneless, skinless split breast
(external view)

Boneless, skinless split breast
(internal view)

Breast quarter (external view)

Breast quarter (internal view)

Breast quarter without wing (external view)

Breast quarter without wing (internal view)

Tenderloin

Wishbone (external view)

Wishbone (internal view)

Leg quarter (external view)

Leg quarter (internal view)

Leg (external view)

Leg (internal view)

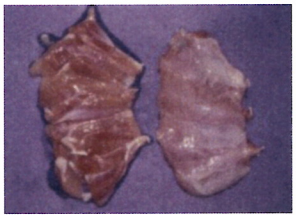
Thigh with back portion (external view)

Thigh with back portion (internal view)

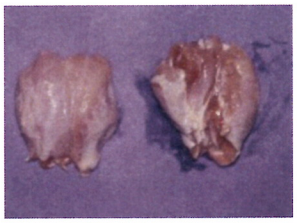
Thigh (external and internal view)

Boneless, skinless thigh
(internal and external view)

Drumstick
(2 external views)



Boneless, skinless drum – flattened
(internal and external view)



Boneless, skinless drum – rolled
(internal and external view)

Wing
(top and bottom views)

Drumette
(top and bottom views)

Wing portion
(top and bottom views)

Liver "with gall bladder removed"
(internal and external view)

"gizzard" with lining removed
(internal and external view)

Heart
(ventral and dorsal view)

Neck
(with skin and skinless)

Paws
(top and bottom view)

MARKET POULTRY
IDENTIFICATION OF READY-TO-COOK POULTRY PARTS

Further processing of whole carcasses has allowed poultry to be sold in many forms. Identifying poultry parts commonly found in a retail store is important to the consumer. Below are photographs and definitions for 24 of the more common chicken parts found in a meat display case. Parts from any of the three weight groups (broilers, heavy broilers, and turkeys) may be used in the contest.

1. Whole Breast

The WHOLE BREAST is the intact breast separated from the remainder of the chicken at the junction of the vertebral and sternal ribs. The sternal ribs remain attached to the breast bone and the vertebral ribs are attached to the back. May be displayed with skin-side up or skin-side down.

2. Breast with Ribs

The BREAST WITH RIBS is the intact breast separated from the backbone at the juncture with the back. The entire rib cage is attached to the breast. It may be displayed with the skin side up or skin side down.

3. Breast Quarter

The BREAST QUARTER is half of the breast with the wing and back portion attached.

4. Breast Quarter Without Wing

As the name indicates, the BREAST QUARTER WITHOUT WING is the breast quarter with the back portion attached, but without the wing.

5. Split Breast

The SPLIT BREAST is the whole breast cut in half parallel to breast bone to create approximately two equal halves. One or both halves may be displayed with or without ribs.

6. Boneless Breast

The BONELESS BREAST is the whole breast with the bones removed. The skin can be attached or removed.

7. Boneless Split Breast

The BONELESS SPLIT BREAST is a half breast with the bones removed. The skin can be attached or removed.

8. Tenderloin

The TENDERLOIN is the inner pectoral muscle that lies up against the keel bone. It is the long slender muscle that is removed from the inner portion of the breast meat.

9. Leg Quarter

The LEG QUARTER is thigh and drumstick with a portion of the back attached.

10. Whole Leg

The WHOLE LEG is the thigh and drumstick with the back portion removed. The ribeye muscle or ‘oyster’ may be attached. The oyster is the piece of meat on the back that lies just in front of the hip joint. The tail may or may not be removed

11. Thigh with Back

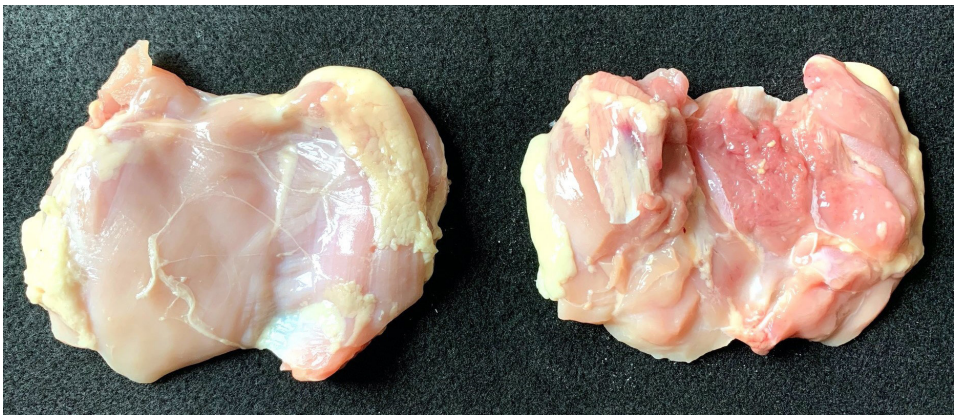
The THIGH WITH BACK is the upper portion of the leg quarter that is separated at the knee and includes part of the back beyond the hip joint

12. Thigh

The THIGH is the upper portion of the whole leg that is separated at the knee and hip joints. The back portion is not attached.

13. Boneless Thigh

The BONELESS THIGH is the whole thigh with the bone removed. The skin may or may not be attached.



14. Drumstick

The DRUMSTICK is the lower portion of the leg that is separated at the hock and knee joints.

15. Boneless Drumstick

The BONELESS DRUMSTICK is the lower portion of the leg that is separated at the hock and knee joints with the bone removed. The skin may or may not be attached.

16. Whole Wing

The WHOLE WING is the entire wing with all muscle, bone, and skin attached except that the wingtip may be removed.

17. Wing Drumette

The WING DRUMETTE is the part of the wing between the second and third joint (shoulder).

18. Wing Flat

The WING FLAT is the part of the wing between the first and second joints of the wing. This is the part of the wing with two bones between the wingtips and the drumette.

19. Back

The BACK is the back of the carcass beginning at the base of the neck and extending back to the tail. It includes the vertebral ribs, hip bones, and attached flesh. All or portions of the oyster may also be attached. The oyster is the piece of meat on the back that lies just in front of the hip joint. The tail may or may not be removed.

20. Neck

The NECK is composed of the neck bones with flesh attached. The skin may or may not be present.

21. Paws

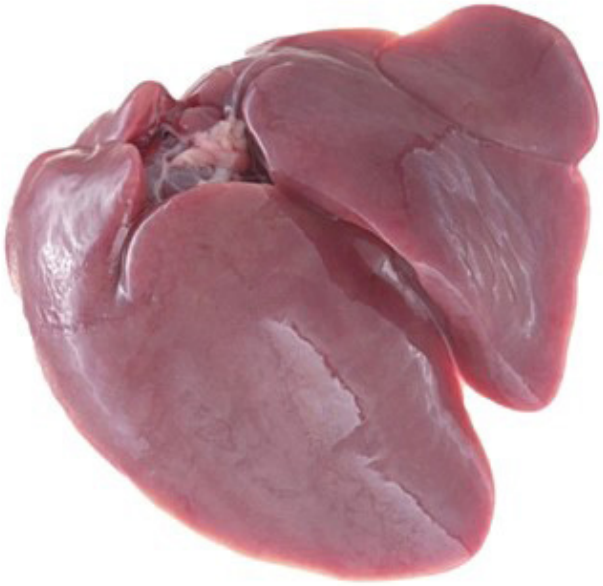
PAWS is the whole foot with the cuticle removed and cut midway to the hock joint.

22. Gizzard

The GIZZARD is the thick-walled muscular organ that has been cross-sectioned into two halves.

23. Liver

The LIVER is the reddish-brown, wedge-shaped organ with four lobes of unequal size and shape.



24. Heart

The HEART is the triangular-shaped, four-chambered muscular organ.

Turkey Meat Cuts

Ready-To-Cook Poultry

Carcasses are graded A, B or C quality. Factors used in judging ready-to-cook carcasses in a 4-H Poultry Judging Contest are:

- exposed flesh,
- missing parts, and
- disjointed and broken bones.

Always mark your scorecard for the lowest grade defect found on the carcass.

Because of the length of most judging contests, carcasses will dry out. You should not place carcasses based on off-color areas such as bruised, dried out or brown burn areas. In addition, feathers and pin-feathers are not used as a quality factor in ready-to-cook grading.

Carcasses used for contests will usually have Grade A fleshing, conformation and fat cover. You should, however, be prepared to recognize poor fleshing and finish if such birds are available for a contest.

