

***I*NSTITUTIONAL
*M*EAT
*P*URCHASE
*S*PECIFICATIONS**

***FRESH LAMB
SERIES 200***

EFFECTIVE: November 2014



Institutional Meat Purchase Specifications

Fresh Lamb - Series 200

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1.0 Introduction

1.1 IMPS Documents

The United States Department of Agriculture (USDA) through its Agricultural Marketing Service (AMS) develops and maintains the Institutional Meat Purchase Specifications (IMPS) for meat and meat products. The complete IMPS series includes the following 11 documents:

General Requirements (GR)	
Quality Assurance Provisions (QAP)	
Fresh Beef	Series 100
Fresh Lamb	Series 200
Fresh Veal and Calf	Series 300
Fresh Pork	Series 400
Cured, Cured and Smoked, and Fully Cooked Pork Products	Series 500
Cured, Dried, and Smoked Lamb Products	Series 600
Variety Meats and By-Products	Series 700
Sausage Products	Series 800
Fresh Goat	Series 11

1.2 Contact Information

These specifications are recommended for use by any meat product procuring activity. For assurance that procured items comply with these detailed requirements, AMS, through its Livestock Poultry and Seed (LPS) Program's Quality Assessment Division (QAD) provides a voluntary meat certification service and a process verification program. For labeling purposes, only producers who have meat products certified according to the IMPS or operate under an approved IMPS process verified program may use the letters "IMPS" on the product label. Purchasers desiring these services should contact:

USDA, AMS, LPS Program, QAD
1400 Independence Ave, SW, Room 3932, Stop 0258
Washington, DC 20250
Phone: (202) 720-3271
<http://www.ams.usda.gov/AMSV1.0/QAD>

2.0 IMPS Ordering Checklist

2.1 Checklist Elements

The following checklist will assist the purchaser in providing contractual language necessary to describe the IMPS product and service desired. Each element within the checklist is further defined within **Section 3.0 - Ordering Data to be Specified by the Purchaser**.

Item Number

Special instructions
Purchaser Specified Option (PSO)
Added ingredients
Mechanical Tenderization
Aging

Grade and Special Requirements

State of Refrigeration (See IMPS GR.)

Chilled
Frozen

Fat Limitations

Portion Cut Weight, Thickness, and Shape

Weight Range

Netting and Tying

Packaging and Packing (See IMPS GR.)

Quality Assurance (See IMPS QAP.)

Method of examination
Acceptable Quality Levels (AQL's)
Certification - (See IMPS GR and QAP.)

3.0 Ordering Data to be Specified by the Purchaser

3.1 Item Number, PSO's & Special Instructions

The purchaser shall specify: (1) IMPS item number and product name to be purchased, and if applicable, (2) PSO's, (3) added ingredients, applicable options, modifications, and special instructions to the requirements of the IMPS.

3.1.1 Abbreviations

In conjunction with other markings that may be required in the General Requirements and by Meat and Poultry Inspection Regulations, the IMPS item number, Class (Lamb, Yearling Mutton, or Mutton), and the product name listed above shall be used for marking of shipping containers. Abbreviation of the product name is recommended. Abbreviations, when used, shall be as follows:

Arm Out – A/O	Partially – Part	Shank Off – S/O
Block Ready – B/R	Roast – Rst	Square-Cut – Sq-Cut
Boneless – Bnls	Roast-Ready – Rst-Rdy	Tenderloin – Tender
Center Cut – Cntr Cut	Short-Cut – Sh-Cut	Trimmed – Trmd
Ground – Grnd	Shoulder – Shld	Trotter Off – T/O
Heel Out – H/O	Sirloin – Sirln	

The product names and abbreviations listed in this series have been reviewed and approved by USDA; FSIS; Office of Policy and Program Development (OPPD); Labeling and Program Delivery Staff, Washington D.C.

3.1.2 Added Ingredients

To enhance product performance, the purchaser may specify ingredients to be added to any IMPS fresh lamb item. Ingredients may be added by immersion or injection. The purchaser may specify any one of the following levels of added ingredients within a purchase order:

Option No.	Maximum Percentage of Added Ingredients
1	7%
2	10%
3	12%
4	15%
5	≥15%

The use of ingredients, method of addition, and product labeling shall comply with FSIS Regulations and Policies.

3.1.3 Mechanical Tenderization

To enhance the tenderness of lamb products, the purchaser may specify roasts or raw materials to be made into portion cuts to be mechanically tenderized. When specified, the roast or raw materials to be portioned shall be mechanically tenderized by using the multiple probe method (pinning) not more than one time.

3.1.4 Aging

The purchaser shall specify the aging type and time desired. For assistance in specifying these parameters, use the following tables.

Type	Description
Wet Aging	Meat is vacuum-packaged in a high moisture-impermeable bag and stored in cooler conditions (33 - 36°F) for a specified length of time.
Dry Aging	Meat is unpackaged and directly exposed to cooler conditions with designated temperature (33 - 36°F), humidity (85 – 90%) and air-flow (positive) controls.

Time	Description
0 – 5 days	Green
5 – 7 days	Moderately aged
7 – 15 days	Aged
>15 days	Extremely aged

3.2 Grade & Special Requirements

3.2.1 Categories

The purchaser may specify any combination of the following grade, class, style and special requirement categories when ordering. NOTE: Only one selection per category, per order.

Category					
Quality Grade*	U.S. Prime	U.S. Choice	U.S. Good	U.S. Utility	
Yield Grade**	1	2	3	4	5

Carcass Wt. Range	As Specified by Purchaser
Diet***	As Specified by Purchaser

*Quality grades predict palatability of lean and are applied to carcasses. They are determined by evaluation of carcass maturity and quality of lean.

**Yield grades predict the yield of closely trimmed boneless retail cuts to be derived from the major wholesale cuts.

***The diet category will allow the purchaser to specify the ingredients included in the animal's ration.

Category			
Class*	Lamb	Yearling Mutton	Mutton
Style**	A	B	

*Carcasses are classified as lamb, yearling mutton, or mutton depending on their evidences of maturity as indicated by the development of muscular and skeletal systems. Lamb carcasses possess less evidence of advanced maturity as opposed to mutton carcasses.

**The purchaser may specify style of carcass fabrication (as illustrated for Cutting Instructions in Diagram 7.3.3) desired when option is available within an individual item description. When not specified, the style of fabrication shall be in accordance with the Cutting Instructions for Style A. Style B is most commonly used for international trading.

3.2.2 Contact Information

The purchaser may request documentation from the vendor, stating that cuts are derived from carcasses meeting the special requirements. For certification of the special requirements, a verification program must be in place. Contact the Meat Grading and Certification Branch for development of verification programs (refer to **Section 1.2 - Contact Information**).

3.2.3 Grade Designations

Official grade designations will appear in any one or any combination of the following ways: (1) shipping container markings, or (2) on individual bags or wrapping material. The processor shall comply with Food Safety and Inspection Service (FSIS) grade labeling procedures.

3.3 State of Refrigeration

Purchaser shall specify the state of refrigeration (chilled or frozen) for delivery of product. (See IMPS GR.)

3.4 Fat Limitations

3.4.1 Carcasses, Saddles, Wholesale/Primal Cuts

The purchaser shall specify yield grade and/or maximum fat thickness as described below.

3.4.2 Cuts, Roasts, Diced, & Special Trim Items

The purchaser shall specify maximum surface fat thickness requirements unless fat limitations for surface and/or seam fat are indicated in the item descriptions. Maximum fat thickness requirements may be specified in terms of “average” or “at any one point”. Alternative “average” and/or “at any one point” fat limitations may be specified.

Option No.	Maximum Average Thickness	Maximum At Any One Point
1	¾-inch (19 mm) "Commodity trim"	1.0 inch (25 mm)
2	¼-inch (6 mm)	½-inch (13 mm)
3	⅛-inch (3 mm)	¼-inch (6 mm)
4	Practically Free (75% lean/seam surface exposed)	⅛-inch (3 mm)
5	Peeled/Denuded* (remaining fat shall not exceed 1.0 inch (25 mm) in the longest dimension and/or ⅛-inch (3 mm) in thickness)	⅛-inch (3 mm)
6	Peeled/Denuded, Surface Membrane Removed* (90% lean exposed)	⅛-inch (3 mm)

*See Section 6.4.

