## Poultry Picture Series

A Guide to U.S. Graded Chicken 2022,1st Edition

United States Department of Agriculture / Agricultural Marketing Service Livestock and Poultry Program / Standards and Specifications Division





# Poultry Picture Series

A Guide to U.S. Graded Chicken 2022,1st Edition

United States Department of Agriculture / Agricultural Marketing Service Livestock and Poultry Program / Standards and Specifications Division

### **Non-Discrimination Statement**

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at How to File a Program Discrimination Complaint and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

USDA is an equal opportunity provider, employer, and lender.

### Table of Contents

Introduction	4
Description	4
Acknowledgements	5
Poultry Grading	5
Quality	6
Advantages of Poultry Grading	6
Standards for Poultry	6
Chicken Skeletal Diagram	7
Skeletal Manner of Cut Diagrams	9
Discoloration Reference	11
U.S. Classes, Standards, and Grades for Poultry Summary Sheets (Grades A,B, & C)	12
USDA AMS Grading vs. USDA FSIS Inspection Infographic	15
Whole Birds	17
Parts	33
Breast	35
Thigh	42
Drumstick	48
Wing	54
Boneless/Skinless Parts	61
Boneless/Skinless Breast	63
Boneless/Skinless Thigh	70
Boneless/Skinless Drumstick	72
Boneless/Skinless Whole Leg	74
Tenderloin	75
Boneless/Skinless Size Reduced	80

### **Poultry Grading Picture Series**

The Poultry Grading Picture Series illustrates various defects described in the official U.S. Classes, Standards, and Grades for Poultry. The illustrations selected are to assist USDA poultry commodity graders, industry, academia, and food buyers. All photos and defect criteria referenced in this picture series apply to chickens within the 2-6 pound size range. Refer to the official U.S. Classes, Standards, and Grades for Poultry for tolerances of other carcass weights.

The U.S. Department of Agriculture (USDA), Agricultural Marketing Service (AMS) has developed official grade standards for poultry carcasses, which measure such factors as meat yield, fat covering, freedom from defects such as cuts and tears in the skin, feathers, broken/disjointed bones, discolorations, and ready-to-cook (RTC) factors. The standards are applied to determine the quality of the product, and are not a reflection of wholesomeness, which is determined by the Food Safety and Inspection Service (FSIS) prior to the grading process.

Poultry grading service is provided in accordance with the official U.S. Classes, Standards, and Grades for Poultry which are available at: <a href="https://www.ams.usda.gov/grades-standards/poultry-and-poultry-products-grades-and-standards">https://www.ams.usda.gov/grades-standards/poultry-and-poultry-products-grades-and-standards</a>

AMS also maintains the Poultry Grading Manual, which is a guide to the uniform application of the U.S. Classes, Standards, and Grades for poultry and can be found at: https://www.ams.usda.gov/publications/content/poultry-grading-manual

USDA graders also utilize AMS' Quality Assessment Division (QAD) policies and procedures for grading known as the 500 series. The 500 series further defines certain information from the U.S. Classes, Standards, and Grades for Poultry and can be found at: <a href="https://www.ams.usda.gov/resources/qad-procedures-grading">https://www.ams.usda.gov/resources/qad-procedures-grading</a>

Poultry producers, packers, wholesalers, food manufacturers, food service operators, food retailers, and consumers rely on USDA's poultry grading services to ensure that their requirements are met for class, quality, condition, and other factors. The grading program offers several advantages, for example, independent third-party opinion on product quality based on the U.S. Classes, Standards, and Grades for Poultry, which assures the buyer the quality meets or exceeds those standards. Additionally, the grade shield assures the consumer or end user they are purchasing top quality poultry and poultry products.

A digital edition of the Poultry Picture Series and further information about poultry grading is available at: https://www.ams.usda.gov/grades-standards/poultry

Printed copies of the Poultry Picture Series and other poultry grading resources may be requested by sending an email to: <a href="mailto:AMSPoultryResources@usda.gov">AMSPoultryResources@usda.gov</a>

### Acknowledgements

This publication would not have been possible without the dedicated assistance and support of numerous USDA poultry commodity graders, supervisors, and the various poultry companies providing product samples for these pictures and the onsite photography sessions.

We express a special thank you to the USDA Photography Services and the Agricultural Research Service in Athens, GA, for their exceptional quality of images taken for this publication.

AMS truly benefits from the working relationship with all our industry and USDA partners. It is our hope that this publication will be a working resource for AMS, industry, academia, and food buyers alike to ensure quality poultry.

### **Poultry Grading**

Grading is classifying and sorting poultry according to various groups of conditions and quality characteristics. Ready-to-cook poultry carcasses and parts, and certain poultry products, may be graded for quality according to official standards and grades.

The development of grade standards and the identification and certification of class, quality, quantity, and condition of agricultural products is authorized by the Agricultural Marketing Act of 1946 (AMA) as amended (7 U.S.C. 1621 et seq). Regulations to implement the AMA were developed in cooperation with State agriculture officials, producers, processors, and consumers.

The kinds of poultry eligible for grading and certification include, but are not limited to, chickens, turkeys, ducks, geese, pigeons, and guineas. The form may be as a ready-to-cook carcass, part, or as a further processed product which include roasts, size reduced poultry and cooked products eligible to receive the Prepared From Grade A shield.

All poultry that is graded must first be inspected. Inspection refers to the wholesomeness of poultry and its fitness for food, but is not concerned with quality or grade. The inspection mark means that the poultry has passed examination by a qualified USDA veterinarian or inspector during slaughter and/or processing. All slaughter plants are supervised by a USDA veterinarian.

### Quality

Quality is defined as the inherent properties of any product that determines its relative degree of excellence or value. The conditions and characteristics that a customer or consumer wants and is willing to pay for can be considered in a broad sense "Quality Factors."

The AMS Livestock & Poultry (L&P) Program administers a nationwide poultry grading program to determine compliance for quality according to the official U.S. Standards. Grading services are rendered by USDA on a voluntary fee-for-service basis. L&P Program representatives (USDA Graders) supervise the grading, packaging, and packing of the poultry product to ensure that it meets applicable quality standards. In order for the poultry to be eligible to bear the official identification, the poultry must be graded by a plant employed authorized grader, and then checkgraded and certified by the USDA Grader. Officially graded poultry which passes this examination and evaluation process is eligible for official grade identification.

### **Advantages of Poultry Grading**

- Independent third-party opinion on product quality based on U.S. Standards
- Assures the buyer of product quality
- Basis for fair bidding between suppliers
- Offers the certification to aid poultry marketing in domestic and foreign markets
- Certifies that product meets the requirements of USDA Approved Commercial Specifications or USDA Federal Purchase Program Specifications

### **Standards for Poultry**

### **USDA** Grade A whole carcasses and parts:

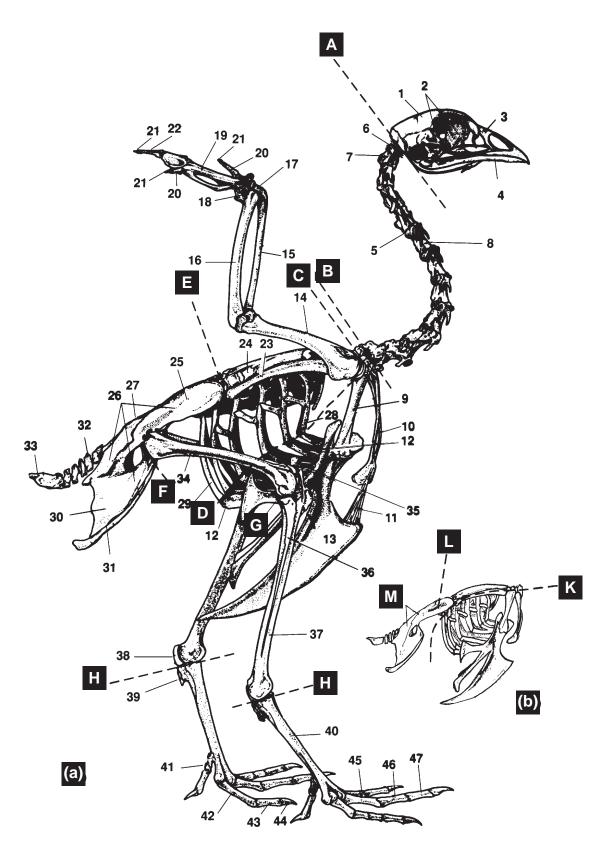
- Are fully fleshed and meaty
- Have normal conformation and shape
- Are free of disjointed or broken bones\*
- Are free of feathers\*
- Are free of exposed flesh and discolorations\*

### **USDA Grade A boneless-skinless poultry products:**

- Are free of bone, skin, cartilage, tendons, bruises, blood clots, and other discolorations\*
- Are free of cuts, tears, and holes in the muscle tissue, and excess trimming around the outer edges of the product\*

\*Within tolerances stated in the U.S. Classes, Standards, and Grades for Poultry (see page 12)

### **Chicken Skeletal Diagram**



Skeleton of a chicken. (Negative No. 89BW0137)

#### Figure (a). Whole chicken skeleton

Bones are identified with the numbers listed below.