The carcasses you judge will be hanging from shackles. This method is used so it is easier to see all parts of the bird. **Carcasses cannot be touched or handled during judging.** It is permissible to turn the shackle to see the whole bird as long as you do not touch the carcass. If the ready-to-cook carcasses are on plates, judge them as you see them.

Ready-to-cook poultry will be judged according to the quality specifications in *Table 3* on page 24. There are four weight categories for determining the size of exposed flesh on the different parts. There are no weight ranges for missing parts and disjointed and broken bones. Learn a method of judging carcasses by looking at one part at a time.

Exposed Flesh

Cuts, tears and trims are a result of a miscut with a knife or tearing of the skin during a processing operation. When ready-to-cook poultry is downgraded for cuts, tears and trims, it is based on the amount of exposed flesh, weight of the carcass and the part. The length of a cut or the amount of flesh showing on the part determines the grade. **Remember: cuts, tears or trims must be completely through the skin so that the meat, called flesh, can be seen before putting the carcass in a lower *grade.***

The grade is determined by the amount of exposed flesh as length of cut or amount of skin missing (Table 3). Sometimes a carcass or part may have more than one cut, tear or trim. When there is more than one on a particular part, add the length or amount missing to determine the grade based on that part only. Each part is graded separately and the grade is determined by the part having the lowest grade on that carcass.

Figure 24 shows some typical cuts, tears and missing skin on the breast. The Grade A carcass is permitted to have only cuts, tears less than 1/4 inch and no missing skin. The Grade B carcass can have up to 1/3 of the flesh showing as long as meat yield is not materially affected. The Grade C carcass has more than 1/3 of the flesh showing.

Figure 25 shows a trim where the meat yield is not materially affected. A good rule of thumb is that the trim is a slight trim if it does not exceed 1/8 inch in thickness (approximately the thickness of a nickel). An excessive trim that would move the carcass one grade lower would have the appearance of a cupped effect that looks deeper than 1/8 inch (a nickel).

Figure 24. Cuts and tears on the breast.

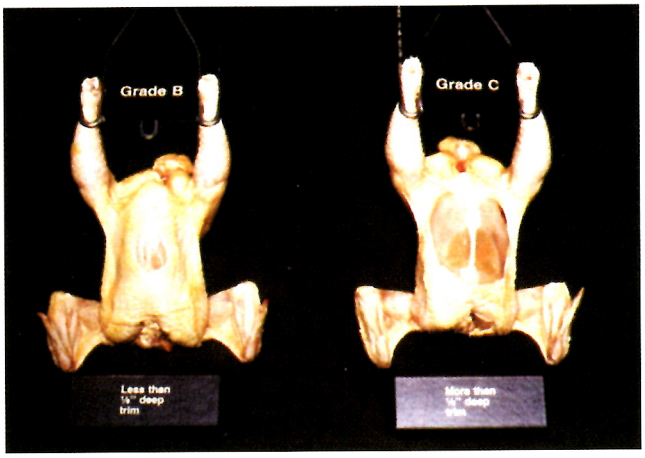


Figure 25. Trim where meat yield is not affected.

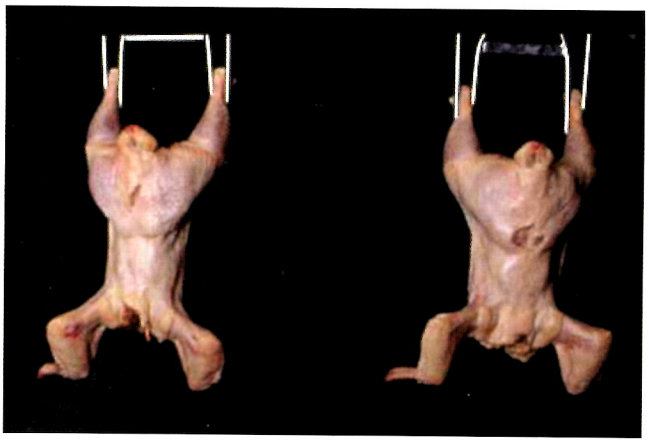


Figure 26. Cuts and tears on the back.

Parts such as wings and the back can have a cut or tear up to 1-1/2 inches for a Grade A carcass. A Grade B carcass is allowed to have up to 1/3 of the flesh exposed on each part beyond what is allowed for a Grade A. Any part with more than 1/3 flesh exposed is a Grade C carcass. Length, such as that from a knife cut, is as important as width that is a result of a tear in determining carcass grade. *Figure 26* shows two carcasses. The carcass on the left shows a 1-inch cut and the one on the right has a 1-inch tear. Both are Grade A since both are less than 1-1/2 inches.

Refer to Table 3 for the section on cuts and tears for the lengths and amount of exposed flesh that is allowed. Remember, a slight cut into the meat not more than the thickness of a nickel (1/8 inch) so that the appearance of the part does not look bad is permitted. If the trim into the meat is more than the depth of a nickel (1/8 inch) or the trim appreciably alters the appearance of the meat, then the carcass grade should be dropped one grade. That is, if less than a 1-1/2 inch cut in back (Grade A) also cuts into the meat more than 1/8 inch or the trim appreciably alters appearance, the carcass should then be Grade B.

Processing cuts near the vent and/or breast opening less than 1 inch beyond the opening are acceptable and should not be considered in grading the carcass.

If a processing cut is larger than 1 inch, downgrade the carcass to the appropriate grade. Contest officials should try to use carcasses without excessive processing cuts when setting up the contest.

Missing Parts

Missing parts to be considered in judging are the wings, tail and part of the back area if it is no wider than the base of the tail. It is important to remember that the carcass weight does not count in judging for missing parts.

The Grade A carcass may have the wing tips and tail missing where the tail joins the back. The Grade B carcass may be missing the wing up to the second joint, as well as the tail and back less than halfway to the hips. In a Grade C ready-to-cook carcass, the wing may be cut off at the third joint at the juncture of the body. In addition, the tail and back, more than halfway to the hip, may be missing. Examples are shown in *Figure 27*. The illustration of the Grade A carcass shows the tail off at the base and some flesh showing due to an extension of the evisceration cut. The back on this carcass had not been removed.

The Grade A carcass has the tail at the body's base and the wing tips removed. For the Grade B ready-to-cook carcass, the back area, not wider than the tail's base and halfway to the hip joint is removed. Part of the wing to the second joint has also been cut off. The Grade C carcass has the back area removed not wider than the tail's base and extended to the hip joints, as well as one wing to the third joint where it joins the body.

For missing parts, use the lowest grade that you see for wings, tail and back.

Figure 27. Missing wing, tail and back parts.

Disjointed and Broken Bones

A disjointed bone is where the joint is out of the socket. In other words, the part that is disjointed is still whole and not broken. You will be able to see the end or knobby part of the joint underneath the skin.

Broken bones occur between the ends of the bone. They can be broken so that the bone either does or does not come through the skin. When the broken bone does not come through the skin it is called **nonprotruding**. As shown in Table 3, a Grade A ready-to-cook carcass can have one disjointed, but no broken bones. A Grade B carcass can have either two disjointed or one disjointed and one non-protruding broken bone. More than two disjointed or non-protruding broken bones, or one or more protruding broken bones makes the carcass Grade C. *Figure 28* shows some examples of broken and disjointed bones you may see on carcasses.

As seen in *Figure 28*, the Grade A carcass has one disjointed bone on the leg between the thigh and drumstick where both parts would normally join together. The Grade B, ready-to-cook carcass has a broken, nonprotruding bone on the wing. The broken bone is in the middle and does not come through the skin. A broken, protruding bone is seen on the wing of the Grade C carcass.

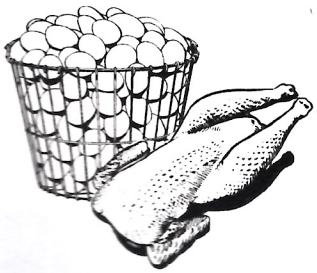
Figure 28. Disjointed and broken bones.

Table 3. Summary of Poultry Judging Contest Specifications of Quality for Individual Carcasses of Ready-to-Cook Poultry

Factor		A Quality		B Quality	C Quality
Exposed Flesh Carcass Weight[1]					
Minimum	*Maximum*	*Breast & Legs*[2]	*Elsewhere*[2]	*All Parts*	
None	2 lbs	1/4″	1″	1/3 of flesh exposed on each part of carcass, provided meat yield not appreciably affected.	No limit
Over 2 lbs	6 lbs	1/4″	1-1/2″		
Over 6 lbs	16 lbs	1/2″	2″		
Over 16 lbs	None	1/2″	3″		
Disjointed bones		1 disjointed		2 disjointed *or* 1 nonprotruding broken and 1 disjointed *or* 1 nonprotruding broken	No limit
Broken bones		None			No limit. Any protruding broken bones
Missing parts		Wing tips and/or tail removed at the base		Wing(s) to second joint. Back area not wider than base of tail and extending less than halfway between base of tail and hip joints	Entire wing(s). Back area not wider than base of tail extending to area beyond halfway to hip joint

[1]Longest length for a cut and total area for tears and missing skin based on the whole part.
[2]For purposes of definition, the parts of the carcass shall be each wing, leg, entire breast and entire back.