Note: When average fat thicknesses are specified by the purchaser or in item descriptions, the appropriate "Maximum at Any One Point" limitation shall apply.

3.4.3 Portion-Cuts

The purchaser shall specify the maximum (at any one point) thickness of surface fat on the edges of the chop unless fat limitations for surface and/or seam fat are indicated in the detailed item descriptions. Alternative fat limitations may be specified. If not specified, surface fat thickness shall not exceed ¼-inch (6 mm) at any one point.

Option No.	Maximum At Any One Point
1	¼-inch (6 mm)
2	⅛-inch (3 mm)
3	Practically free (75% lean/seam surface exposed and remaining fat shall not exceed ⅛-inch (3 mm))
4	Peeled/Denuded* (remaining fat shall not exceed 1.0 inch (25 mm) in the longest dimension and/or ⅛-inch (3 mm) in thickness))
5	Peeled/Denuded, Surface Membrane Removed* (90% lean exposed and remaining fat shall not exceed ⅛-inch (3 mm))

*See **Section 6.4.**

3.4.4 Comminuted Products & Trimmings

Fat limitations for these items shall be expressed in terms of a fat content percentage. Fat content describes the percentage of fat present in the product. Unless otherwise specified, the fat content shall not exceed 22 percent. However, the purchaser may specify any fat content provided it does not exceed 30 percent and may specify discount ranges.

The purchaser shall specify the fat content analysis to be determined on a (1) composite analysis, or (2) average analysis method (as defined within the IMPS QAP.) If the purchaser does not specify either method, the procedures for average fat content analysis method shall be used.

3.4.5 Fat Content Verification

The fat content shall be specified by the purchaser and verified by one or any combination of the following PSO's. If not specified, the fat content shall be verified with PSO #2 requirements.

Option No.	Fat Content
1	Fat content shall be declared on the product label along with a nutrition facts panel in accordance with FSIS regulations
2	Contractor shall submit documentation of fat analysis to purchaser
3	Fat content certified by AMS (see QAP.)

4	Samples selected by AMS and sent to purchaser designated laboratory
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3.5 Portion Cut Weight, Thickness & Shape

3.5.1 Weight & Thickness

The purchaser shall specify the portion weight and/or thickness desired. For assistance in specifying weight, see weight range tables. Unless other portion weight and/or thickness tolerances are specified by the purchaser, the following tables shall be used. When both weight and thickness are specified, it is recommended that those requirements be limited to items that are mechanically pressed and/or sliced.

Portion Thickness Tolerances*		
Specified Thickness	Thickness Tolerance	Thickness Uniformity
1 inch (25 mm) or less	+/- ³ / ₁₆ -inch (5 mm)	³ / ₁₆ -inch (5 mm)
More than 1 inch (25 mm)	+/- ¼-inch (6 mm)	¼-inch (6 mm)

* Thickness measurements are not applicable within ¼-inch (6 mm) of the edge. Also, value listed under thickness uniformity is the maximum allowable difference between the thinnest and thickest measurement of an individual chop.

Portion Weight Tolerances		
Specified Weight	Weight Tolerance	Thickness Uniformity*
Less than 6.0 ounces (170 g)	+/- ¼ oz. (7 g)	³ / ₁₆ -inch (5 mm)
6.0 (170 g) to 12.0 ounces (340 g)	+/- ½ oz. (14 g)	¼-inch (6 mm)
12.01 (341 g) to 24.0 ounces (680 g)	+/- ¾ oz. (21 g)	³ / ₈ -inch (9 mm)
24.01 ounces (681 g) or more	+/- 1 oz. (28 g)	½-inch (13 mm)

3.5.2 Shape

Unless otherwise specified, the shape of whole muscle portions cuts shall resemble the approximate shape relative to the cut of origin. Cubed and braising chops which are

mechanically pressed and sliced shall be uniform in shape. Unless otherwise specified, patties shall be round.

3.6 Weight Range

Table 1. Index of IMPS Lamb products and weight ranges

Purchaser shall specify IMPS item number, product name, and weight range to be purchased. The following weight ranges are intended as guidelines. **Carcass weights are not necessarily related to the weight of cuts within their respective weight range.** Other weights or ranges may be specified.

Foodservice Cuts							
Item No.	Product Name	Weight Ranges (Pounds)					Page#
		A	B	C	D	E	
200	Carcass	55-65	65-75	75-85	85-95	95-up	24
200A	Carcass, 3-way	52-62	62-71	71-81	81-90	90-up	24
200B	Carcass, Block-Ready	31-37	37-43	43-49	49-54	54-up	24
202	Foresaddle	21-25	25-35	35-40	40-up		25
203	Bracelet	6-8	8-10	10-12	12-up		25
204	Rack	6-7	7-8	8-9	9-10	10-up	25
204A	Rack, Chined	2.5-3	3-3.5	3.5-4	4-4.5	4.5-up	25
204B	Rack, Roast-Ready	2-2.5	2.5-3	3-3.5	3.5-4	4-up	25
204C	Rack, Roast-Ready, Frenched	2-2.25	2.25-2.5	2.5-2.75	2.75-3	3-up	26
204D	Rack, Roast-Ready, Frenched, Special (Cap Off)	1.25-1.5	1.5-1.75	1.75-2	2-2.25	2.25-up	27
204E	Rack, Ribeye Roll	1-down	1-1.5	1.5-2.5	2.5-up		27
206	Shoulder	14-18	18-22	22-26	26-30	30-up	28
207	Shoulder, Square-Cut	6.5-7.5	7.5-8.5	8.5-9.5	9.5-10.5	10.5-up	28
207B	Shoulder, Inside	4-5	5-6	6-7	7-up		28
207C	Shoulder, Inside Rack	.75-down	.75-1	1-up			28
208	Shoulder, Square-Cut, Boneless	4-5	5-6	6-7	7-7.5	7.5-up	28
208A	Shoulder, Outside, Tied, Boneless	1-1.5	1.5-2	2-up			29
208B	Shoulder, Arm Out, Boneless	.5-down	.5-.75	.75-up			29
208C	Shoulder, Inside Roll, Boneless	1-down	1-up				29
208D	Shoulder, Pectoral Meat	1-down	1-up				29
209	Breast	2-2.5	2.5-3	3-up			30
209A	Ribs, Breast Bones Off	1-1.25	1.25-1.5	1.5-up			31
209B	Shoulder, Ribs	.5-down	.5-up				31
209C	Belly	3-3.5	3.5-4	4-4.5	4.5-5	5-up	32
209D	Belly, Boneless	2-down	2-2.5	2.5-up			32
210	Foreshank	1-down	1-1.5	1.5-up			32
229A	Hindsaddle, Long-Cut, Trimmed	30-36	36-42	42-48	48-54	54-up	32
230	Hindsaddle	24-30	30-34	34-38	38-44	44-up	33
231	Loins, Shortloins, Saddle	7-down	7-9	9-11	11-13	13-up	33
232	Loins, Shortloins, Saddle, Trimmed	6-down	6-8	8-10	10-12	12-up	33
232A	Loin, Shortloin, Block-Ready, Trimmed	2-down	2-2.25	2.25-2.5	2.5-3	3-up	33
232B	Loins, Double, Boneless	2.5-3	3-3.5	3.5-4	4-4.5	4.5-up	33
232C	Loin, Single, Boneless	1-down	1-1.5	1.5-up			34
232D	Loin, Short Tenderloin	.5-down	.5-1	1-2	2-up		34