1	Vertebral cranium	14	Humerus	32	Coccygeal vertebrae
	(lateral parietal crest)	15	Radius	33	Urostilus - Pygostyle
2	Orbital fossa	16	Ulna		
3	Visceral cranium	17	Radial carpal		Leg
	(lateral ramus of nasal bone)	18	Ulnar carpal	34	Femur
4	Mandibula	19	Third carpometacarpal	35	Patella - Knee cap
	(mandible, lower jaw)	20	First phalanges	36	Fibula
		21	Distal phalanges	37	Tibia
	Neck	22	Second phalanx, third digit	38	Hypotarsal sesamoid
5	Region of the				
	ligamentum nuchae		Back		Foot
	(main ligament of the neck)	23	Scapula	39	Hypotarsal ridge
6	Atlas - First cervical	24	Thoracic vertebrae	40	Tarsometatarsus
7	Axis - Second cervical	25	Ilium		(second, third, and fourth)
8	Cervical vertebrae	26	Os innominatum	41	First metatarsal

Wing

27 Synsacrum

28 Second rib

30 Ischium

29 Vertebral rib portion

31 Pubium - Pinbone

#### Breast

Head

- 9 Coracoid
- 10 Clavicle Wishbone
- 11 Hypocledial ligament
- 12 Sternal rib portion
- 13 Sternum Keelbone

Points where parts are cut in accordance with USDA regulations are identified with the letters listed below.

- A Head from neck
- B Neck from breast/back
- C Wing from breast
- D Breast from back
- E Front half of back from back half of back
- F Leg from back
- G Thigh from drumstick
- H Drumstick from foot

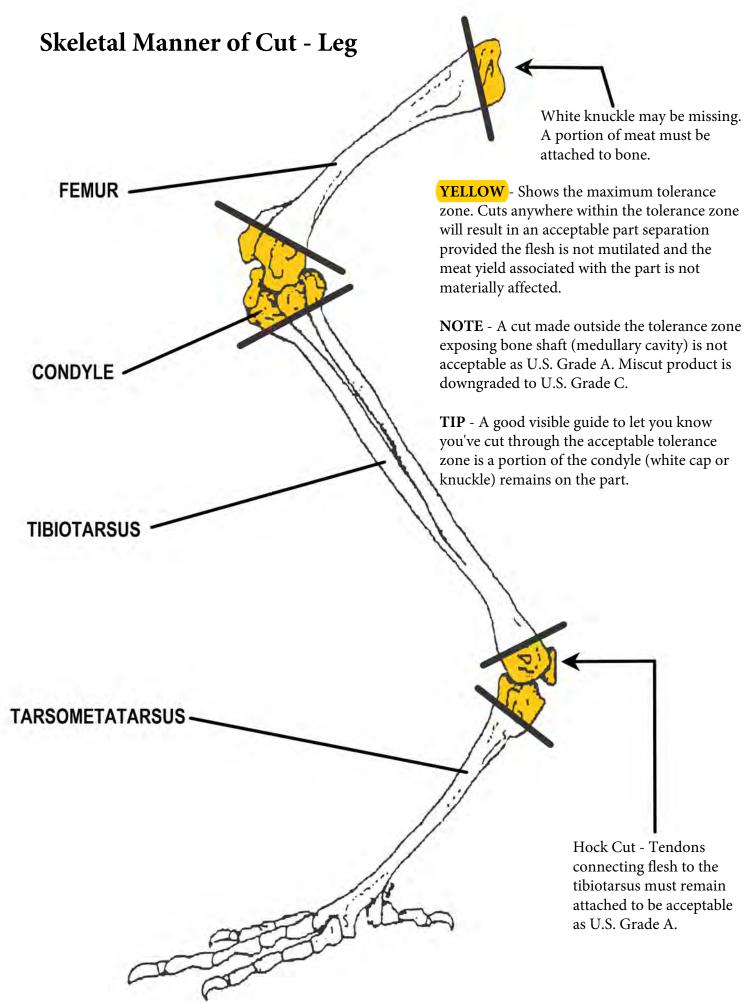
### Figure (b). Breast and back of chicken skeleton.

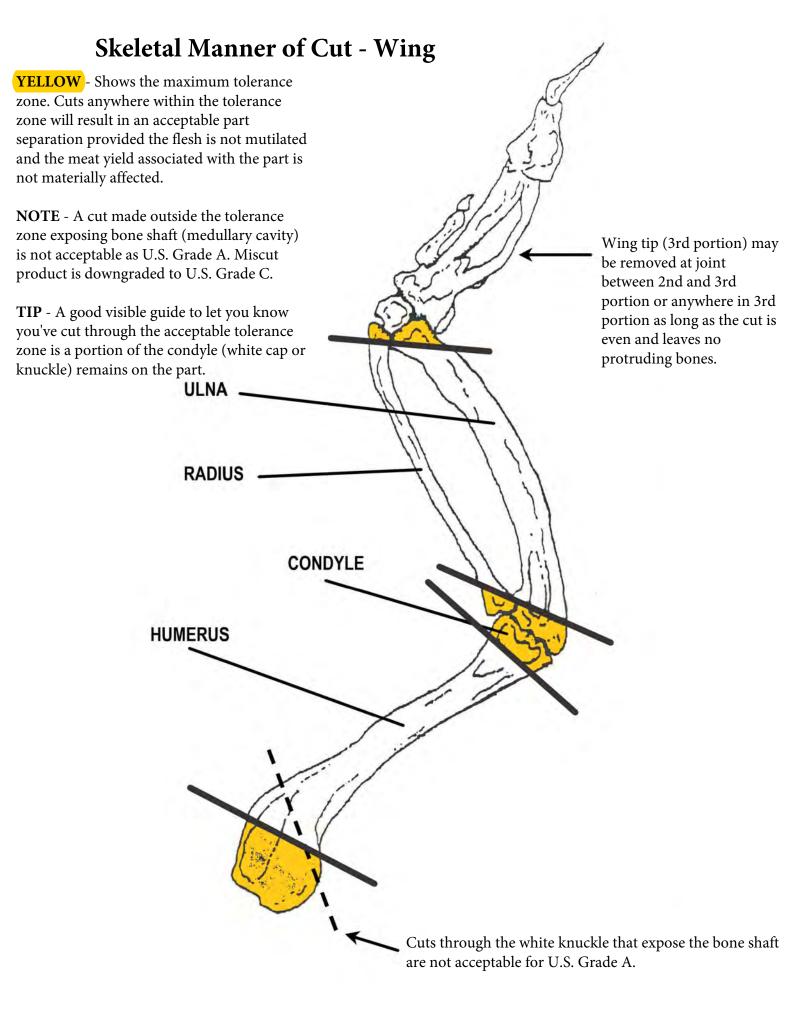
Rib and pelvic meat areas, and point to cut breast with ribs, are identified with the letters listed below.

- K Breast with rib cut
- L Oyster meat area
- M- Pelvic meat area

Tail

- 42 First phalanx, second digit
- 43 Second phalanx, second digit
- 44 Distal phalanx, second digit
- 45 First phalanx, third digit
- 46 Second phalanx, third digit
- 47 Third phalanx, third digit





### **Discoloration Reference**



**Slight** discolorations are areas of discoloration that are *generally pinkish* in color and do not detract from the appearance of the carcass or part.



**Light** discolorations are *generally reddish* in color and are usually confined to areas of the skin or the surface of the flesh.



Moderate discolorations are areas that are *generally* dark red or bluish, or are areas of flesh bruising.

Areas of discoloration are limited to an aggregate area equivalent to the area of a circle of the diameter specified on the U.S. Classes, Standards, and Grades for Poultry Summary Sheets for each grade A, B, and C.