Carcass Evaluation



ANSWER KEY

1) **Q:** Name three factors used to evaluate carcasses.

A: ***Exposed flesh, broken/disjointed bones and missing parts***

2) **Q:** How much exposed flesh is permitted on a grade A carcass?

A: ***For a grade A, a maximum of 1 1/2" of exposed flesh is permitted on the back and wings of the carcass. An additional 1/3" receives a grade B, and anything beyond this receives a grade C.***

3) **Q:** What missing parts affect carcass evaluation?

A: ***Missing wings, tail, back portions and occasionally legs***

4) **Q:** How is a carcass graded if it has two disjointed bones?

A: ***A carcass with two disjointed bones, or one broken and one disjointed bone receives a grade B; a carcass with only one disjointed bone and no broken bones receives a grade A; a carcass with more than two disjointed bones, broken bones, and protruding bones receives a grade C.***

POULTRY
LEARNING LABORATORY KIT

Exploratory Learning:
Educational Program

Product distribution through the Curriculum Materials Service

EVALUATING READY-TO-COOK POULTRY CARCASSES AND/OR PARTS *

During processing, chicken and turkey carcasses and parts are inspected and graded by the USDA to ensure wholesomeness and compliance with quality standards. To serve as a means of achieving competency and skill in evaluating processed carcasses and parts, the National FFA Poultry Evaluation Career Development Event includes two ready-to-cook poultry classes.

- Class 4 is a quality grading class of ten (10) ready-to-cook chicken and/or turkey carcasses and/or parts. The class may consist of any combination of carcasses and parts (for example, there may be six broiler carcasses, three broiler parts, and one turkey carcass, or there may be five broiler carcasses and five turkey carcasses). Each broiler carcass will weigh more than two pounds but not more than six pounds. Each turkey carcass will weigh more than six pounds but not more than sixteen pounds. Carcasses and parts are to be graded based on the latest standards (see NOTE below). USDA quality grades are A, B, and C. NG designates nongradable. More than one carcass or part of the same USDA quality grade may be in the class. IMPORTANT: Feathers, pin feathers, hair, preen glands, visible scales, excess skin, and medullary bone are not considered in this class. The carcasses should be displayed on shackles. Parts will be displayed under plastic, or they will be kept moist. Participants may not touch the carcasses or parts. The participants may rotate the shackles, if used, to view the carcasses.

- Class 5 is a placing class of four (4) ready-to-cook chickens or turkey hens and/or toms. Each chicken carcass will weigh more than two pounds but not more than six pounds. Each turkey carcass will weigh more than six pounds but not more than sixteen pounds. The carcasses are to be placed after predetermining their USDA quality grades based on the latest standards (see NOTE below). USDA quality grades are A, B, and C. NG designates nongradable. More than one carcass of the same USDA quality grade may be in the class. IMPORTANT: Feathers, pin feathers, hair, preen glands, visible scales, excess skin, and medullary bone are not considered in this class. The carcasses should be displayed on shackles. Participants may not touch the carcasses. The shackles may be rotated for viewing the carcasses.

A "Summary of Specifications for Standards of Quality for Individual Carcasses and Parts" table is found on the next page. Two pages of images and USDA grades for representative whole carcasses and parts follow the table.

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The latest editions of the *Regulations Governing the Voluntary Grading of Poultry Products and Rabbit Products and U.S. Classes, Standards, and Grades* (7CFR Part 70) and the *Poultry-Grading Manual* (USDA Handbook #31) include a discussion of uniform standards for grading ready-to-cook poultry carcasses and parts. Two sets of USDA color photographs and scripts that illustrate grade assignments for whole fryers and fryer parts are available to supplement these publications. Refer to the REFERENCES section of this manual

SUMMARY OF SPECIFICATIONS FOR STANDARDS OF QUALITY FOR INDIVIDUAL CARCASSES AND PARTS*

(Not All Inclusive) (Minimum Requirements and Maximum Defects Permitted)

Factor*	A Quality			B Quality			C Quality [NOTE]
CONFORMATION:	Normal.			Moderate deformities.			Abnormal.
Breastbone	Slight curve or dent.			Moderately dented, curved, or crooked.			Seriously curved or crooked.
Back	Slight curve.			Moderately crooked.			Seriously crooked.
Legs and Wings	Normal.			Moderately misshapen.			Misshapen.
FLESHING:	Well fleshed, considering kind, class, and part.			Moderately fleshed, considering kind, class, and part.			Poorly fleshed.
FAT COVERING:	Well-developed layer – especially between heavy feather tracts.			Sufficient fat layer – especially on breast and legs.			Lacking in fat covering over all parts of carcass.
EXPOSED FLESH:	Carcass		Part[2]	Carcass		Part[2]	
Carcass Weight Minimum	Maximum	Breast & Legs	Elsewhere[1]	Breast & Legs	Elsewhere[1]		
None	2 lb	1/4"	1"	No more than 1/3 of flesh exposed on each part of carcass (or each individual part) provided meat yield not appreciably affected.			No
>2 lb	6 lb	1/4"	1 1/2"				Limit
>6 lb	16 lb	1/2"	2"				
>16 lb	None	1/2"	3"				
DISCOLORATIONS:							
None	2 lb	3/4"	1 1/4"	1 1/4"	2 1/4"		No
>2 lb	6 lb	1"	2"	2"	3"		
>6 lb	16 lb	1 1/2"	2 1/2"	2 1/2"	4"		Limit[3]
>16 lb	None	2"	3"	3"	5"		
DISJOINTED AND BROKEN BONES:	Carcass — 1 disjointed & no broken.			Carcass — 2 disjointed & no broken or 1 disjointed & 1 nonprotruding broken.			No
	Parts — Thighs with back portion, legs, or leg quarters may have femur disjointed from the hip joint.			Parts — May be disjointed, no broken.			Limit
	Other Parts — None.						
MISSING PARTS: (Whole carcass only)	Wing tips and tail.			Wing tips, 2nd wing joint, and tail. Back area not wider than base of tail and extending half way between base of tail and hip joints.			Wing tips, wings, and tail. Back area not wider than base of tail extending to area between hip joints.
FREEZING DEFECTS: (Consumer packaged)	Slight darkening on back and drumstick. Overall bright appearance. Occasional pockmarks due to drying. Occasional small areas of clear, pinkish, or reddish colored ice.			May lack brightness. Few pockmarks due to drying. Moderate areas showing layer of clear, pinkish, or reddish colored ice.			Numerous pockmarks and large dried areas.

NOTE: Carcasses or parts not meeting specifications for C Quality are designated NG (nongradable).

1 Maximum aggregate area of all exposed flesh. In addition, the carcass of part may have cuts or tears that do not expand or significantly expose flesh, provided the total aggregate length does not exceed the permitted tolerance for the weight range.

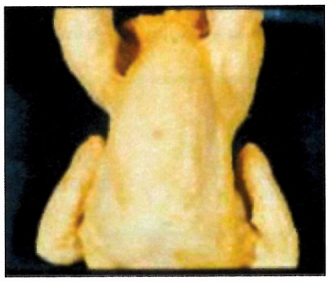
2 For purposes of definition, the parts of the carcass shall be each wing, leg, entire back, and entire breast with each permitted to have one-third of the flesh exposed by cuts, tears, and missing skin. Refer to the Standards of Quality in the Poultry Grading Manual for the minimum requirements and maximum defects permitted on large carcass parts and other parts.

3 No limit on size, number of area, or intensity of discolorations and flesh bruises if such areas do not render any part of the carcass unfit for food.

* 7 CFR Part 70 – Regulations Governing the Voluntary Grading of Poultry Products and Rabbit Products and U.S. Classes, Standards, and Grades (1999 edition) and the Poultry Grading Manual (USDA Handbook No. 31, 1998 edition).