232E	Flank, Untrimmed	1.5-2	2-2.5	2.5-up			34	
233	Legs	9-11	11-12.5	12.5-14	14-16	16-up	34	
233A	Leg, Trotter Off	8.5-10	10-11.5	11.5-13	13-14.5	14.5-up	34	
233B	Leg, Shank Off						34	
233C	Leg, Trotter Off, Semi-Boneless	6.5-8	8-9	9-10.5	10.5-11.5	11.5-up	34	
233D	Leg, Shank Off, Semi-Boneless	5.5-6.5	6.5-7.5	7.5-8.5	8.5-9.5	9.5-up	35	
233E	Leg, Sirloin Removed, Semi-Boneless	5-6	6-7	7-8	8-9	9-up	35	
233F	Leg, Hindshank	1-1.5	1.5-up				36	
233G	Leg, Hindshank, Heel On	1-1.5	1.5-up				36	
234	Leg, Boneless	5.5-7	7-8	8-9	9-10	10-up	36	
234A	Leg, Shank Off, Boneless	5-6	6-6.5	6.5-7	7-8.5		36	
234B	Leg, 2-Way, Boneless	2-5	5-7	7-9	9-up		37	
234C	Leg, Bottom, Boneless	1-down	1-1.5	1.5-2	2-up		37	
234D	Leg, Outside, Boneless	1.5-2	2-2.5	2.5-up			37	
234E	Leg, Inside, Boneless	1.5-2	2-2.5	2.5-3	3-up		37	
234F	Leg, Sirloin Tip, Boneless	1.5-2	2-2.5	2.5-up			38	
234G	Top Sirloin, Boneless	1-down	1-up				38	
235	Back	12-14	14-16	16-18	18-20	20-up	38	
236	Back, Trimmed	11-13	13-15	15-17	17-19	19-up	39	
238	Trimnings	Amount as Specified						39
239	Special Trimnings	Amount as Specified						39
242	Loins, Full	3-4	4-6	6-8	8-up		39	
243	Loins, Full, Trimmed	2-3	3-5	5-7	7-up		39	
244	Loin, 3-Way, Boneless	2-3	3-5	5-7	7-up		40	
245	Sirloin	2-down	2-3	3-4	4-up		40	
246	Tenderloin	1-down	1-1.5	1.5-2	2-2.5	2.5-up	40	
295	Lamb for Stewing	Amount as Specified						40
295A	Lamb for Kabobs	Amount as Specified						40
296	Ground Lamb	Amount as Specified						40
296A	Ground Lamb and Soy Protein Product	Amount as Specified						41

Table 2. Index of IMPS Lamb portion cut products and weigh ranges

Foodservice Cuts			
Item No.	Product Name	Weight Ranges (Ounces)	Page#
1200	Cubed Steaks	2-6	41
1201	Cubed Steaks, Special	2-6	41
1202	Braising Steaks, Swiss	2-6	42
1204B	Rib Chops	2-8	42
1204C	Rib Chops, Frenched	2-8	42
1204D	Rib Chops, Special, Frenched	2-8	43
1204F	Rib Chops, Frenched to Eye	2-8	43
1207	Shoulder Chops	2-8	43
1209	Short Rib, Bone-In	6-10	43
1232A	Loin Chops	2-8	44
1232B	Loin Chops, Double, Boneless	2-8	44
1232C	Loin Chops, Single, Boneless	2-8	44
1233E	Leg, Center-Cut Steaks	2-8	44
1233G	Lamb Osso Buco, Hindshank	2-12	44

1234	Leg Chops, Boneless	2-8	44
1234A	Leg, Cutlet, Boneless	2-8	44
1296	Ground Lamb Patties	2-8	44
1296A	Ground Lamb and Soy Protein Product Patties	2-8	45
1297	Lamb Steaks, Flaked and Formed, Frozen	2-8	45
1297A	Lamb Sandwich Steaks, Flaked, Chopped, Formed and Wafer Sliced, Frozen	2-8	45
1297B	Lamb Steaks, Sliced and Formed, Frozen	2-8	45

3.7 Netting & Tying

Many of the item descriptions require roasts to be netted or tied to facilitate institutional style cookery methods. The purchaser may specify the netting and tying requirements for such items as needed.

When tying is required, stretchable netting (or any other equivalent material) shall be used to make roasts firm and compact. Unless otherwise specified, roasts shall be netted so that all portions are held intact, without any portions protruding through the ends of the netting. Conversely, excess netting at the portion ends shall be no more than 2.0 inches (5.0 cm) in length. Alternatively, roasts may be string tied by loops of twine uniformly spaced at no more than approximately 2.0 inches (5.0 cm) intervals along the items length). When tying does not make roasts firm and compact, lengthwise tying may be used. For net weight verification, netting and tying material shall be included along with packaging materials when determining tare weight.

3.8 Packaging & Packing

Purchaser shall specify packaging and packing for delivery of product. (See IMPS GR.)

3.9 Quality Assurance

The purchaser may consult the IMPS QAP for options regarding production examination and lot acceptance criteria in terms of acceptable AQLs.

4.0 USDA Certification and Verification

4.1 Contact Information

When requested, the purchaser shall specify within a contract or purchase order that product shall be certified or that the producer is operating under an approved IMPS Process Verified Program by the USDA, AMS, LPS, QAD. The IMPS QAP, <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELDEV3003293>, will be used to determine compliance. Purchasers desiring these services should contact:

USDA, AMS, LPS Program, QAD

1400 Independence Ave, SW, Room 3932, Stop 0258
Washington, DC 20250
Phone: (202) 720-3271

5.0 Material Requirements

All products offered shall comply with the following material requirements and the individual item descriptions. For certification, product shall be evaluated in accordance with the IMPS QAP.

6.0 Quality

6.1 Excellent Condition

All product offered as meeting the specification requirements must be in excellent condition. For certification, product shall be in the fresh-chilled state (not previously frozen) when examined for excellent condition; e.g., exposed lean and fat surfaces shall be of a color and bloom normally associated with the class, grade, and cut of meat, and typical of meat which has been properly stored and handled. Cut surfaces and naturally exposed lean surfaces shall show no more than slight darkening or discoloration due to dehydration, aging, and/or microbial activity. The fat shall show no more than very slight discoloration due to oxidation or microbial activity. No odors foreign to fresh meat shall be present. Changes in color and odors characteristically associated with vacuum packaged meat in excellent condition shall be acceptable. Also, product shall show no evidence of freezing, defrosting, or mishandling. Lamb must be maintained in excellent condition through processing, storage, and transit.

Portion-cut and ground items to be delivered frozen may be produced from frozen meat cuts which have been previously certified in the fresh-chilled state, provided such cuts show no evidence of deterioration. Unless otherwise specified, portion cut items shall maintain their approximate original shape. Products thus produced shall be packaged, packed, and returned promptly to the freezer.

6.2 Lean Quality

Except for ground and flaked items, dark cutting and/or calloused lamb is not acceptable. All lamb shall be free of bruises, blood clots, bloody tissue, blood discoloration, exposed blood vessels, cod and/or udder fat, gambrel cord, specified risk materials or any other conditions which would negatively affect the use of the product.

Lamb cuts shall be free of dislocated or enlarged joints or other malformations of the skeletal structure. However, cuts with bones broken during processing are acceptable if the bones are not splintered to the extent that the lean around the fracture is affected.

6.3 Workmanship

Except for cuts that are separated through natural seams, all cut surfaces shall form approximate right angles with the skin surface. No more than a slight amount lean, fat, or bone shall be removed or included from an adjacent cut.

Except for chops which are cubed and/or knitted or unless otherwise specified in the individual item description, chops shall be cut in full slices in a straight line reasonably perpendicular to the outer surface and at an approximate right angle to the length of the cut being sliced or portioned. For individual muscle cuts, portions shall be made by slicing perpendicular to the grain (muscle fiber alignment) of the cut. Portion-cut items shall be practically free of: (1) fractures, (2) tag ends, and (3) knife scores. Individual chops shall remain intact when suspended ½-inch (13 mm) from the outer edge.