#### Ready-to-Cook Poultry - A Quality

Summary of Specifications for Standards of Quality for Individual Carcasses and Parts

Effective April 29, 1998 (Not All Inclusive -- Minimum Requirements and Maximum Defects Permitted)

,		A Quality								
Conformation:				Norm	nal					
Breastbone		Slight curve or dent								
Back			Slight curve							
Legs and Wings			Normal							
Fleshing:		Well fleshed con	Well fleshed, considering kind and class							
			Nell developed layer especially between heavy feathers tracts							
Defeathering:			Turkeys		Ducks and Geese <sup>1</sup>		ner Poultry			
Free of protru	ding feathers and hairs	(feathers less th	,	,	,		ess than 1/2 in.)			
Tree of protituding feathers and halfs		Carcass	Parts	Carcass	Parts	Carcass	Parts			
Function of Floors 2		4	2	8	4	4	2			
Exposed Flesh: <sup>2</sup> Weight Range		Carcass		Large Carcass Parts <sup>3</sup> (halves, front and rear halves)		Other Parts <sup>3</sup>				
Minimum	Maximum	Breast and Legs	Elsewhere	Breast and Legs	Elsewhere					
None	2 lbs.	1/4 in.	1 in.	1/4 in.	1/2 in.	1	/4 in.			
Over 2 lbs.	6 lbs.	1/4 in.	1 1/2 in.	1/4 in.	3/4 in.	1	/4 in.			
Over 6 lbs.	16 lbs.	1/2 in.	2 in.	1/2 in.	1 in.	1	/2 in.			
Over 16 lbs.	None	1/2 in.	3 in.	1/2 in.	1 1/2 in.		/2 in.			
Discolorations:		Lightly Shaded		Moderately Shaded <sup>4</sup>						
	Carcass	Breast and Legs	Els	sewhere	Hock of leg	Elsewhere				
None	2 lbs.	3/4 in.	1	1/4 in.	1/4 in.	5	5/8 in.			
Over 2 lbs.	6 lbs.	1 in.		2 in.	1/2 in.		1 in.			
Over 6 lbs.	16 lbs.	1 1/2 in.	2	1/2 in.	3/4 in.	1	1/4 in.			
Over 16 lbs.	None	2 in.		3 in.	1 in.	1 1/2 in.				
Discolorations:		Lightly Shaded		Moderately Shaded ⁴						
	Carcass Parts ont and rear halves)	Breast and Legs	Elsewhere		Hock of leg	Elsewhere				
None	2 lbs.	1/2 in.		1 in.	1/4 in.	1	/2 in.			
Over 2 lbs.	6 lbs.	3/4 in.	1	1/2 in.	3/8 in.	3	8/4 in.			
Over 6 lbs.	16 lbs.	1 in.		2 in.	1/2 in.		1 in.			
Over 16 lbs.	None	1 1/4 in.	2	1/2 in.	5/8 in.	1	1/4 in.			
Discolorations: O	ther Parts	Lightly Shaded			Moderately Shaded ⁴					
None	2 lbs.		1/2 in.			1/4 in.				
Over 2 lbs.	6 lbs.		3/4 in.			3/8 in.				
Over 6 lbs.	16 lbs.		1 in.			1/2 in.				
Over 16 lbs.	None		1 1/4 in.			5/8 in.				
Disjointed and Br		Carcass1 disjoi		broken bones. Pa	rtsThighs with		n, legs, or leg			
				ointed from the hip						
Missing Parts:		Wing tips and tail. In ducks and geese, the parts of the wing beyond the second joint may be removed if removed at the joint and both wings are so treated. Tail may be removed at the base.								
Freezing Defects:		Slight darkening on back and drumstick. Overall bright appearance. Occasional pockmarks due to drying. Occasional small areas of clear, pinkish, or reddish-colored ice.								

<sup>&</sup>lt;sup>1</sup>Hair or down is permitted on the carcass or part, provided the hair or down is less than 3/16 inch in length, and is scattered so that the carcass or part has a clean appearance, especially on the breast and legs.

<sup>&</sup>lt;sup>2</sup> Maximum aggregate area of all exposed flesh. In addition, the carcass or part may have cuts or tears that do not expand or significantly expose flesh, provided the aggregate length of all such cuts and tears does not exceed a length tolerance equal to the permitted dimensions listed above.

<sup>&</sup>lt;sup>3</sup> For all parts, trimming of skin along the edge is allowed, provided at least 75 percent of the normal skin cover associated with the part remains attached, and the remaining skin uniformly covers the outer surface and does not detract from the appearance of the part.

<sup>&</sup>lt;sup>4</sup>Moderately shaded discolorations and discolorations due to flesh bruising are free of clots and limited to areas other than the breast and legs except for the area adjacent to the hock.

### Ready-to-Cook Poultry - B Quality

### Summary of Specifications for Standards of Quality for Individual Carcasses and Parts

Effective April 29, 1998 (Not All Inclusive --Minimum Requirements and Maximum Defects Permitted)

Lifective April	129, 1990 (INC	ot All Inclusiveiv	illillillidili Nequii		uality	erriitted)			
Conformation	•								
Breastbone	•	Moderate deformities  Moderately dented, curved, or crooked							
Back			'	•		,u			
	200				ely crooked				
Legs and Win	igs				Moderately misshapen				
Fleshing:		Moderately fleshed							
Fat Covering:		Sufficient fat layer-			1	All Other	D 14		
Defeathering:		Turkeys Ducks and (feathers less than 3/4 in.) (feathers less			nd Geese <sup>1</sup> Ss than 1/2 in.)  All Other Poultry (feathers less than 1/2 in.)				
A few scattered		Carcass	Parts	Carcass	Parts	Carcass	Parts		
feathers and ha	airs	6	3	10	5	6	3		
Exposed Flesh	n:								
Weight	Range		Carcass		Parts				
Minimum:	Maximum:								
None	2 lbs.								
Over 2 lbs.	6 lbs.			gs, entire back, or		/3 of the flesh norm	ally covered by		
Over 6 lbs.	16 lbs.	entire breast) has	more than 1/3 of	the flesh exposed		skin exposed			
Over 16 lbs.  Discolorations	None			0					
Discolorations	5:		Lia		cass	tions			
Card	cass		Breast and Legs		Shaded Discolorations Elsewhere				
None	2 lbs.	1 1/4 in.			2 1/4 in.				
Over 2 lbs.	6 lbs.		2 in.		3 in.				
Over 6 lbs.	16 lbs.		2 1/2 in.		4 in.				
Over 16 lbs.	None		3 in.		5 in.				
Discolorations	s: <sup>2</sup>			Large Car	cass Parts				
Large Car	cass Parts	Lightly or Moderately Shaded Discolorations							
(halves, front a			Breast and Legs			Elsewhere			
None	2 lbs.		<u>5</u> 1 in.			1 1/4 in.			
Over 2 lbs.	6 lbs.		1 1/2 in.		1 3/4 in.				
Over 6 lbs.	16 lbs.		2 in.		2 1/2 in.				
Over 16 lbs.	None		2 1/2 in.			3 in.			
Discolorations	s: <sup>2</sup>		Lia	<b>Othe</b> ı htly or Moderately	r <b>Parts</b> Shadad Diagalara	tiono			
Other	Parts		Ligi			lions			
	2 lbs.				gs, and Parts 1 in.				
None Over 2 lbs.	6 lbs.				+ ın. in.				
Over 6 lbs.	16 lbs.				/2 in.				
Over 16 lbs.	None				/4 in.				
Disjointed and		Carcass2 disjoint	ed and no broke			otruding broken bor	ne. Partsmay		
Bones:		be disjointed, no br					,		
Missing Parts:		Wing tips, 2nd wing	g joint, and tail.						
Trimming:			Carcass			Parts			
		Slight trimming of t				int of meat may be t			
		the meat yield of a			the edge of a part	to remove defects.			
		appreciably affecte							
		area not wider than							
Eroozina Dofo	oto	halfway between th			  adorato areas aba	wing a layer of clas	r ninkinh or		
Freezing Defe	uis.	reddish colored ice		s due to drying. IV	iouerale areas sho	wing a layer of clea	ı, pırıkisti, öt		
1 Hair or down i	s nermitted on	the carcase or part	provided the ha	ir or down is less th	han 3/16 inch in lo	ngth, and is scattere	ad so that the		
		pearance, especial			nan 3/10 mon m	ngin, and is scattere	ou so mat me		
ouroass or part	nas a olcan ap	podranico, especial	iy on the bleast a	and logs.					

<sup>&</sup>lt;sup>2</sup> Discolorations due to flesh bruising shall be free of clots and may not exceed one-half the total aggregate area of permitted discoloration.

### Ready-to-Cook Poultry - C Quality Summary of Specifications for Standards of Quality for Individual Carcasses and Parts

Effective April 29, 1998 (Not All Inclusive) (Minimum Requirements and Maximum Defects Permitted)