Examples of USDA Grades of Whole Carcasses

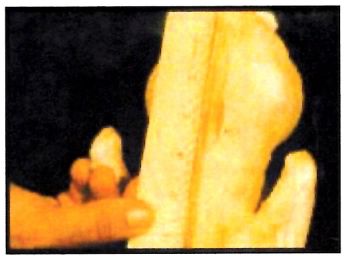
GRADE A
disregard slight discoloration on leg



GRADE A
disregard slight discoloration on breast

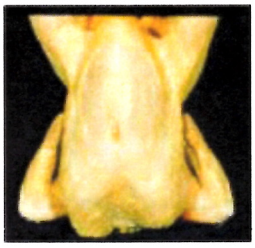
GRADE A
disregard exposed flesh caused by removal of oil (preen) gland

GRADE B
trimmed back not wider than base of tail and less than halfway between base of tail and hip joints



GRADE B
tear or cut on back exceeds amount permitted

GRADE B
parts of wing removed beyond the second joint



GRADE C
more than 1/3 of flesh exposed on breast

GRADE C
trimmed back not wider than base of tail but more than halfway between base of tail and hip joints

GRADE C
entire wing removed

GRADE C
protruding broken bone in wing tip

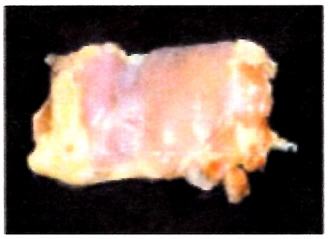
NONGRADABLE
trimming of tip of keel exceeds amount permitted

NONGRADABLE
trimmed back exceeds amount permitted

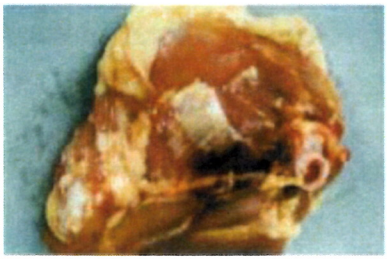
Examples of USDA Grades of Carcass Parts

GRADE A
exposed flesh on leg within limits allowed

GRADE A
no defect on thigh



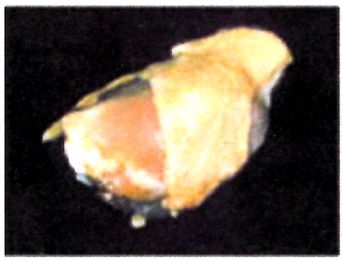
GRADE A
no defect on boneless, skinless thigh



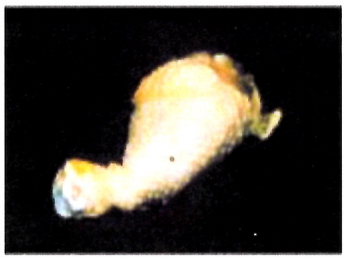
GRADE B
discoloration on thigh exceeds amount permitted

GRADE B
less than 1/3 of flesh exposed on leg

GRADE B
discoloration on drumstick exceeds amount permitted

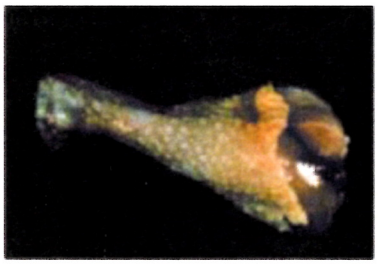


GRADE C
more than 1/3 of flesh exposed on thigh

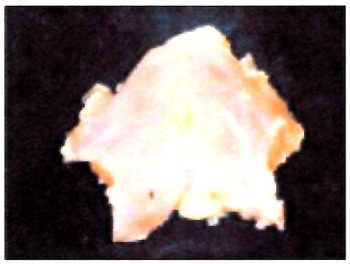


GRADE C
broken tibia on drumstick

GRADE C
discoloration on thigh exceeds amount permitted



GRADE C
discoloration of drumstick exceeds amount permitted



NONGRADABLE
appreciable meat yield loss on boneless, skinless whole breast

NONGRADABLE
appreciable meat yield loss on boneless, skinless whole breast with rib meat

MARKET POULTRY
GRADING READY-TO-COOK POULTRY CARCASSES

Ready-to-cook (RTC) carcass grade scoring is based on the USDA quality grades A, B, and C. No Grade (NG) is an option only if the carcass has a major defect that exceeds meat removal that is allowed for a C grade. Factors used in judging ready-to-cook carcasses and parts in a 4-H Poultry Judging Contest are:

1. Exposed Flesh
2. Missing Parts
3. Disjointed and Broken Bones

Always select your score based on the lowest grade defect found on each carcass or part.

Because of the length of most judging contests, carcasses will dry out. You should not grade carcasses based on off-color areas that appear bruised, dried out, or discolored. In addition, feathers and pin-feathers are not used as a quality factor when carcass grading.

Carcasses used for contests will usually have Grade A fleshing, conformation, and fat cover. You should, however, be prepared to recognize poor fleshing and finish if such carcasses are available for a contest.

The carcasses you judge will be hanging from shackles. This method is used to make it easier to see all parts of the carcass. **Carcasses cannot be touched or handled during judging events.** It is permissible to turn the shackle to see the entire carcass as long as you do not touch the carcass. You can also tilt the shackle to check for broken bones. The carcasses can be hung from both legs, or just one (see Figure 1). If you do not have shackles for practicing and the ready-to-cook carcasses are placed on plates, judge the carcasses based on what you can see.

Figure 1. Ready-to-cook carcasses hung from shackles either by both legs (left photo) or one leg (right photo)

Ready-to-cook carcasses will be judged according to the quality specifications in Table 1. Table 1 includes three weight categories for determining the size of exposed flesh on the different parts of the whole carcasses. In a 4-H poultry judging contest, however, only the first two weight classes will be used. There are no weight ranges for missing parts, disjointed, and/or broken bones.

Learn a method of judging carcasses by looking at one part at a time. By definition, the six parts of the carcass are; each wing (2), each leg (2), the entire breast (including the rib area), and the entire back (width of the hip joints to the width of the wing joints).

EXPOSED FLESH

Cuts, tears, and trims are a result of a mis-cut or tearing of the skin during a processing operation. When ready-to-cook carcasses are downgraded for cuts, tears, and trims, it is based on the amount of exposed flesh, weight of the carcass, and the part where the exposed flesh occurs. The length of a cut or the amount of flesh showing on the part determines the grade. Cuts, tears, or trims must be completely through the skin so that the meat, called flesh, can be seen before putting the carcass in a lower grade.

Injection marination is a common practice for many poultry processors. **Marination injection marks should not be considered if they appear on carcasses and parts within a contest.** The presence of the marks will be announced by the contest officials during the contest orientation.

The grade is determined by the amount of exposed flesh as the length of the cut or amount of skin missing (Table 1).

Sometimes a carcass or part may have more than one cut, tear, or trim. When there is more than one exposed area on a particular part, add the length or amount missing to determine the grade based on that part only. Cuts and tears in the flesh are cumulative on a given individual part, but they are NOT cumulative across multiple parts. Each part is graded separately and the grade is determined by the part having the lowest grade on the carcass.

Figure 2 shows some typical cuts and tears resulting in missing skin (or exposed flesh) on the breast of 2-6 lb. carcasses. The Grade A carcass is permitted to have only cuts or tears on the breast that total less than 1/4 inch and no missing skin. The Grade B carcass can have up to 1/3 of the flesh on the entire breast exposed. The Grade C carcass has more than 1/3 of the flesh exposed on the entire breast.

Table 1. Summary of USDA specifications for standards of quality for individual whole carcasses

FACTOR		A Quality		B Quality	C Quality	No Grade
Exposed Flesh **Carcass weight** **Min**	**Max**	**Breast and Legs**	**Elsewhere (wing and back)**	**Entire carcass**	**Entire carcass**	**Entire carcass**
> 2 lb.	6 lb.	¼ inch	1½ inches	No more than ⅓ of the flesh exposed normally covered by skin exposed	Over ⅓ of the flesh exposed normally covered by skin No limit on exposed flesh provided meat yield not affected	Flesh removed from any part in which the normal meat yield is materially affected (>⅛ inch deep and diameter of a quarter coin or larger)
> 6 lb.	16 lb.	½ inch	2 inches			
> 16 lb.	none	½ inch	3 inches			
Disjointed and broken bones		1 disjointed No broken bones		2 disjointed *or* 1 disjoint and 1 non-protruding broken *or* 1 non-protruding broken	Any protruding broken or cut bones No limit on disjoints or broken bones	N/A
Missing parts (whole carcass only)		Wing tips Tail removed at base		Wing to 2nd joint Tail and back area not wider than base of tail and extending up to halfway between base of tail and hip joints	Wing to 3rd joint (entire wing) Tail and back area not wider than base of tail extending up to hip joints	Back area removed wider than the base of the tail and/or extending beyond the hip joints Flesh removed from any part in which the normal meat yield is affected (>⅛ inch deep and diameter of a quarter coin or larger)
The parts of the carcass shall be: each wing (2), each leg (2), the entire breast (including rib area), and the entire back (width of hip joints to the width of the wing joints).						