6.4 Fat Trimming

Trimming of external fat shall be accomplished by smoothly removing the fat following the contour of the underlying muscle surface. Beveling of the edges only is not acceptable. Two terms used for describing fat limitations are: (1) maximum fat thickness at any one point and (2) average fat thickness. Fat thickness requirements may apply to surface fat (external and/or exterior fat in relationship to the item) and seam fat (fat between adjacent muscles within an item) as specified by the purchaser or within the detailed item description.

6.4.1 Peeled/Denuded

The term "peeled" implies surface fat and muscle separation through natural seams so that the resulting cut's seamed surface ("silver" or "blue" tissue) is exposed with remaining "flake" fat NTE 1.0 inch (25 mm) in the longest dimension and/or ⅛-inch (3 mm) in depth at any point. The term "denuded" implies all surface fat is removed so that the resulting cut's seamed surface ("silver" or "blue tissue") is exposed with remaining "flake" fat NTE 1.0 inch (25 mm) in any dimension and/or ⅛-inch (3 mm) in depth at any point.

6.4.2 Peeled/Denuded, Surface Membrane Removed

Peeled/denuded, surface membrane removed requires the surface membrane ("silver" or "blue" tissue) to be removed (skinned); the resulting cut surface shall expose at least 90 percent lean with remaining "flake" fat NTE ⅛-inch (3 mm) in depth.

6.4.3 Cuts & Roast Items

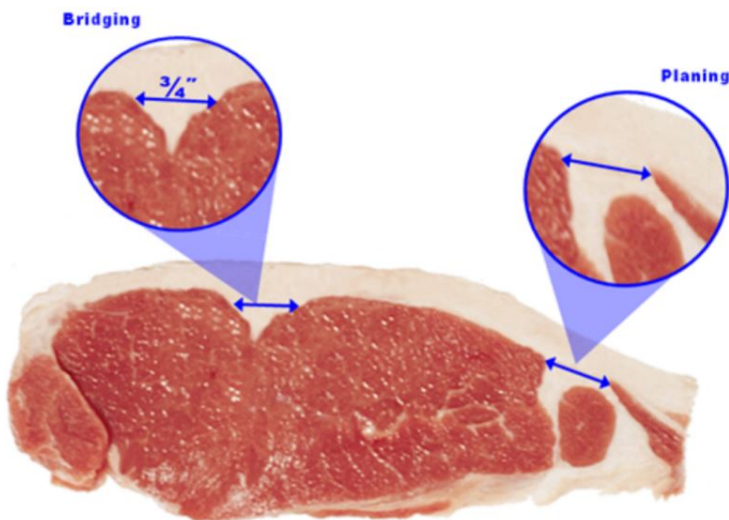
For cuts and roast items, the maximum fat thickness at any one point is evaluated by visually determining the area of a cut which has the most fat thickness and measure the thickness (depth) at this point. The average fat thickness is evaluated by visually determining the areas of surface fat and taking multiple measurements in these areas only. The average shall be determined by evaluating the amount of surface area that

each thickness represents (e.g., if one third of the fat surface was 0.2 inch in depth, one third was 0.3 inch in depth and one third was 0.4 inch in depth, then the average would be 0.3 inch).

The actual measurements of fat are made on the edges of the cut and by probing or scoring the overlying surface fat as necessary in a manner that reveals the actual fat thickness and accounts for any natural depression or seam which could affect the measurement.

6.4.4 Bridging & Planing

When a natural depression occurs in a muscle, only the fat above the portion of the depression which is more than $\frac{3}{4}$ -inch (19 mm) in width is considered (this method is known as "bridging"). When a seam of fat occurs between adjacent muscles only the fat above the level of the involved muscles is measured (this method is known as "planing"). However, when fat limitations for Peeled/Denuded or Peeled/Denuded, Surface Membrane Removed are specified, the bridging method shall be used for evaluating fat above a natural depression in a muscle and fat occurring between adjacent muscles.



6.4.5 Diced & Portion-Cut Items

For the purpose of measuring surface fat, the maximum fat thickness at any one point is evaluated by visually determining the areas on the edges of either side of the dice or portion-cut which have the thickest amount of fat and measuring the thickness (depth) of fat in these areas. The average fat thickness is evaluated by visually determining the various areas of surface fat and taking multiple measurements in these areas. The average shall be determined by evaluating the amount of surface area that each thickness represents.

The actual measurements of fat are made on the edges of the cut and by probing or scoring the fat surface as necessary in a manner that reveals the actual fat thickness. For chop items, the bridging and/or the planing methods shall be applied to take into

account any natural depression occurring in a muscle and/or when a seam of fat occurs between adjacent muscles.

6.4.6 Seam Fat

For the purpose of measuring seam fat, when specified, the maximum fat thickness at any one point is evaluated by visually determining the areas of fat between layers of lean (muscles) on any side of the cut which have the thickest (widest) deposits of fat and measuring the width in these areas. The average fat thickness is evaluated by visually determining the various areas of seam fat and taking multiple measurements in these areas. The average shall be determined by evaluating the areas that each thickness (width) represents.

For chop items, the bridging and/or planing methods shall be applied to take into account the irregular widths of the seam fat within a muscle depression or between adjacent muscles in order to reveal the actual fat thickness (width) of fat within a seam. Seam fat shall be evaluated no closer than $\frac{3}{4}$ -inch (19 mm) from the contour (projected perimeter when symmetrically formed or unformed) of the outer edge of the chop.

However, when fat limitations for Peeled/Denuded or Peeled/Denuded, Surface Membrane Removed are specified, the bridging method shall be used for evaluating surface fat above a natural depression in a muscle and fat occurring between adjacent muscles.

6.5 Objectionable Materials

- Trimming for further processing into ground, flaked, chopped, or diced items - The processor shall remove materials that are objectionable and will have a negative impact on quality of the end item. The following objectionable materials shall be excluded:
- Major lymph glands (prefemoral, popliteal, and prescapular), thymus gland, and the sciatic (ischiatric) nerve (lies medial to the outside round).
- All bone, cartilage, and the following heavy connective tissues:
 - White fibrous – Shoulder tendon, elbow tendon, silver skin (outside round), sacrociatic ligament, opaque periosteum, serous membrane (peritoneum), tendinous ends of shanks, gracilis membrane, patellar ligament (associated with the stifle joint), and achilles tendon.
 - Yellow elastin – Back strap and abdominal tunic.