		All IIICIUSIVE			C Quality				
					C Quality				
Conformation:					Abnormal				
Breastbone				Seriou	sly curved or cooke	d			
Back				S	eriously crooked				
Legs and Win	ngs	Misshapen							
leshing:		Poorly fleshe							
at Covering:		Lacking in fa	t covering over	all parts of carca	ass				
Defeathering:		Tur	keys	Ducks ar	nd Geese <sup>1</sup>	d Geese <sup>1</sup> All Other Poultry			
	otruding feathers		s than 3/4 in.)		ss than 1/2 in.)	(feathers less than 1/2 in.)			
and hairs		Carcass	Parts	Carcass	Parts	Carcass	Parts		
		8	4	12	6	8	4		
xposed Flesh	1:		Caracaa			Parts			
Weigh	t Range		Carcass			Paris			
Maximum	Minimum	_							
None	2 lbs.								
Over 2 lbs.	6 lbs.				No limit				
Over 6 lbs.	16 lbs.				INO IIIIIIL				
Over 16 lbs.	None								
Discolorations		<del> </del>			Carcass				
	cass	Breast and Legs Elsewhere							
None	2 lbs.								
Over 2 lbs.	6 lbs.		No limit						
		on size, number of areas, or intensity of discolorations and flesh bruises if such areas do not render any part of the carcass unfit for food.							
Over 6 lbs.	16 lbs.								
Over 16 lbs.	None	<u> </u>							
iscolorations)					Parts				
Parts (includes large carcass parts)		Breasts, Legs, and Parts							
None	2 lbs.								
Over 2 lbs.	6 lbs.		No limit						
_		on size, number of areas, or intensity of discolorations and flesh bruises if such areas					<u> </u>		
()VAr 6 lhe	Th inc	do not render any part unfit for food.							
Over 6 lbs.	16 lbs.		size, number of		ty of discolorations		such areas		
Over 16 lbs.	None		size, number of		ty of discolorations der any part unfit for		such areas		
Over 16 lbs. Disjointed and	None Broken Bones:				ty of discolorations		such areas		
Over 16 lbs.  Disjointed and	None Broken Bones:	Wing tips, wi Backs shall i (oyster) may The vertebra	ngs, and tails. nclude all meat be removed. Il ribs and scapu	do not rend and skin from pour	ty of discolorations der any part unfit for  No limit  elvic bones, except  d skin and the back	food.	ined in the ilium		
Over 16 lbs.  Disjointed and  Missing Parts:	None Broken Bones:	Wing tips, wi Backs shall i (oyster) may The vertebra	ngs, and tails. nclude all meat be removed. Il ribs and scapulso be removed	do not rend and skin from po ala with meat and I (front half of ba	ty of discolorations der any part unfit for  No limit  elvic bones, except  d skin and the back	that the meat conta	ined in the ilium		
Over 16 lbs.	None Broken Bones:	Wing tips, wi Backs shall i (oyster) may The vertebra bones may a	ngs, and tails.  nclude all meat be removed.  Il ribs and scapulso be removed.  Carcasthe breast and I	and skin from pour and skin from pour and skin from pour and later	ty of discolorations der any part unfit for  No limit  elvic bones, except  d skin and the back	that the meat conta	nined in the ilium or (forward) of ilia		
Over 16 lbs.  Disjointed and  Missing Parts:	None Broken Bones:	Wing tips, wi Backs shall i (oyster) may The vertebra bones may a Trimming of materially aff The back mathe area bety	ngs, and tails.  nclude all meat be removed.  Il ribs and scapulso be removed  Carcaethe breast and I fected.  ay be trimmed in ween the hip join	and skin from poula with meat and (front half of basses) egs is permitted an an area not wice	ty of discolorations der any part unfit for No limit  No limit  elvic bones, except d skin and the back ck).  , but not to the exte	that the meat contact that the meat contact that the meat anterior that the normal means of the contact that the contact	nined in the ilium or (forward) of ili neat yield is		

carcass or part has a clean appearance, especially on the breast and legs.

### **Poultry Grading and Inspection**

### What's the Difference?



### **U.S. Graded Poultry**

- # Grading refers to the sorting of poultry by quality factors that determine its relative degree of excellence.
- # Product is continuously monitored by USDA graders and assigned a grade based on the following quality factors:
  - Exposed flesh, defeathering, discolorations, broken bones, missing parts, freezing defects, conformation or shape, fleshing, and fat covering.
- # Grading is a voluntary service paid for by poultry processors. Not all poultry is USDA graded.



### **U.S. Inspected Poultry**

- # Inspection refers to the safety of poultry and poultry products and the accuracy of their labels.
- # Both the products and the plants' systems for sanitation and preparation of products are inspected to assure that they are safe.
- # Inspection involves only those properties related to wholesomeness and labeling, not quality.
- # Inspection is mandatory and required by law, with minor exceptions.

### **Quality is the Difference!**





### **United States Department of Agriculture**

Agricultural Marketing Service Livestock & Poultry Program

> Revised June 2007 September 1997 AMS-632

### Whole Bird



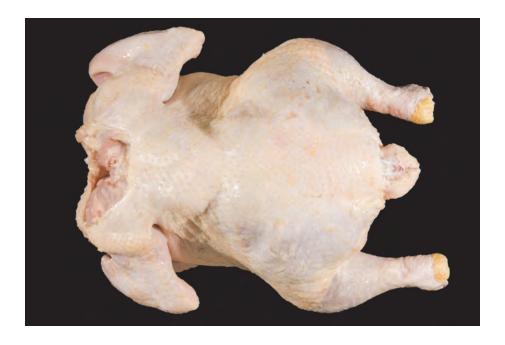




### Whole Bird—Grade A

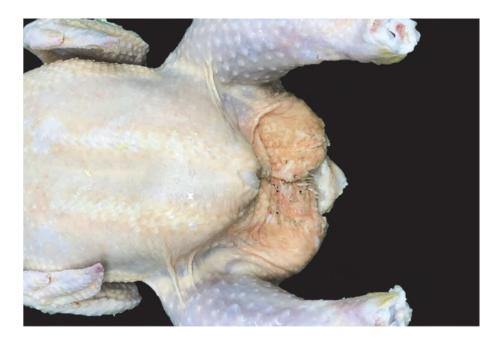


Grade A Whole Bird (Front)



Grade A Whole Bird (Back)

### Whole Bird—Feathers



## Grade A Whole Bird with Borderline Feathers Under the Tail

There is a tolerance for a small amount of encrustations and feathers in this area provided it does not detract from the overall appearance.



### **Grade A Whole Bird** with Feather Shafts

Tolerance for feathers less than ½ inch:

Grade A: 4 feathers

Grade B: 6 feathers

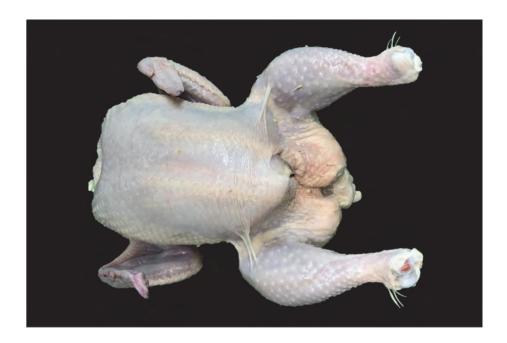
Grade C: 8 feathers

No Grade: more than 8

feathers

Note: Feather shafts are considered feathers

### Whole Bird— Feathers



### **Grade B Whole Bird** with 6 Feathers

Tolerance for feathers less than ½ inch:

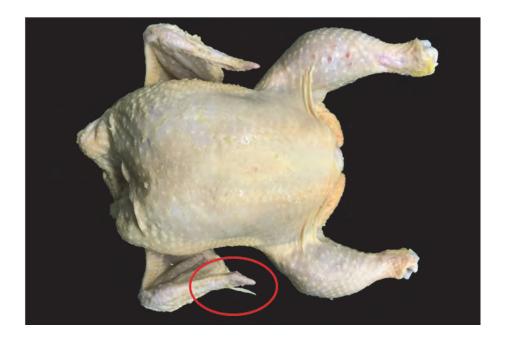
Grade A: 4 feathers

Grade B: 6 feathers

Grade C: 8 feathers

No Grade: more than 8

feathers



### No Grade Whole Bird with Feather Longer than ½ inch

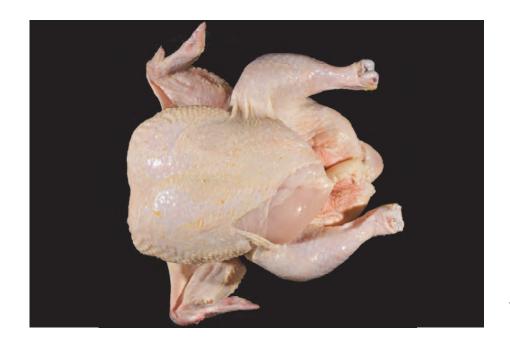
Parts or carcasses with attached feather(s) exceeding ½ inch in length are considered No Grade.

### Whole Bird—Exposed Flesh



## Grade A Whole Bird with Borderline Exposed Flesh on Breast Tip

Tolerance for exposed flesh for breast on Grade A carcasses is ¼ inch, but natural exposed flesh on the breast tip is allowed up to the heavy feather tract.



## Grade B Whole Bird with Exposed Flesh on Breast Tip

Grade B carcasses may have exposed flesh provided no part on the carcass (wings, legs, entire back, or entire breast) has more than ¼ the flesh normally covered by skin exposed.

### Whole Bird—Exposed Flesh



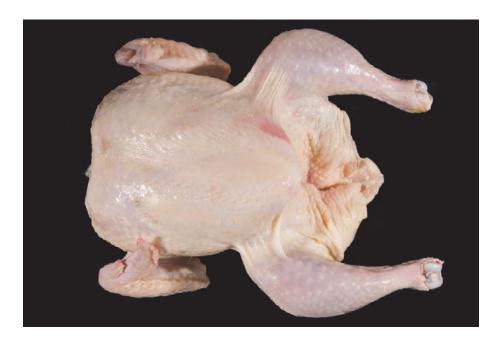
### Grade A Whole Bird with Exposed Flesh on Back

Tolerance for exposed flesh on Grade A carcasses is 1 ½ inches in length or diameter on parts other than the breast and legs.



## Grade B Whole Bird with Exposed Flesh on Breast

Grade B carcasses may have exposed flesh provided no part on the carcass (wings, legs, entire back, or entire breast) has more than ½ the flesh normally covered by skin exposed.