Figure 3 shows deep cuts on various parts of a carcass that remain Grade B based on the amount of exposed flesh. **Cuts on the carcass that are deeper than 1/8 inch without any meat removal will not change the grade beyond what is designated for the exposed flesh.**

A trim is when meat is removed. Trims that do not exceed 1/8 inch in thickness (approximately the thickness of a nickel coin) and the area of 0.75 inches in diameter (approximately the size of a quarter coin) do not affect the grade. **Any time meat is removed from the breast and legs of the carcass that exceeds these parameters, the carcass would be marked as a NO GRADE.** Figure 4 shows trims on carcasses where the meat yield is affected.

Parts such as wings and the back portion (considered 'elsewhere') on a 2-6 lb. carcass can have a cut or tear up to 1½ inches for a Grade A carcass. Grade B carcasses are allowed to have up to 1/3 of the flesh exposed. Any part with more than 1/3 flesh exposed on the entire part is a Grade C carcass. Length, such as that from a knife cut, is as important as the width that is a result of a tear in determining carcass grade. Figure 5 shows examples of back and wing cuts with the corresponding grade.

Refer to Table 1 for the section on cuts and tears for the lengths and amount of exposed flesh that is allowed. If a cut is less than 1½ inches in the wing of a 2-6 lb. carcass (Grade A) and also cuts into the meat more than 1/8 inch or the trim

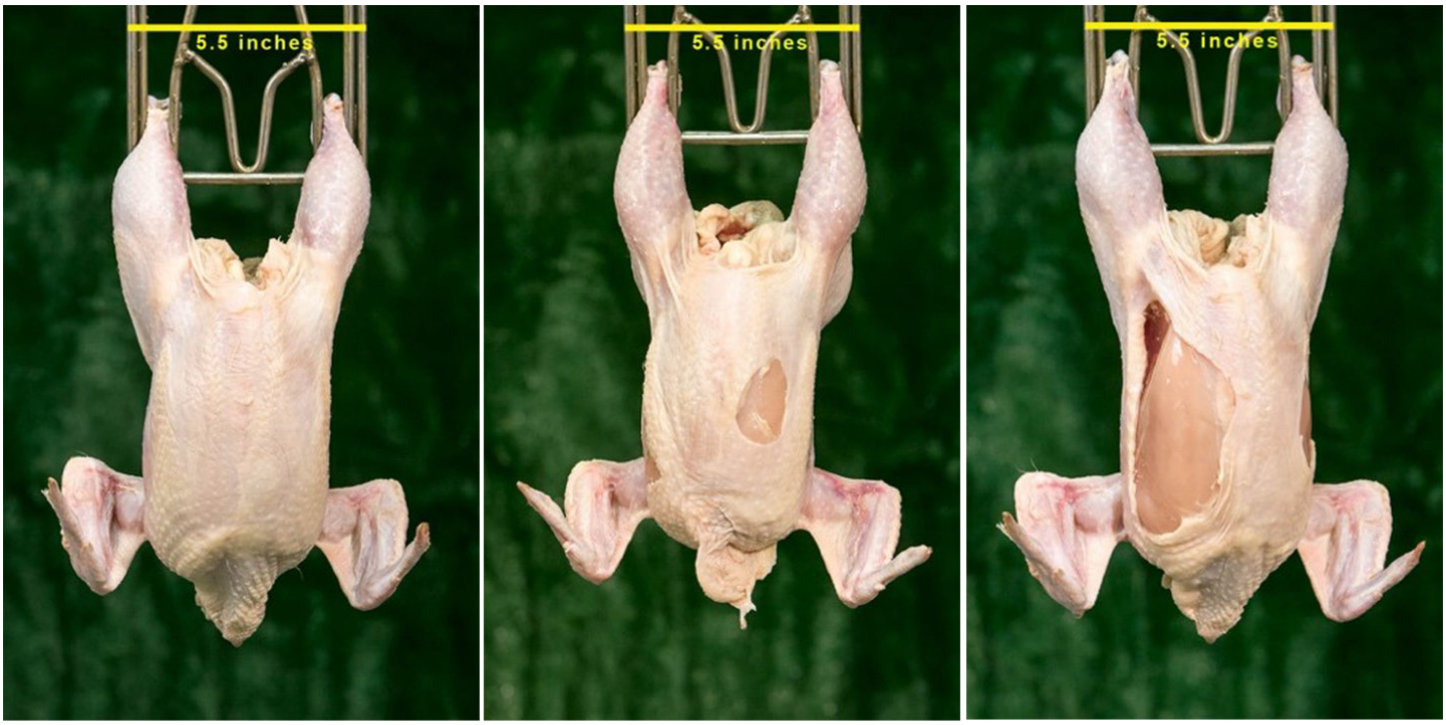


Figure 2. Grading carcasses based on cuts and tears on the breast.

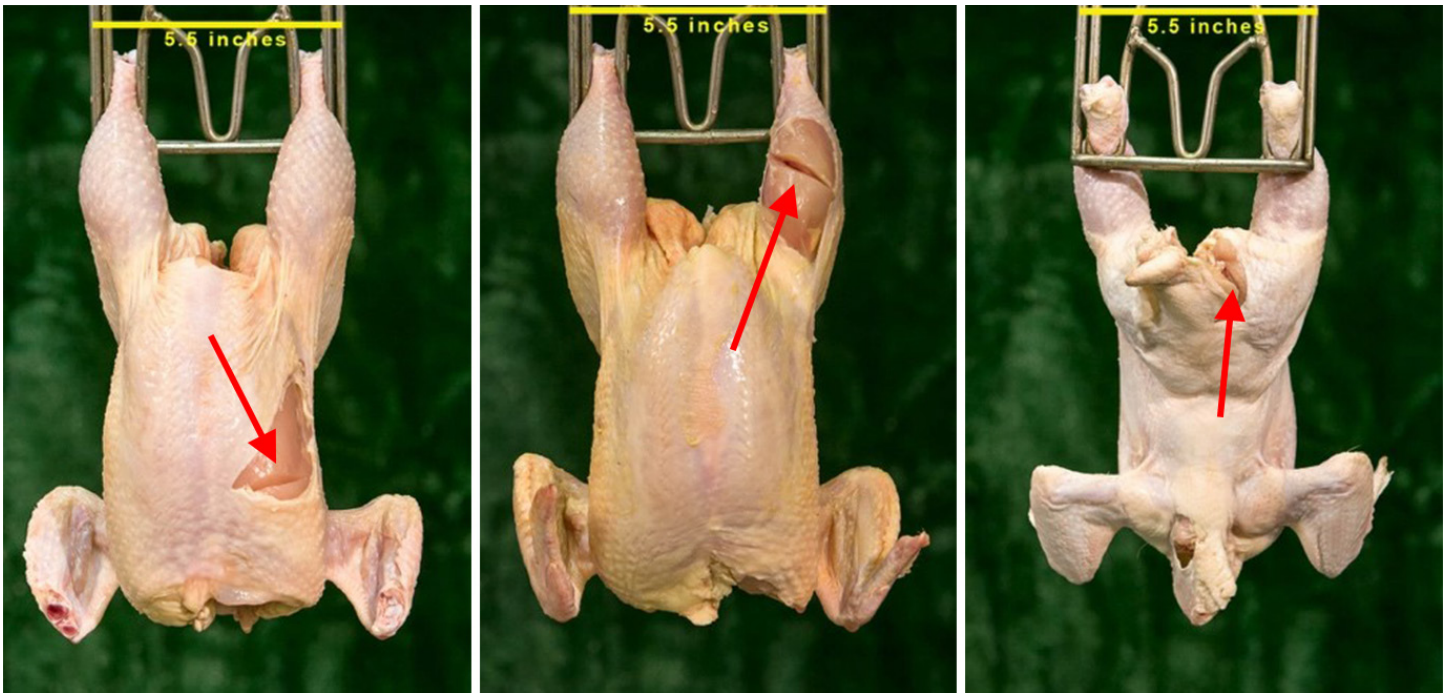
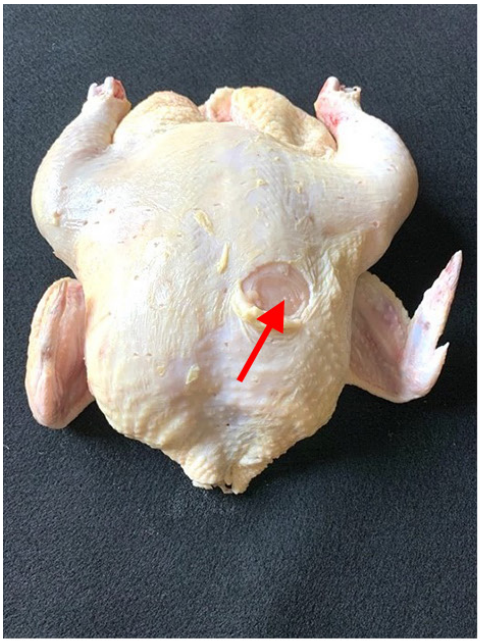