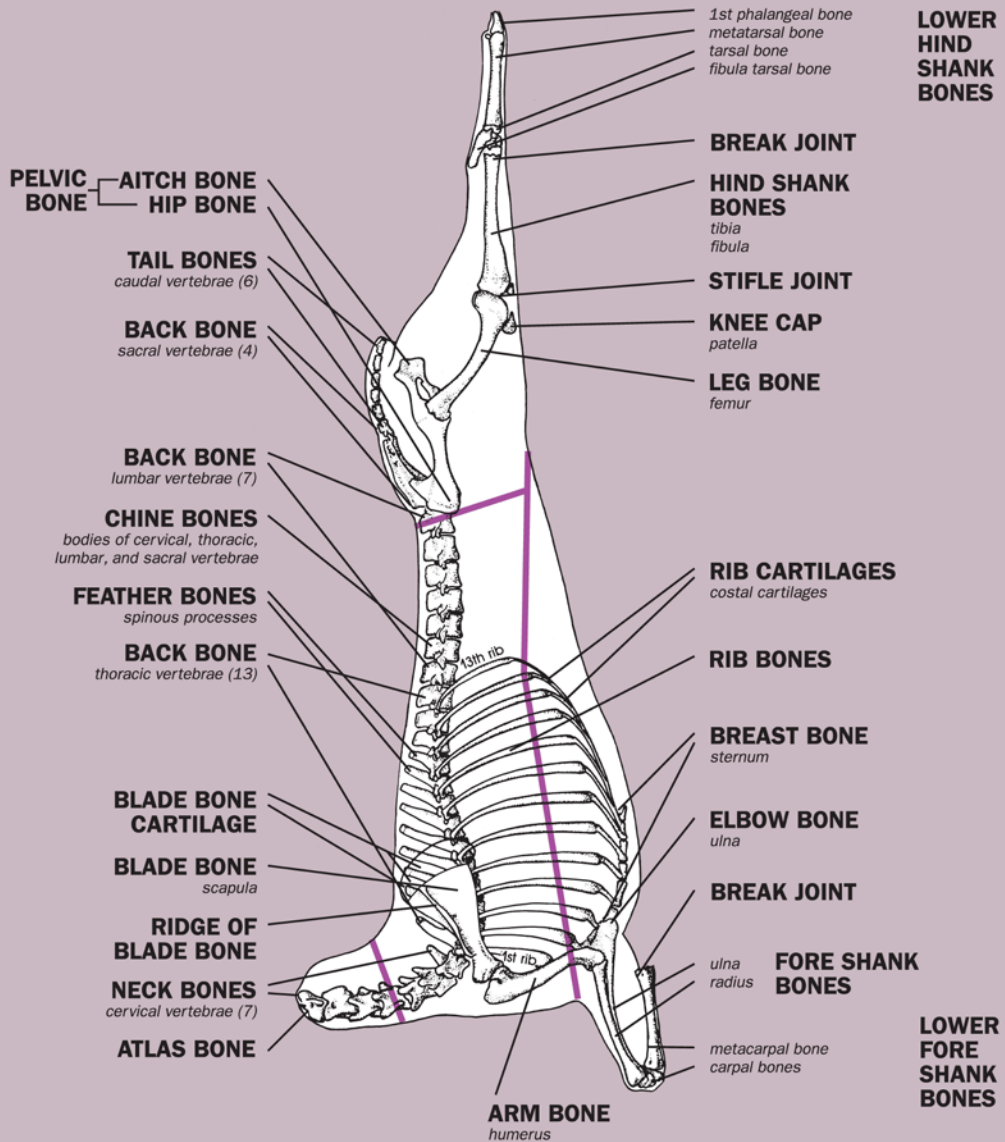
7.0 Diagrams

7.1 Lamb Side Skeletal Diagram

Lamb

Lamb Skeletal Chart

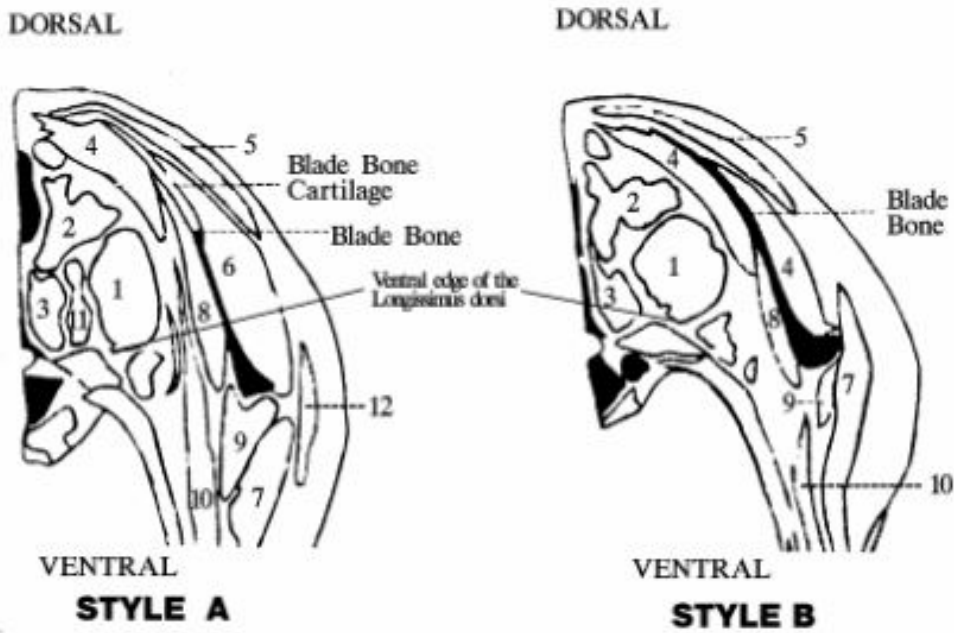
Location, Structure and Names of Bones



Courtesy of the American Meat Science Association

7.3 Primal Separations Diagram
 7.3.1 RACK – SHOULDER SEPARATION

RACK – SHOULDER SEPARATION



- 1. *Longissimus dorsi*
- 2. *Spinalis*
- 3. *Multifidus*
- 4. *Rhomboides*

- 5. *Trapezius*
- 6. *Infraspinatus*
- 7. *Latissimus dorsi*
- 8. *Subscapularis*

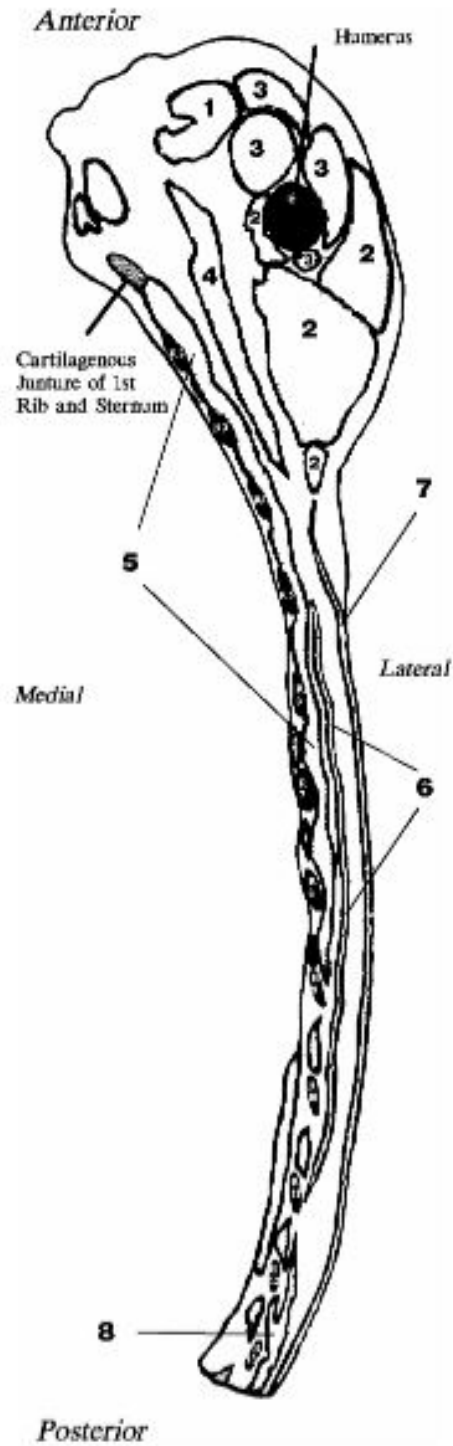
- 9. *Teres major*
- 10. *Serratus ventralis*
- 11. *Semispinalis capitis*
- 12. *Tensor fasciae antebrachii*

7.3.2 A cross-section of the arm portion of the shoulder and breast/rack separation.

A cross-section of the arm portion of the shoulder and breast/rack separation.