## Grade A Whole Bird with Light Discoloration

Tolerance for areas of light discoloration for Grade A carcasses on the breast and legs is 1 inch in diameter.



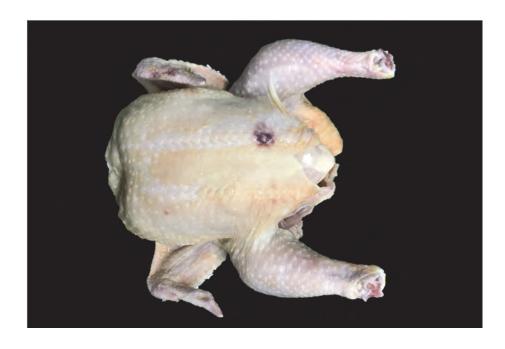
## Grade A Whole Bird with Light Discoloration on Back of Wing

Tolerance for areas of light discoloration for Grade A carcasses on areas other than the breast and leg is 2 inches in diameter.



## Grade A Whole Bird with Moderate Discoloration on Back of Wing

Tolerance for moderate discoloration for Grade A carcasses on areas other than the breast and legs is 1 inch in diameter.



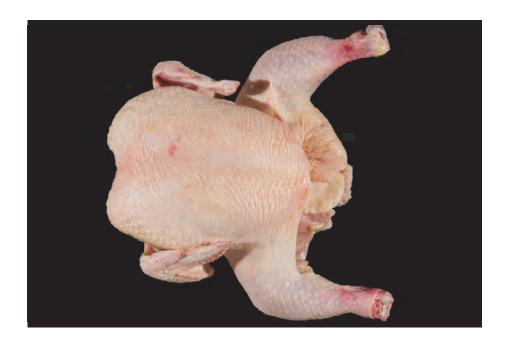
## **Grade B Whole Bird with Moderate Dis- coloration on Breast**

Moderate discoloration is not permitted on the breast and legs for Grade A carcasses. Tolerance for moderate discoloration on Grade B carcasses is 2 inches in diameter on the breast and legs.



## Grade C Whole Bird with Moderate Aggregate Discoloration

There is no limit on size, number of areas, or intensity of discoloration for Grade C if such areas do not render any part of the carcass unfit for food.



## Grade A Whole Bird with Moderate Discoloration on Hock

Moderate discolorations are limited to areas other than the breast and leg except for the area adjacent to the hock. Tolerance is ½ inch on hocks for Grade A whole bird carcasses.



## Grade A Whole Bird with Borderline Encrustation on Breast

Small lightly colored encrustations that do not detract from the overall appearance of the carcass or part are permitted.



### No Grade Whole Bird with Scab on Breast

Large or darkly colored scabs that detract from the overall appearance of the carcass or part are not permitted.

### Whole Bird—Bone Defects



## Grade A Whole Bird with One Disjointed Wing

There is a tolerance for one disjointed bone on Grade A carcasses, but there is no tolerance for broken bones on Grade A carcasses.



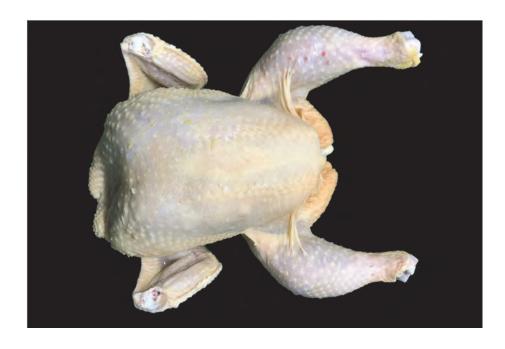
Grade B Whole Bird with One Non-Protruding Broken Bone

There is a tolerance for one broken non-protruding bone for Grade B carcasses.



### Grade A Whole Bird with Long Neck

The neck is associated as part of the whole bird carcass and does not need to be removed. Neck length is unlimited provided no part of the head is attached.



### **Grade A Whole Bird Wing Tips Removed**

One or both wing tips may be removed at the joint or anywhere in the third portion as long as the cut is even and leaves no protruding bones.



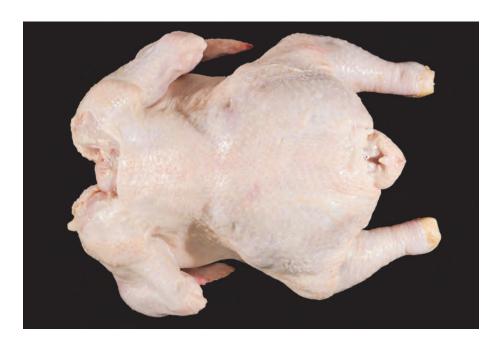
### **Grade A Whole Bird Tail Removed**

The tail may be removed at the base.



### **Grade B Whole Bird** with Back Trimmed

The back may be trimmed in an area not wider than the base of the tail to the area halfway between the base of the tail and hip joints.



Grade A Whole Bird
Oil Gland Removed
with Oil Duct Remaining

The oil duct may remain intact so long as the oil gland is removed.



### No Grade Whole Bird with Oil Gland Close Up

Both lobes of the oil gland must be removed. Remnants of oil gland are permitted provided secretory material is not present.



## Grade A Whole Bird Without Oil Gland Close Up

A small amount of yellow remnants of the oil gland are acceptable.



### No Grade Whole Bird with Missing Part

There is no tolerance for missing parts on Grade A carcasses except for wing tips and tail.



### **Parts**









**Grade A Split Breast** 



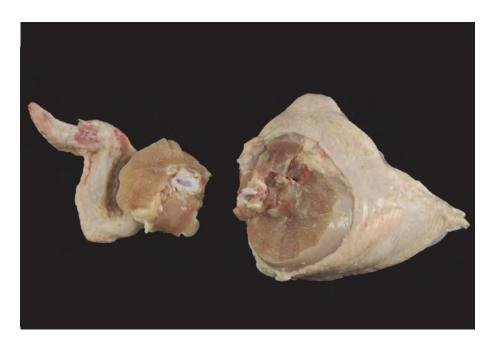
**Grade A Split Breast Wing Cut Tolerance** 

Wing cuts may extend to the heavy feather tract.



### Grade A Split Breast with Grade A Wing

Cut shown is right at the edge of the heavy feather tract on the breast.



### **Grade C Split Breast** with **Grade A Wing**

Cut shown extends beyond heavy feather tract resulting in a Grade C breast due to yield loss. Wings with excess breast meat attached are acceptable (sometimes called "Silver Dollar" wings).



### **Grade A Split Breast** with Exposed Flesh

Tolerance for Grade A parts is ¼ inch exposed flesh.



### **Grade B Split Breast** with Exposed Flesh

Tolerance for Grade B parts is up to ⅓ area of flesh normally covered by the skin.



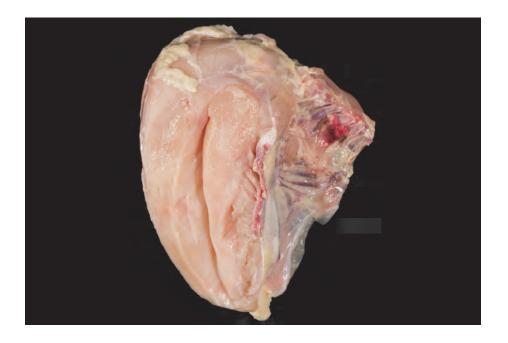
### Grade B Split Breast with Borderline Aggregate Light Discoloration

Tolerance for Grade B is 1 inch aggregate area. This area of aggregate light discoloration would amount to more than 1 inch when condensed and detracts from the overall appearance.



## Grade B Split Breast with Moderate Discoloration

Tolerance for Grade B is 1 inch. For Grade A, there is no tolerance for moderate discoloration on breast parts.



## Grade A Split Breast (inside) with Small Lung

The tolerance for lungs for all Grades is less than ¼ of a lung.



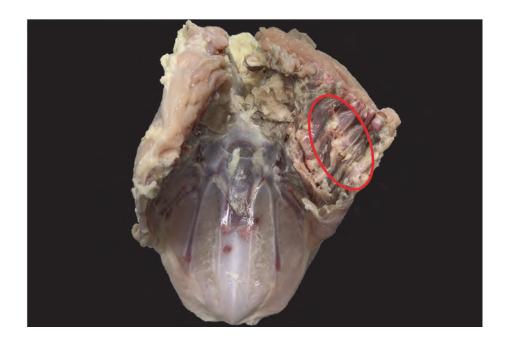
### No Grade Split Breast (inside) with Large Lung

When more than ¼ of a lung is present, the part is considered a No Grade.



### Grade A Whole Breast with Ribs Scored for Styling Purposes (inside)

Ribs are allowed to be scored and folded for styling purposes. They may be flexible, but still intact. The score should be made evenly with no sharp broken bones.