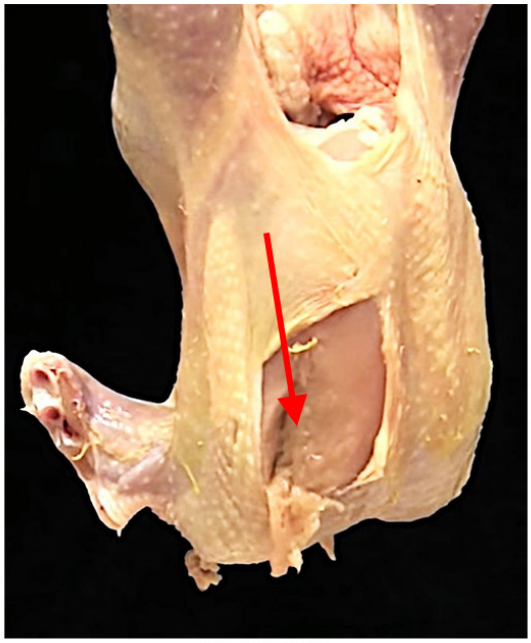
Figure 3. Grade B carcasses based on cuts deeper than ⅛ inch without meat loss where the grade is not altered.

appreciably alters the appearance, the carcass should still be graded by the size of the exposed flesh since it is a part that can be removed.

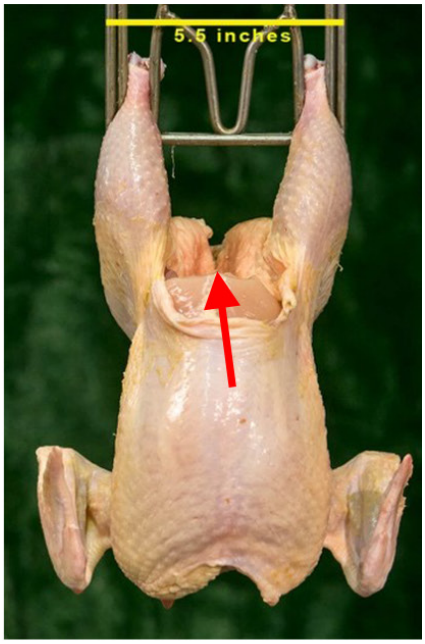
Processing cuts near the vent and/or breast opening less than 1-inch beyond the opening are acceptable and should not be considered in grading the carcass. If a processing cut is larger than 1-inch, as demonstrated in Figure 6, downgrade the carcass to a Grade B.



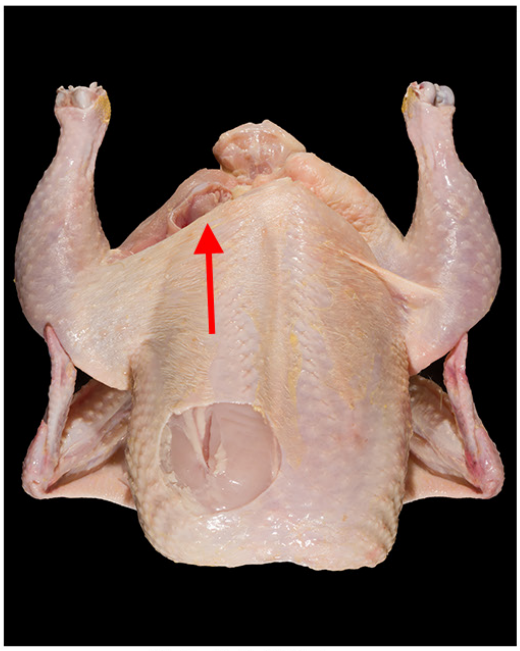
GRADE B
Breast Trim



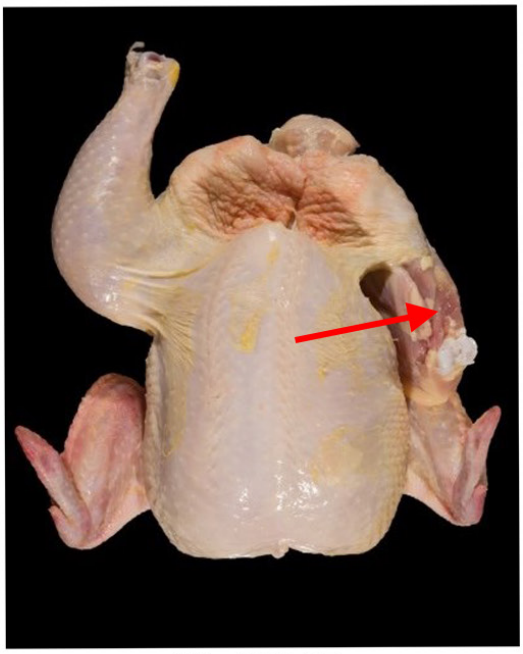
NO GRADE
Breast trim deeper than 1/8 inch and larger than 0.75 inch in diameter.



NO GRADE
Keel trim



NO GRADE
Missing meat on thigh



NO GRADE
Missing drumstick

Figure 4. Different carcass grades based on meat trim where meat yield may be altered.

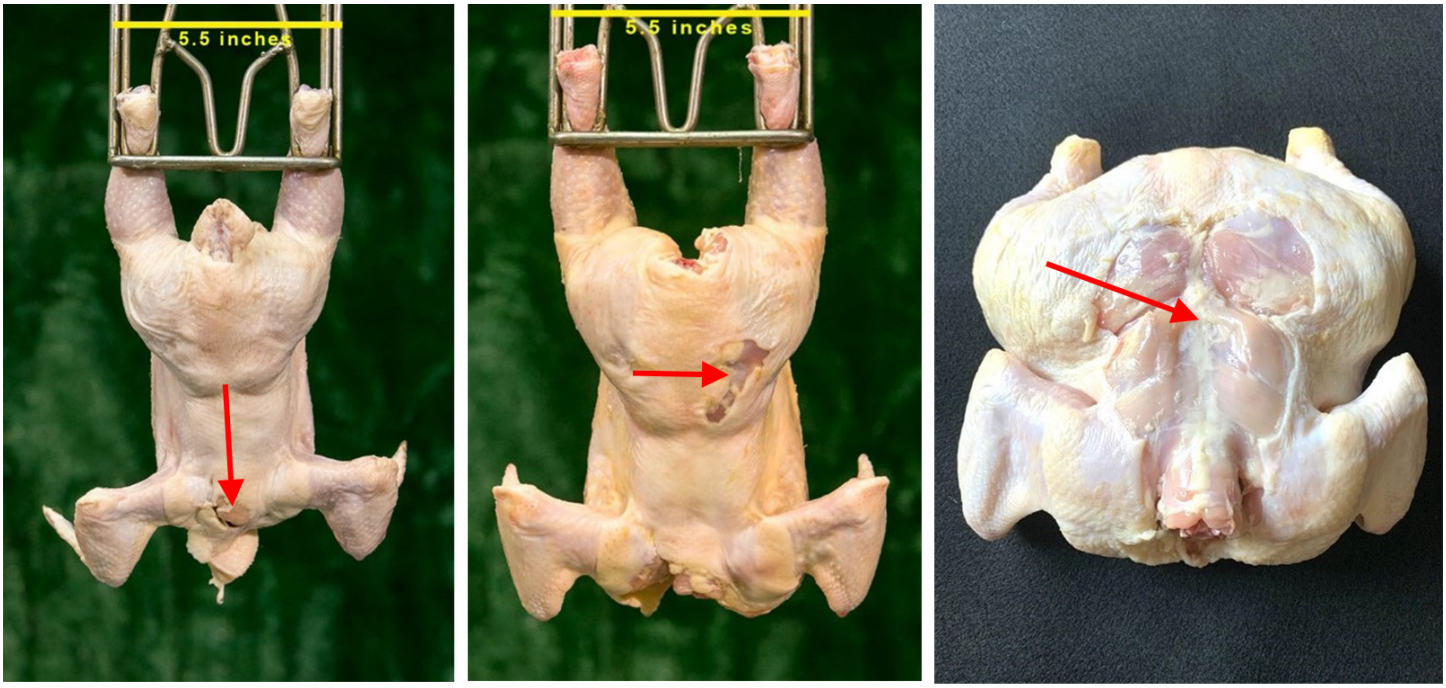


Figure 5. Grades based on cuts and tears on the back or wing.