- 1 - *Pectoralis superficialis*
- 2 - *Triceps brachii* group
- 3 - Minor muscles associated with the humerus
- 4 - *Pectoralis profundus*
- 5 - *Serratus ventralis*
- 6 - *Latissimus dorsi*
- 7 - *Cutaneous trunci*
- 8 - *Obliquus externus abdominis*

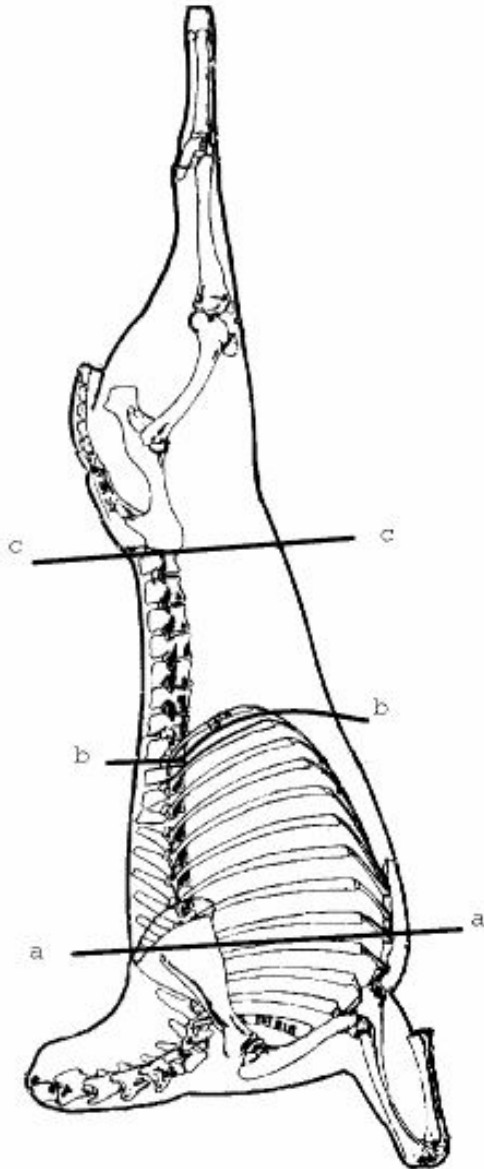


7.3.3 Cutting Style Instructions

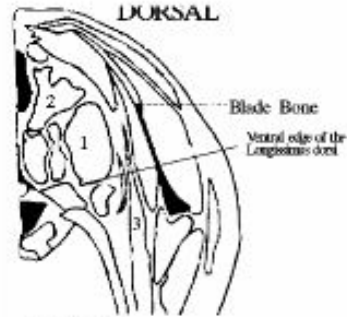
Cutting Instructions - Style A

Cutting Instructions Style A

Separation a. - Shoulder-Bracelet Separation



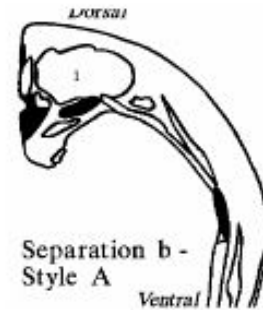
The shoulder is separated from the bracelet by a straight cut between the 4th and 5th ribs, leaving 4 ribs on the shoulder. The cut surface (see figure) shall expose the *spinalis dorsi* to be dorsal in relationship to the *longissimus dorsi*



Separation a - Style A
 1 - Longissimus dorsi
 2 - Spinalis dorsi
 3 - Serratus ventralis

Separation b. Bracelet-Loin Separation

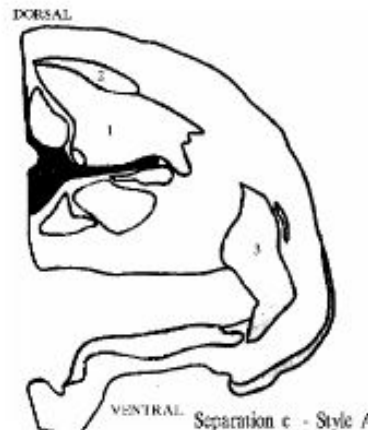
The bracelet is separated from the loin by a cut which follows the natural curvature between the 12th and 13th ribs. Leaving 8 ribs (ribs 5-12) with the bracelet and no more than 1 rib remaining with the loin.



Separation b - Style A
 1 - Longissimus dorsi

Separation c. Loin-Leg separation

The leg is separated from the loin by a straight cut, approximately perpendicular to the length of the leg, passing anterior to the hip bone and hip bone cartilage. The cut surface, which is approximately perpendicular to the length of the leg, exposes the *gluteus medius* and does not expose the *tensor fasciae latae* (see figure).



Separation c - Style A

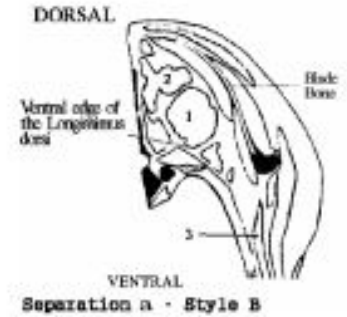
- 1 - Longissimus dorsi
- 2 - Gluteus medius
- 3 - Obliquus internus abdominis

Cutting Instructions - Style B

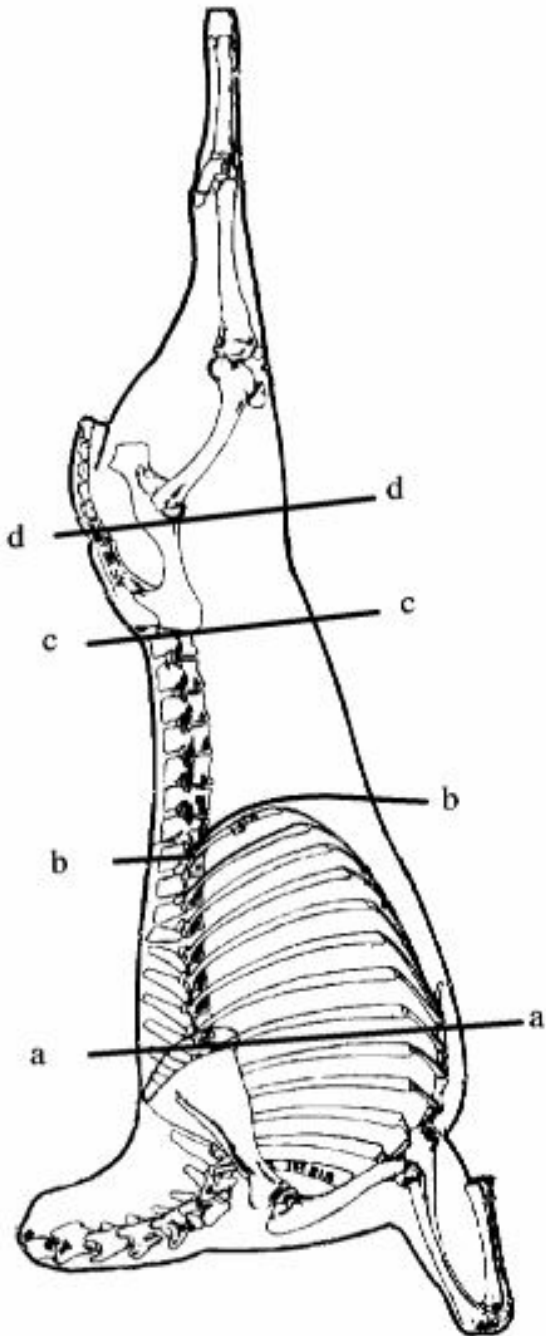
Cutting Instructions Style B

Separation a. - Shoulder-Bracelet Separation

The shoulder is separated from the bracelet by a straight cut between the 5th and 6th ribs, leaving 5 ribs on the shoulder. The cut surface (see figure) shall expose the *spinalis dorsi* (2) to be dorsal in relationship to the *longissimus dorsi* (1) and the *serratus ventralis* (3) shall not extend past (dorsal to) the ventral edge of the *longissimus dorsi*.