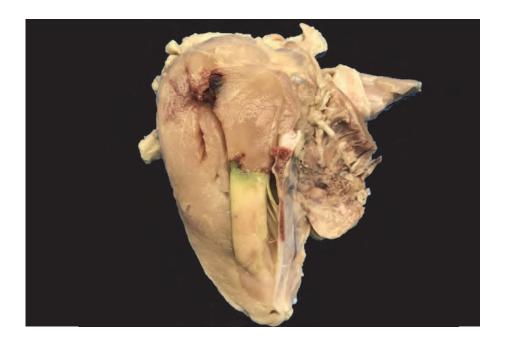
### Grade C Whole Breast with Splintered Ribs (Inside)

Breast with ribs that are splintered, jagged, and/or sharp are considered Grade C for broken bones.



## Grade A Split Breast (inside) with Ribs Folded

Ribs may be scored and folded for styling purposes.

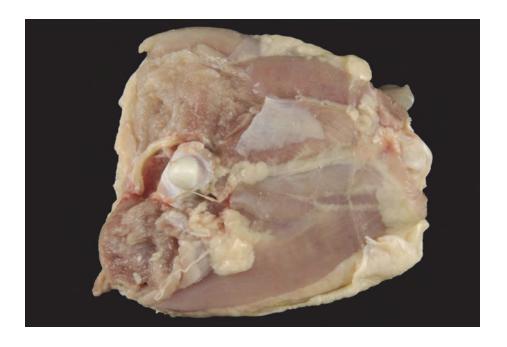


## No Grade Split Breast with Green Muscle Disease

There is no tolerance for serious flesh defects. Product is considered No Grade and should be shown to plant representative.



Grade A Thigh (outside)



Grade A Thigh (inside)



### Grade A Thigh with Exposed Flesh

Tolerance for Grade A parts is ¼ inch. For all parts, trimming of skin along the edge is allowed, provided 75% skin associated with the part remains attached, and the remaining skin uniformly covers the outer surface.



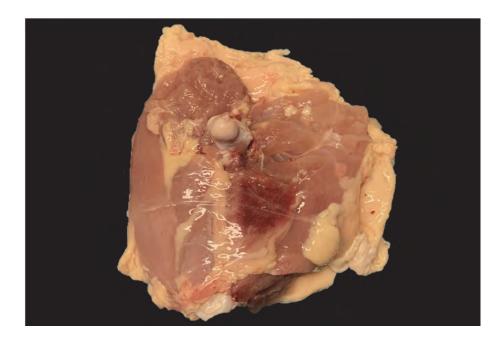
## Grade B Thigh with Exposed Flesh (exceeds ¼ inch)

Tolerance for Grade B parts is up to ⅓ area of flesh normally covered by the skin.



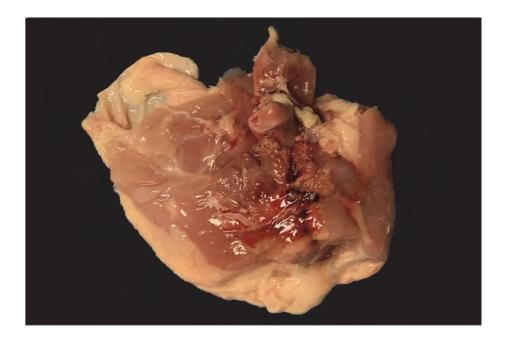
### **Grade A Thigh with Slight Discoloration**

Slight discolorations are acceptable, provided they do not detract from the overall appearance of the product.



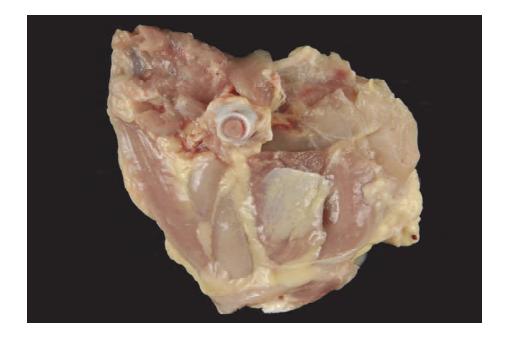
# Grade A Thigh with Maximum Natural Adductor Muscle Discoloration

Natural discoloration of the adductor muscle on the thigh is acceptable up to this level.



## Grade C Thigh with Moderate Discoloration and Blood Clot

There is no tolerance for presence of blood clots for Grades A and B.



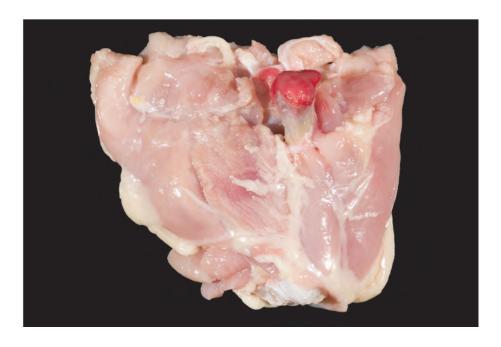
### **Grade A Thigh with Femur Cap Removed**

Cap of femur bone may be partially attached or removed entirely for Grade A.



### Grade C Thigh Joint Miscut

Cuts must occur within the tolerance zone referenced on page 9. Note the absence of condyle surrounding the bottom/left portion of the femur cap. Medullary cavity is clearly exposed.



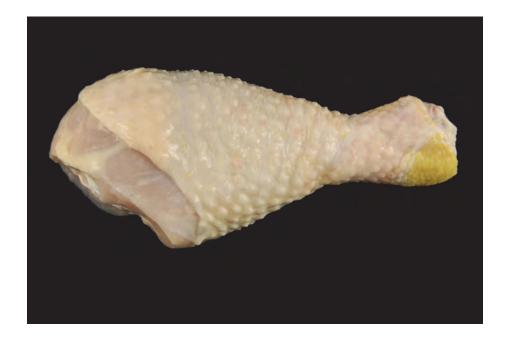
### Grade C Thigh Joint Miscut (Meat Not Attached to Back of Femur Cap)

Flesh must be attached to the bone. If flesh falls away from femur cap when held upright, it is considered a miscut.

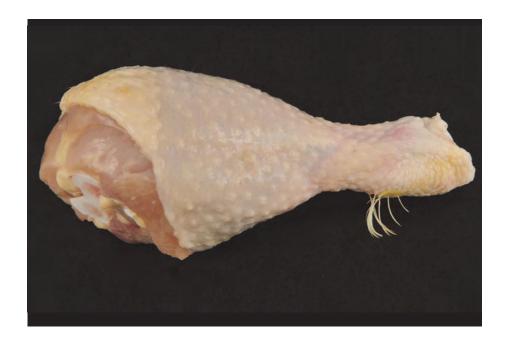


### Grade A Thigh with Back Portion

Back portion (with or without tail) may be attached when labeled as such.



#### **Grade A Drumstick**



#### No Grade Drumstick Excessive Feathers

Tolerance for feathers less than ½ inch:

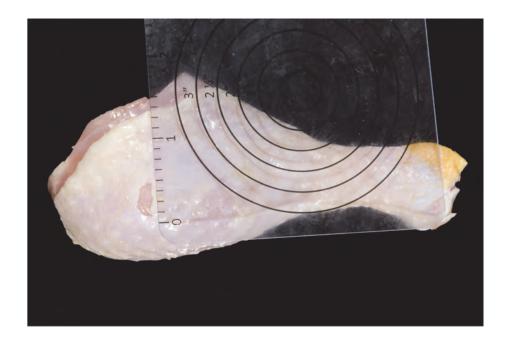
Grade A: 2 feathers

Grade B: 3 feathers

Grade C: 4 feathers

No Grade: more than 4

feathers



### Grade B Drumstick Exposed Flesh (exceeds ¼ inch)

Tolerance for Grade B parts is up to ⅓ area of flesh normally covered by the skin.



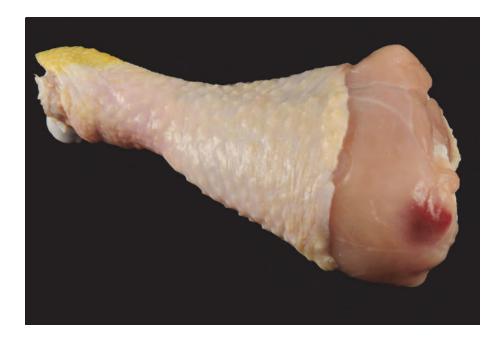
## Grade A Borderline Drumstick Light Discoloration on Hock

Tolerance for light discoloration on parts is ¾ inches of aggregate area. This photo shows the maximum allowable area of aggregate light discoloration.



## **Grade A Drumstick Moderate Discolora- tion on Hock**

Moderately shaded discolorations are limited to areas other than the leg except for the area adjacent to the hock. Tolerance is % inch area for parts.



## **Grade B Drumstick Moderate Discolora- tion**

Tolerance for moderate discolorations for Grade B is 1 inch.



### **Grade A Drumstick Borderline Hock Cut**

Cut occurred in tolerance zone referenced on page 9 as evident by presence of condyle.