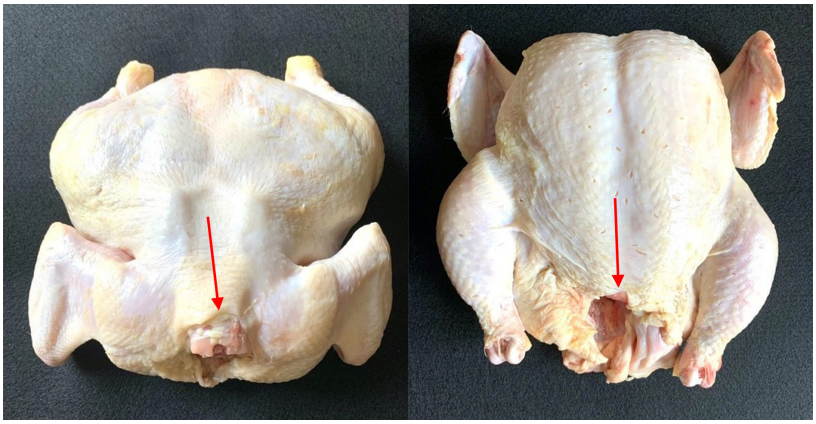


Figure 6a. Grade A carcasses with processing cuts at the neck (left) or tip of the keel (right). Note: Ignore all marination injection marks on the breast)

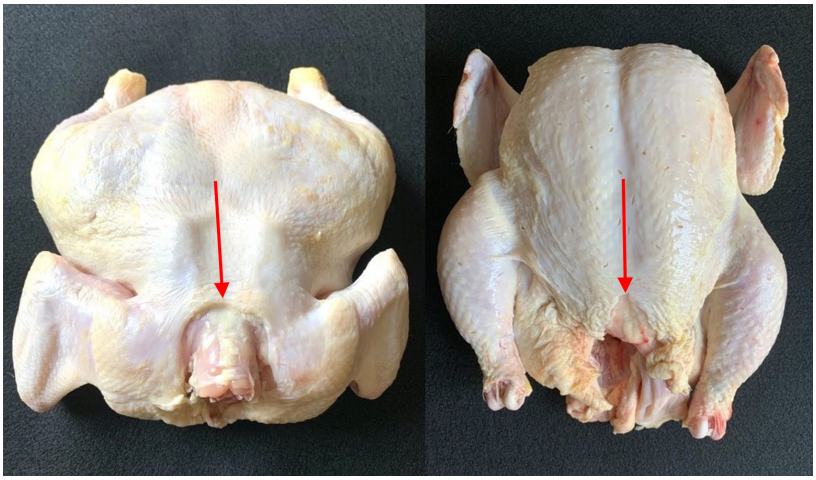


Figure 6b. Grade B carcasses with processing cuts at the neck (left) or tip of the keel (right). Note: Ignore all marination injection marks on the breast)

MISSING PARTS

Missing parts to be considered in judging are the wings, tail, and back. Carcass weight is not a factor when judging for missing parts.

Use the lowest grade that you see for the wings, tail, and back that may be missing. **Any part, or flesh missing from anywhere else, and the carcass will be considered a NO GRADE.** The NO GRADE designation implies a loss of marketable product and is intended for excessive trim beyond what is designated for the A, B, or C grades (allowable loss of wings and back areas). Excessive trim of a wing into the breast muscle, or tail trim wider/deeper than that which is allowed for a Grade C, would result in a NO GRADE designation. For example, if significant meat (deeper than 1/8 inch and larger than 0.75 inches in diameter) is missing from the breast as the result of an excessive wing removal, or the tail is cut wider than the base of the tail or is cut beyond the hip joints, the carcass should be considered a NO GRADE.

A Grade A carcass can have one or both of the wing tips removed. The Grade B carcass would be missing one or both of the wings to the second joint. A Grade C carcass will have one or both whole wings cut off cleanly at the juncture of the body without removing breast meat. A NO GRADE carcass has breast meat trimmed with the removal of the whole wing. See Figure 7 for different examples.

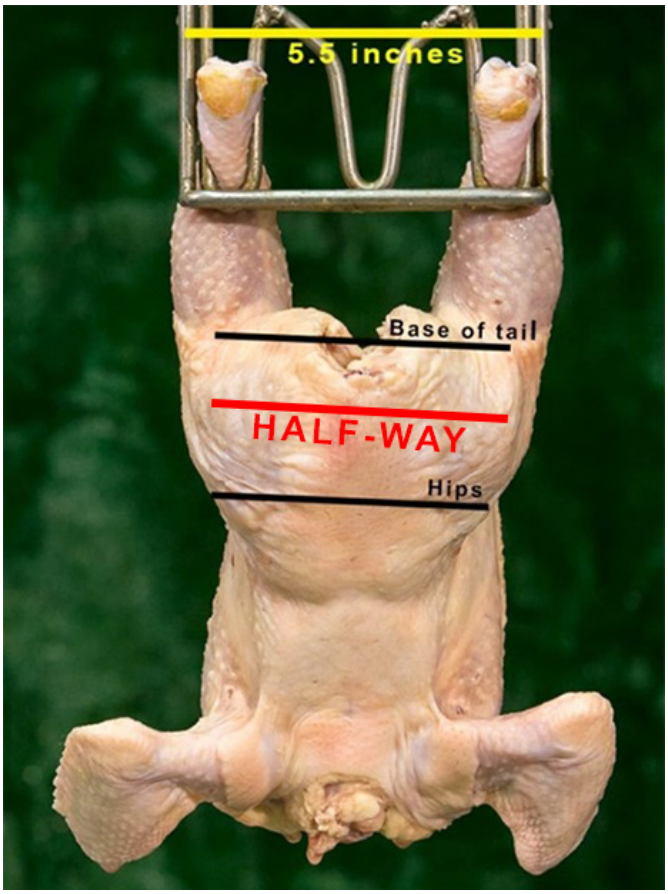


Figure 8a. Anatomical references for missing back portions.

GRADE A
Missing one wingtip

GRADE B
Missing wingtip plus flat section

GRADE C
Missing entire wing

NO GRADE
Breast trim with wing removed

Figure 7. Carcasses with different grades based on missing wings

A photo showing the anatomical reference points for the tail and back is found in Figure 8a. Figure 8b shows examples of carcass grades based on tail and back removal. The Grade A carcass has the tail removed at its base. For the Grade B carcass, the back area, not wider than the tail's base and halfway to the hip joint is removed. The Grade C carcass has the back area removed not wider than the tail's base and extended beyond the hip joints. **The NO GRADE carcass has been trimmed wider than the base of the tail resulting in meat loss.**

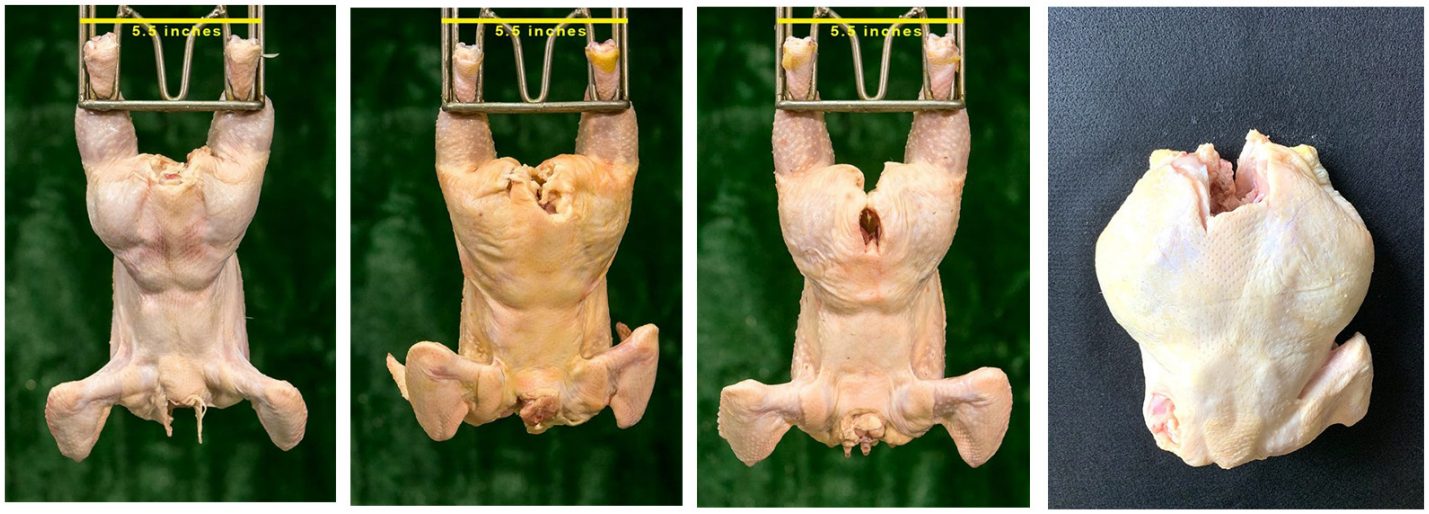


Figure 8b. Carcass grades based on missing tail and back portion.