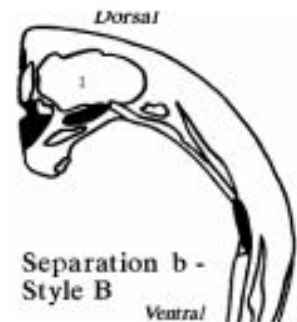


- 1 – *longissimus dorsi*
- 2 – *spinalis dorsi*
- 3 – *serratus ventralis*



Separation b. Bracelet-Loin Separation

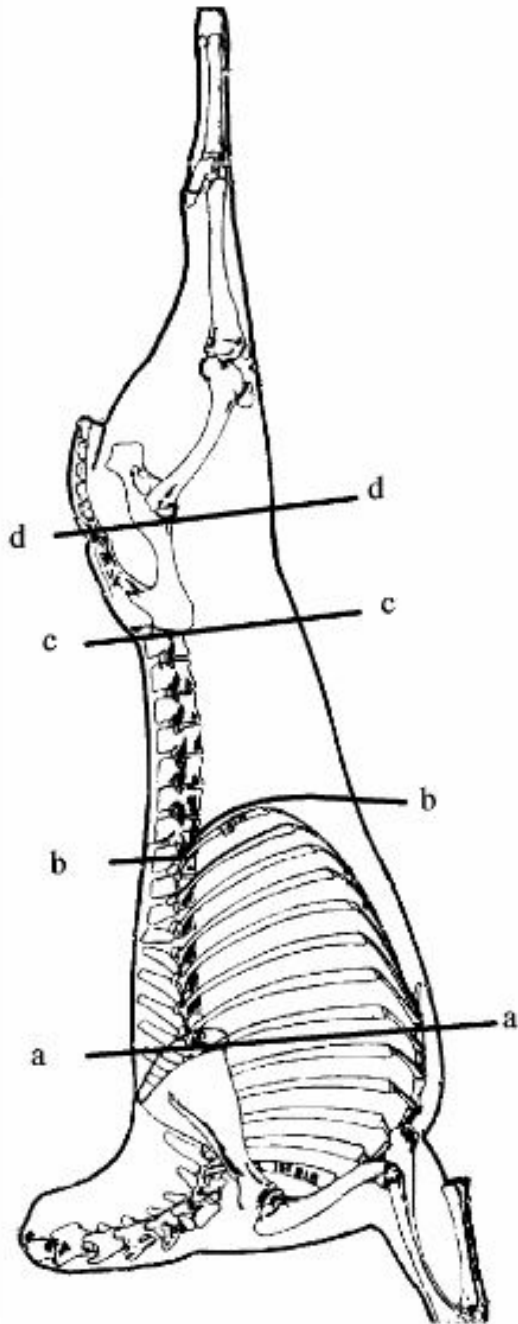
The bracelet is separated from the loin by a cut which follows the natural curvature posterior to the 13th rib, leaving 8 ribs (ribs 6-13) with the bracelet and no rib remaining with the loin.



- 1 – *Longissimus dorsi*

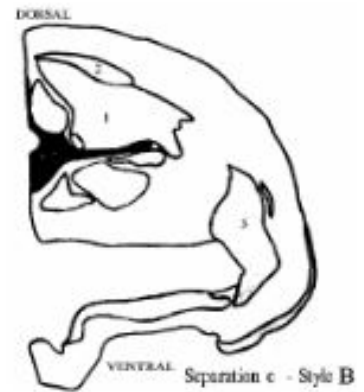
Cutting Instructions - Style B continued

Cutting Instructions Style B (continued)



Separation c. Loin-Leg separation

The leg is separated from the loin by a straight cut, approximately perpendicular to the length of the leg, passing anterior to the hip bone and hip bone cartilage. The cut surface, which is approximately perpendicular to the length of the leg, exposes the *gluteus medius* and does not expose the *tensor fasciae latae* (see figure).



- 1 - Longissimus dorsal
- 2 - Gluteus medius
- 3 - Obliquus internus abdominis

Separation d. Sirloin-Leg Separation

The leg is separated from the sirloin by a straight cut; (1) approximately perpendicular to the length of the leg; (2) starting at the juncture of the last sacral and first caudal vertebra and (3) passing anterior to the protuberance of the femur (while exposing the ball of femur). The cut surface (see figure) shall expose; (1) the *gluteus medius* to be approximately equal in size to the *biceps femoris* and (2) the *tensor fasciae latae* shall be exposed and shall not extend around the knuckle.



Separation d - Style B

- 1 - Gluteus Medius
- Biceps Femoris
- Fasciae Latae

- 2 -
- 3 - Tensor

8.0 Cut Descriptions

8.1 Myology

In addition to the illustrations of muscles contained in this document, a reference for identification of muscles is "Ovine Myology" by R.G. Kauffman, L.E. St. Clair, and R.J. Reber.

8.2 Foodservice Cut Descriptions

Item No. 200 - Carcass - A lamb, yearling mutton, or mutton carcass is the entire unsplit carcass. Bloody tissue, frayed ends at the neck and practically all kidney, pelvic and heart fat shall be removed. The diaphragm and the hanging tender may be removed. However, if present, the membranous portion shall be trimmed close to the lean.

Item No. 200A - Carcass, 3 Way - This item is as described in Item No. 200, except that the carcass is separated into three portions, (double shoulder, double back, and double leg) and packaged. The portions shall be separated as described for the following styles. When style is not specified by the purchaser, the requirements for Style A shall be followed.

Style A - The shoulders shall be separated from the back in accordance with separation a, and the legs from the back in accordance with separation c. (Refer to Cutting Instructions for Style A.)

Style B - The shoulders shall be separated from the back in accordance with separation a, and the legs from the back in accordance with separation c. (Refer to Cutting Instructions for Style B.)

Item No. 200B - Carcass, Block-Ready - This item is as described in Item No. 200 except that, unless otherwise specified, the carcass is separated into single square-cut shoulders, single racks, single loins, foreshanks, breasts, and single legs and packaged. The hanging tenders and kidneys shall be removed. When style is not specified by the purchaser, the requirements for Style A shall be followed.

Style A - The shoulders, racks, loins, and legs shall be separated in accordance with separations a, b, and c of the Cutting Instructions for Style A. The breast shall consist of the brisket attached to the breast. The foreshanks shall be separated from the brisket through the natural seam by a cut which passes through the web (*pectorales superficialis*). The trotter (lower foreshank) shall be removed at the knee joint.

Style B - The shoulders, racks, full loins, and legs shall be separated in accordance with the separations a, b, and d of the Cutting Instructions for Style B. The foreshanks shall be separated from the brisket through the natural seam by a cut which passes through the web (*pectorales superficialis*). The trotter (lower foreshank) shall be removed at the knee joint.

Item No. 202 - Foresaddle - The foresaddle is separated from the hindsaddle as described in separation b as referenced in the Cutting Instructions for Style A or Style B. This item consists of the intact shoulder, rack, breast, and foreshank and shall contain 12 ribs for Style A and 13 ribs for Style B. Bloody tissue, frayed ends at the neck end and practically all heart fat shall be removed. The diaphragm and the hanging tender may be removed. However, if present, the membranous

portion shall be trimmed close to the lean. When style is not specified by the purchaser, the requirements for Style A shall be followed.

The purchaser may specify one the following styles for **Item Nos. 203, 204, and 204A**. If not specified, product shall comply with Style A requirements.

Style: A: 8 ribs (ribs 5 - 12)
B: 8 ribs (ribs 6 - 13)

For Style B bracelet and rack/rib items, the *serratus ventralis* muscle shall not extend past (dorsal to) the ventral side of the *longissimus dorsi*.

Item No. 203 - Bracelet - The bracelet consists of the rack and breast from both sides of the carcass attached. It is separated from the shoulder as described in separation a, and from the loin in separation b. When style is not specified by the purchaser, the separations a and b for Style A shall be followed.

Item No. 204 - Rack - The rib rack is as described in Item No. 203 except that the breast shall be removed. The breast shall be removed from the bracelet by a straight cut across the ribs which is not more than 4.0 inches (10.0 cm) from the ventral edge of the *longissimus dorsi*. The diaphragm and fat on the ventral surface of the vertebrae shall be removed. Unless otherwise specified, the rack is often packaged split. This unsplit rack is often referred to as a “hotel rack”.

Item No. 204A - Rack, Chined - This item is as described in Item No. 203 except the rack shall be split and the breast shall be removed by a straight cut across the ribs which is not more than 4.0 inches (10.0 cm) from the ventral edge of the *longissimus dorsi*. The chine bones shall be removed such that the lean is exposed between the ribs and the feather bones, leaving the feather bones attached.

Option No.	Description
1	Purchaser may specify a ½ rack (4 rib rack) for this item

Item No. 204B - Rack, Roast Ready - This item is as described in Item No. 204A except that the breast side of the ribs shall be removed by a straight cut across the ribs which is not more than the PSO from the ventral edge of the *longissimus dorsi*. Additionally, feather bones, exterior fat cover, backstrap, blade bone and the *trapezius*, *infraspinatus*, and *latissimus dorsi* shall be removed, making the item partially cap-off. The purchaser may specify one of the following tail length options for **Item No. 204B**.