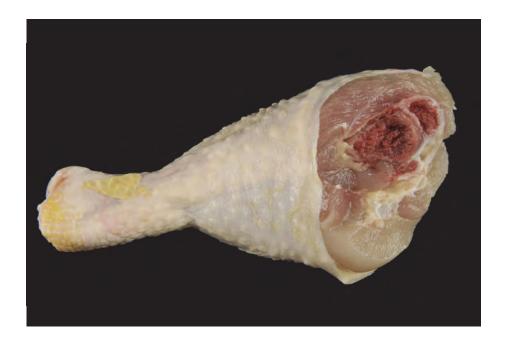
### Grade C Drumstick Hock Miscut

Cuts must occur within the tolerance zone referenced on page 9. Note that the tendon has been severed and is visible below the bone.



### **Grade A Drumstick Borderline Joint Cut**

Cut occurred in tolerance zone referenced on page 9 as evident by presence of condyle.



### **Grade C Drumstick Joint Miscut**

Cuts must occur within the tolerance zone referenced on page 9. Note the absence of condyle surrounding the left portion of the bone. Medullary cavity is clearly exposed.



### No Grade Drumstick with Excessive Skin

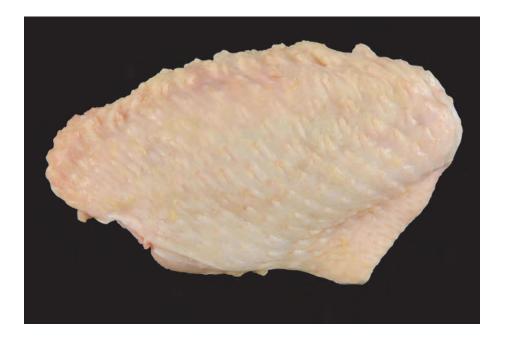
Skin or fat not normally associated with the part may not be included unless stated on the label. Skin is considered excessive when it extends more than 1 ½ inches beyond the meat tissue of the part.



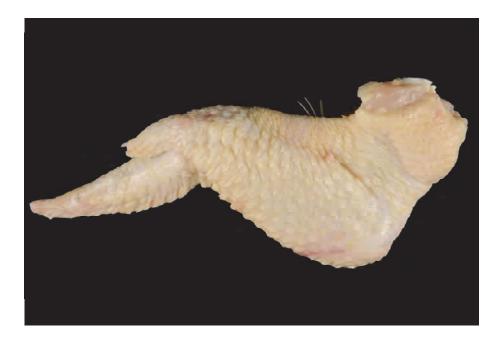
Grade A Whole Wing



Grade A First Segment Wing Portion (Wing Drummette)



Grade A Second Segment Wing Portion (Wing Flat)



### Grade B Wing with Feathers

Tolerance for feathers less than ½ inch:

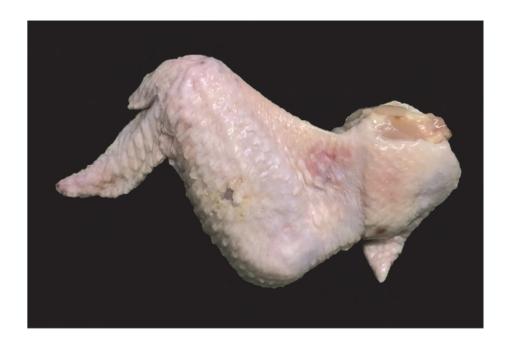
Grade A: 2 feathers

Grade B: 3 feathers

Grade C: 4 feathers

No Grade: more than 4

feathers



### Grade A Wing with Exposed Flesh

Tolerance for Grade A parts is ¼ inch.



### Grade B Wing with Exposed Flesh

Tolerance for Grade B parts is up to ⅓ area of flesh normally covered by the skin.



Grade A Wing with Borderline Discoloration on Back of Wing

Tolerance for light discoloration on parts is ¾ inch in diameter.



Grade A Wing with Moderate Discoloration

Tolerance for moderate discoloration on parts other than breast and leg is % inch in diameter.



Grade B Second Segment Wing with Aggregate Moderate Discoloration

Tolerance for Grade B parts is 1 inch in diameter maximum aggregate area.



Grade B Wing with Moderate Discoloration

Tolerance for Grade B parts is 1 inch in diameter maximum aggregate area.



Grade A Wing after
Wing Tip with Moderate Discoloration
is Removed

Wings tips with discoloration can be removed to retain the quality of the part.



## Grade C Wing with Moderate Discoloration

There is no limit for discoloration for Grade C parts so long as it does not render any part unfit for food.



### **Grade A Wing with Borderline Cut**

Cut occurred in tolerance zone referenced on page 10 as evident by presence of condyle.



### Grade C Wing with Miscut

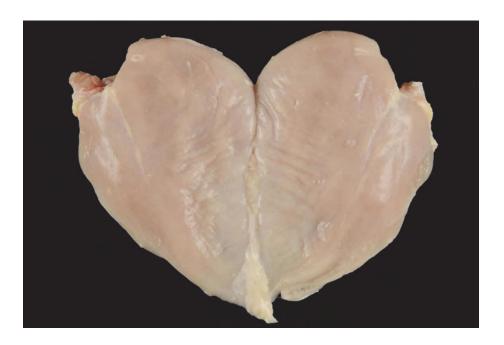
Cuts must occur within the tolerance zone referenced on page 10. Medullary cavity of the bone shaft is clearly exposed.

## Boneless/Skinless Parts









Grade A Boneless Skinless Whole Breast Butterfly

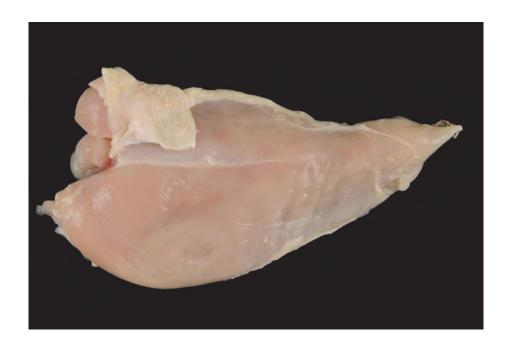


**Grade A Boneless Skinless Half Breast** 



# Grade A Boneless Skinless Breast Half with Acceptable Shape

Trimming of the meat along the outer edges is permitted provided at least ½ the part remains intact and the normal symmetrical appearance of the part is retained.



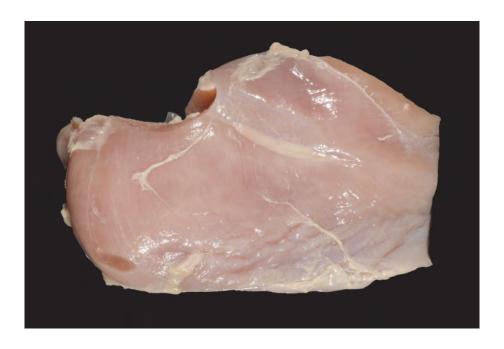
### No Grade Boneless Skinless Breast with Skin

There is no tolerance for attached skin on boneless skinless parts.



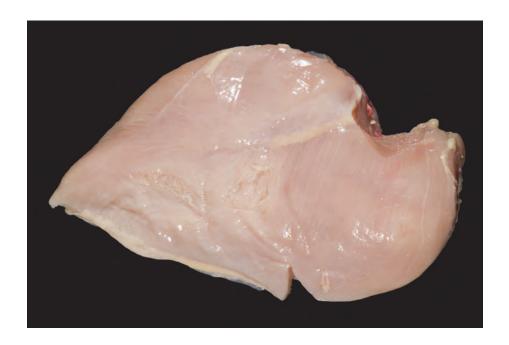
#### No Grade Boneless Skinless Breast with Discoloration

There is no tolerance for light or moderate discoloration on boneless skinless parts. Only slight discoloration is allowed.



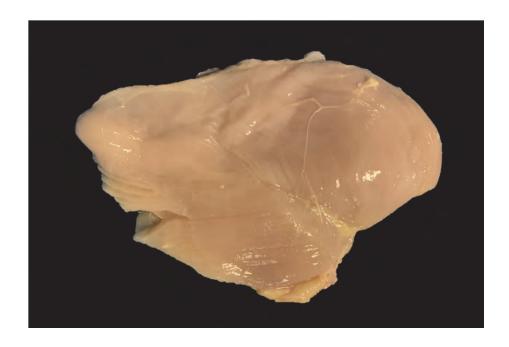
### No Grade Boneless Skinless Breast Tip Removed

Trimming of the meat along the outer edges affected the normal symmetrical shape and appearance of the part.



Grade A Boneless
Skinless Breast Borderline Tear and Minor Abrasion in
Flesh

Minor abrasion and separation of the muscle tissue is permitted provided it does not detract from the overall appearance of the part.



Grade A Boneless
Skinless Breast Borderline Tear with
Grain of Muscle

Separation of the muscle tissue is permitted provided it does not detract from the overall appearance of the part.



## Grade A Boneless Skinless Breast with Cut at Tip

Separation of the muscle tissue is permitted provided it does not detract from the overall appearance of the part.



### No Grade Boneless Skinless Breast Split Tip

Separation of muscle tissue detracts from the overall appearance of the part.