DISJOINTED AND BROKEN BONES

A disjointed bone is where the ball end portion of a joint is out of the socket. In other words, the part that is disjointed is still whole and not broken. You may be able to see the end or ball portion of the joint underneath the skin.

Broken bones occur between the two ends of a bone and are typically not associated with a joint. They can be broken such that the bone either does or does not come through the skin. When the broken bone does not come through the skin it is called non-protruding. When the broken bone ruptures through the skin, it is referred to as a protruding bone. The wing tips will not be considered for disjointed or broken bones.

As listed in Table 1, a Grade A carcass can have one disjointed, but no broken bones. A Grade B carcass can have either two disjointed bones or one disjointed and one non-protruding broken bone. If the broken bone is in the wing mid-joint it is considered one broken bone even though there are two bones present. More than two disjointed or non-protruding broken bones, or any protruding broken bones, would make the carcass a Grade C. Figure 9 shows some examples of broken and disjointed bones that you may see on carcasses.

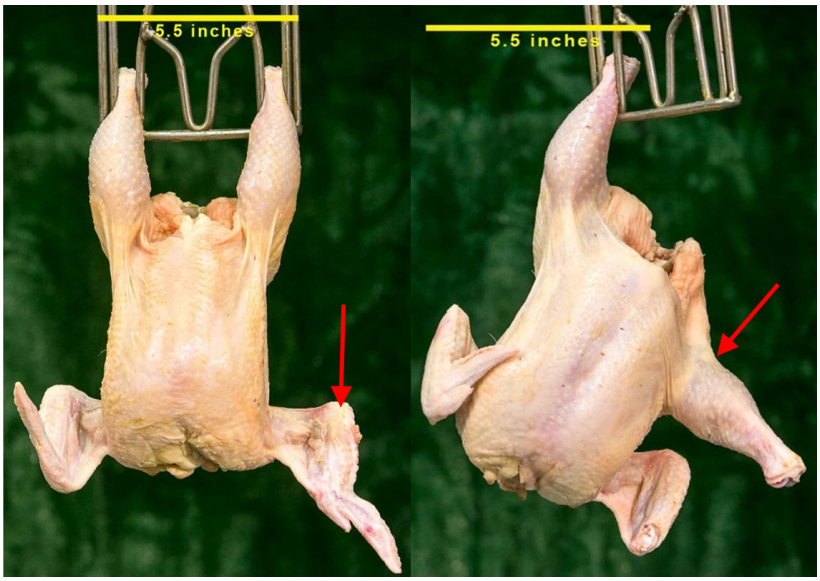


Figure 9a. Grade A carcasses each with one disjoint (wing in left photo and leg in the right photo). Compare the way the wings and legs hang when there are no disjoints (Figure 1).

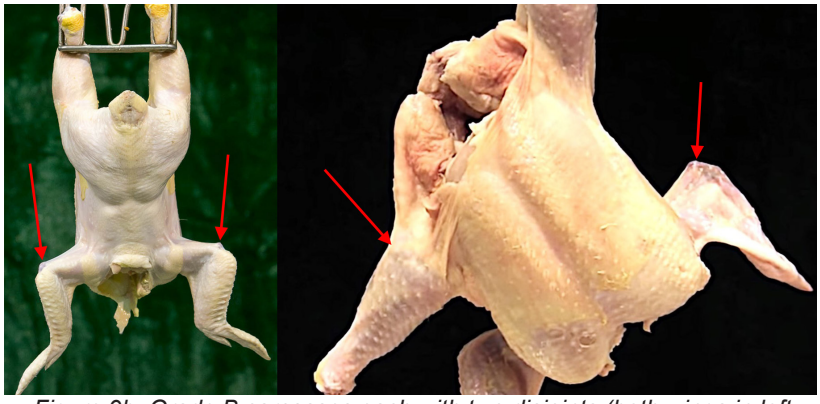


Figure 9b. Grade B carcasses each with two disjoints (both wings in left photo and one wing and one leg in right photo)

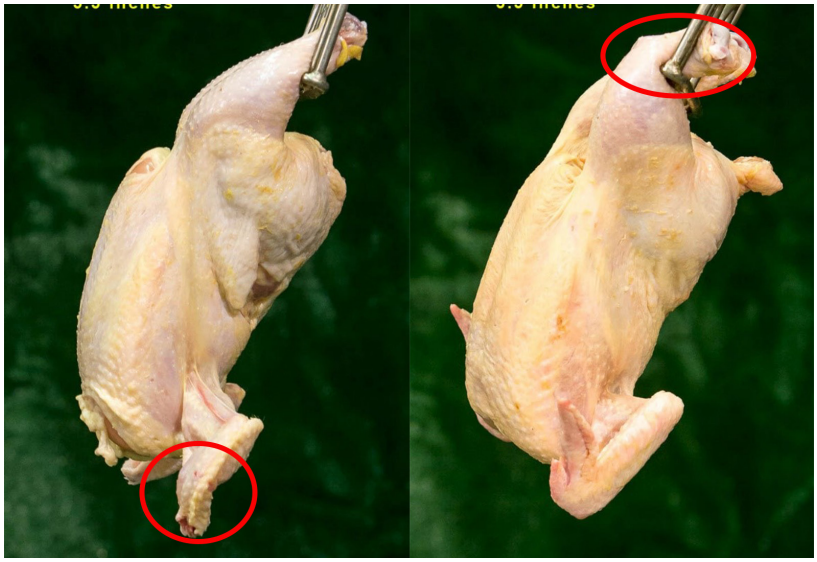


Figure 9c. Grade B carcasses each with one broken, non-protruding bone (broken wing in the left photo and broken drumstick in right photo)

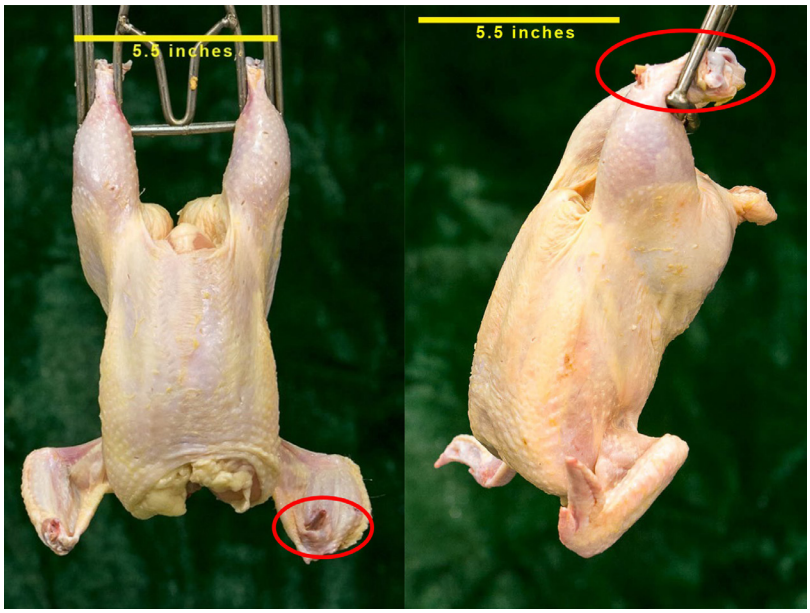


Figure 9d. Grade C carcasses each with one broken, protruding bone (broken wing in the left photo and broken drumstick in right photo)