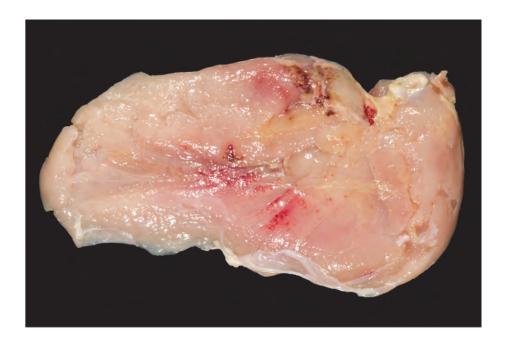
### No Grade Boneless Skinless Breast with Abrasion in Flesh

Abrasions resulting in an angular indentation as shown are not permitted. Minor flesh abrasions with smooth and even appearance that do not detract from the overall appearance are acceptable.



### No Grade Boneless Skinless Breast with Over-Scalded Flesh

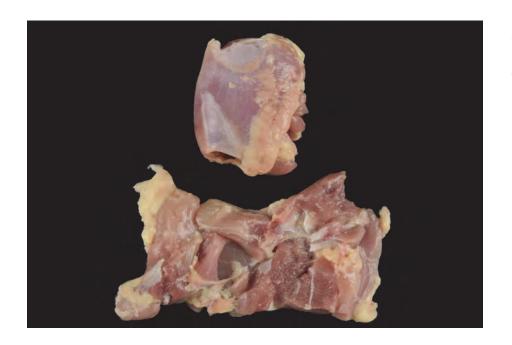
There is no tolerance for over-scalded flesh. Product is considered No Grade and should be shown to plant representative.



### No Grade Boneless Skinless Breast with Serious Flesh Defect

There is no tolerance for serious flesh defects. Product is considered No Grade and should be shown to plant representative.

### **Boneless/Skinless Parts—Thigh**



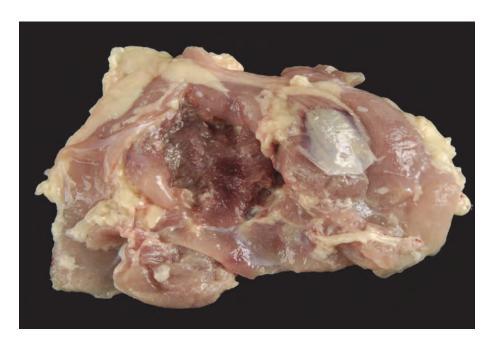
**Grade A Boneless Skinless Thigh** 



No Grade Boneless
Skinless Thigh with
Moderate Discoloration

There is no tolerance for light or moderate discoloration on boneless skinless parts. Only slight discoloration is allowed.

#### **Boneless/Skinless Parts—Thigh**



No Grade Boneless Skinless Thigh with Moderate Discoloration

There is no tolerance for light or moderate discoloration on boneless skinless parts. Only slight discoloration is allowed.



No Grade Boneless Skinless Thigh with Bone

There is no tolerance for bone or bone fragments in boneless skinless parts.

#### **Boneless/Skinless Parts—Drumstick**



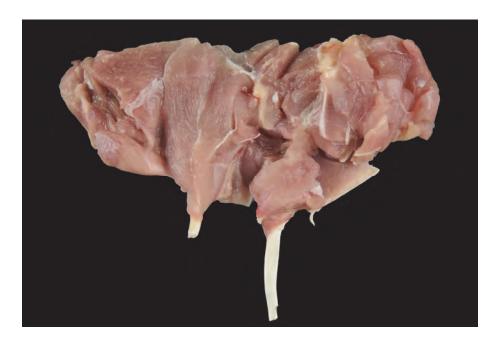
### **Grade A Boneless Skinless Drumstick**



No Grade Boneless Skinless Drumstick with Bone

There is no tolerance for bone or bone fragments in boneless skinless parts.

#### **Boneless/Skinless Parts—Drumstick**



No Grade Boneless Skinless Drumstick with Excessive Tendon

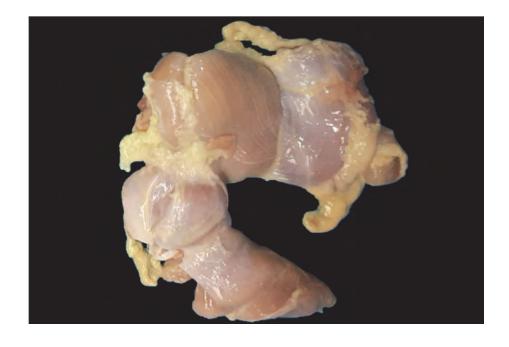
The tolerance for tendons in boneless skinless drums is ½ inch beyond the meat tissue.

#### **Boneless/Skinless Parts—Whole Leg**



### **Grade A Boneless Skinless Whole Leg**

For boneless skinless legs, holes in the meat resulting from the removal of the patella (knee cap) are permitted provided the bulk of the drumstick and thigh remains intact and connected.



#### No Grade Boneless/ Skinless Whole Leg

The bulk of the drumstick and thigh must remain intact and connected.



**Grade A Tenderloin** 



Grade A Tenderloin with Attached Tendon

Tendons normally associated with tenderloins are permitted. There is no limit for length of the tendon.



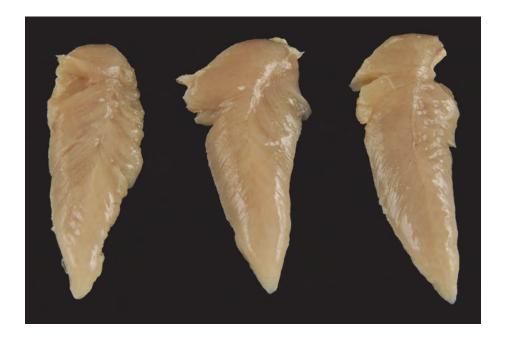
## Grade A Tenderloin with Slight Discoloration

Slight discoloration is permitted so long as it does not detract from the overall appearance of the part.



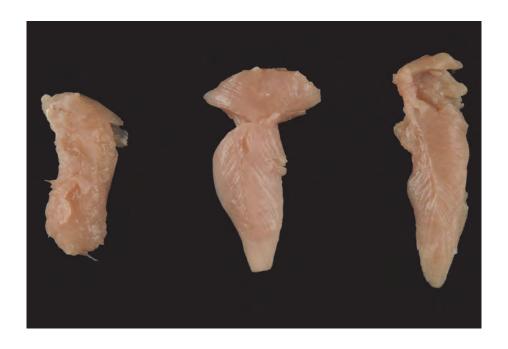
## No Grade Tenderloin with Moderate Discoloration

There is no tolerance for light or moderate discoloration on boneless skinless parts. Only slight discoloration is allowed.



#### Grade A Tenderloins Exhibiting Borderline Flesh Separations

Separation of the muscle tissue is permitted, provided it does not detract from the overall appearance of the part.



#### No Grade Tenderloins Exhibiting Flesh Mutilation

Separation of the muscle tissue detracts from the overall appearance.



# Grade A Tenderloin with Maximum Acceptable Amount of Attached Tissue

Strands of tenderloin tissue not attached to the tendon may be present, provided they do not detract from the overall appearance of the product.



# No Grade Tenderloin with Unacceptable Amount of Attached Tissue

Strands of tenderloin tissue detract from the overall appearance of the tendon.



#### No Grade Tenderloin with Hole

There is no tolerance for holes in the muscle tissue.

#### **Boneless/Skinless Parts—Size Reduced**



**Grade A Thin Sliced Breast** 



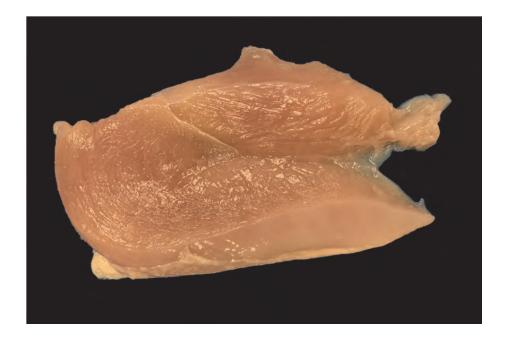
**Grade A Thin Sliced Breast** 

#### **Boneless/Skinless Parts—Size Reduced**



# Grade A Thin Sliced Breast with Natural Separation between the Muscles

Holes occurring naturally between muscles are acceptable. Holes occurring through muscle tissue would not be acceptable.



#### Grade A Thin Sliced Breast with Borderline Acceptable Shape

Variation in shape of the outer edges of the individual portions of meat are permitted.

### **Poultry Picture Series**

#### A Guide to U.S. Graded Chicken

A resource that illustrates the various defects described in the official U.S. Classes, Standards, and Grades for Poultry. Focusing on chicken carcasses and parts in the 2-6 lb. size range, the Poultry Picture Series is a visual representation of our Standards that will aid in uniformly interpreting grade standards for USDA poultry commodity graders, industry, academia, and food buyers.

To request a printed copy or download a digital copy, visit: https://www.ams.usda.gov/grades-standards/poultry