If not specified, tail length will not be more than 4.0 inches (10 cm) from the ventral edge of the *longissimus dorsi* or as specified within the item description.

The term block-ready is used interchangeably with roast-ready when describing this item.

Option No.	Description
1	3 in. (7.5 cm)
2	2 in. (5 m)
3	1 in. (2.5mm)
4	0 in (0 mm)
5	Purchaser may specify a ½ rack (4 rib rack) for this item
6	In addition, the rhomboideus and subscapularis muscles below the blade bone shall be removed, making the item cap off.

Item No. 204C - Rack, Roast Ready, Cap On, Frenched - This item is as described in Item No. 204A and is further prepared by removing the blade bone and associated cartilage, and by removing the feather bones. In addition, the breast side of the ribs shall be frenched (removal of the *intercostal* meat and lean and fat over the ribs). Exposed portions of rib bones shall not exceed 2 inches (5.0 cm) in length and the remaining *intercostal* meat and lean and fat over the rib bones shall not exceed 2.0 inches (5.0 cm) from the ventral edge of the *longissimus dorsi* muscle.

The term block-ready is used interchangeably with roast-ready when describing this item.

Option No.	Description
1	The length from the ventral edge of the longissimus dorsi to the point at which the breast is removed shall be no more than 3 inches (7.5 cm), and neither the exposed rib bone nor the remaining intercostal meat, lean, and fat over the rib bones shall exceed 1.5 inches (3.8 cm) in length.
2	Purchaser may specify a ½ rack (4 rib rack) for this item.
3	The intercostal meat and lean and fat over the rib bones shall be removed (frenched) to the base of the loin eye.
4	The muscles above where the blade bone was (trapezius, infraspinatus, and latissimus dorsi) are removed.
5	Purchaser may specify an alternative length for the remaining intercostal meat/French.

Item No. 204D - Rack, Roast Ready, Cap Off, Frenched - This item is as described in Item No. 204B PSO 6, which has the cap fully removed. In addition, the breast side of the ribs shall be frenched (removal of the *intercostal* meat and lean and fat over the ribs). Exposed portions of rib bones shall not exceed 2 inches (5.0 cm) in length and the remaining *intercostal* meat and lean and fat over the rib bones shall not exceed 2.0 inches (5.0 cm) from the ventral edge of the *longissimus dorsi* muscle. The term “Block-Ready” is used interchangeably with “Roast-Ready” when describing this item.

Option No.	Description
1	The length from the ventral edge of the longissimus dorsi to the point at which the breast is removed shall be no more than 3 inches (7.5 cm), and neither the exposed rib bone nor the remaining intercostal meat, lean, and fat over the rib bones shall exceed 1.5 inches (3.8 cm) in length.
2	Purchaser may specify a ½ rack (4 rib rack) for this item.
3	The intercostal meat and lean and fat over the rib bones shall be removed (frenched) to the base of the loin eye.
4	Purchaser may specify an alternative length for the remaining intercostal meat/French.

Item No. 204E - Rack, Ribeye Roll - This item is as described in Item No. 204D except that all bones shall be removed. It shall consist of the *longissimus dorsi*, *multifidus dorsi*, *spinalis dorsi*, and the minor muscles, fat and related *intercostal* lean on the breast side. The breast shall be removed by a straight cut not more than 1.0 inch (25 mm) from the ventral edge of the longissimus dorsi.

The purchaser may specify one of the following styles for **Item Nos. 206, 207, 208, 208A, 208B, and 208C**. If style is not specified, product shall comply with Style A requirements.

Style: A: 4 ribs (ribs 1 - 4)
 B: 5 ribs (ribs 1 - 5)

Item No. 206 - Shoulder - The shoulders are separated from the carcass as described in separation a. Thymus gland and heart fat shall be closely removed. Purchaser may specify the item as single or double.

Item No. 207 - Shoulder, Square-Cut - This item is as described in Item No. 206 except that the foreshank and brisket (portions of the sternum, associated cartilage, overlying lean and fat and rib ends) are removed by a straight cut approximately perpendicular to the rib side and through the cartilaginous juncture of the first rib and the sternum. The neck shall be removed by a straight cut

perpendicular to the rack side which leaves not more than 1.0 inch (25 mm) of the neck on the shoulder. Purchaser may specify the item as single or double.

Item No. 207A - Shoulder, Outside - This item shall consist of the shank, humerus, and blade bone and associated muscles of the shoulder. It may be prepared from the shoulder prior to removal of the rack and breast by cutting the web muscle (*pectoralis superficialis*) and following the natural seam to a point immediately medial to the blade cartilage. The trotter (lower foreshank) shall be removed at or above the knee joint. The thick end (arm end) shall include the shank and humerus bones and overlying lean (*latissimus dorsi, triceps brachii* group, minor muscles associated with the humerus). The thin end (blade end) shall consist of the blade bone and muscles overlying the blade bone (*supraspinatus, infraspinatus, latissimus dorsi* and may contain the *subscapularis* and *teres major*). The *cutaneous* muscle (shoulder rose) shall be removed when the underlying fat exceeds the surface fat thickness specified. All sides shall be trimmed following the natural curvature of the major muscles and the scapula.

Item No. 207B – Shoulder, Inside – This item shall consist of the portion of the square-cut shoulder remaining after the removal of the outside shoulder (IMPS Item No. 207A). The lower portion of the inside shoulder shall be removed by a straight cut at an approximate right angle to the rack end which is ventral to but no more than 4 inches from the longissimus. All remaining portions of the trapezius muscle covering this item shall be removed through the natural seams.

Item No. 207C – Shoulder, Inside Rack – This item is as described in Item No. 207B, except that the neck shall be removed by a straight cut through the juncture of the last cervical and first thoracic vertebrae (immediately anterior and parallel to the first rib).

Option No.	Description
1	The chine and feather bones shall be removed.
2	The lean and fat between the rib bones shall be removed (frenched) leaving no more than 1 inch of lean and fat ventral to the longissimus.

Item No. 208 - Shoulder, Square-Cut, Boneless, - This item is prepared from a single Item No.207. All bones, cartilages, backstrap, fell, prescapular lymph gland, and heart fat shall be removed. The brisket side and rib end shall form an approximate right angle. The brisket side shall expose the *pectoralis profundus* extending posterior to the 3rd rib mark. The neck shall be removed by a straight cut approximately perpendicular to the rack end leaving no more than 1.0 inch (25 mm) of the neck on the shoulders. The purchaser may request that the shoulder be rolled with the ribeye lengthwise to the roll and netted or tied.

Item No. 208A - Shoulder, Outside, Tied, Boneless- This item is as described in Item 207A except that all bones and cartilages shall be removed. The tendons on the elbow end shall be trimmed to be even with the lean. This item shall be netted or tied.

Item No. 208B - Shoulder, Arm Out, Boneless - This item is as described in Item No. 208 except that the arm portion shall be removed (after removal of the outside shoulder) by a straight cut at an approximate right angle to the rack end, which is ventral to, but no more than 3.0 inches (7.5 cm) or less than 1.0 inch (25 mm) from, the *longissimus dorsi* at the rack end. The outside shoulder and blade portion shall be individually packaged.

Item No. 208C - Shoulder, Inside Roll, Boneless - This boneless item consists of the muscle system which lies under the blade bone. The arm shall be removed by a straight cut at an approximate right angle to the rack end, which is ventral to, but no more than 3 inches (7.5 cm) from the *longissimus dorsi* at the rack end. All bones and cartilages shall be removed, including the blade bone and the lean and fat overlying the blade bone.

PSO - The purchaser may specify tail length options for **Item No. 208C**. If not specified, tail length will not be more than 3.0 inches (7.5 cm) from the ventral edge of the *longissimus dorsi* or as specified within the item description.

Option No.	Description
1	2 in. (5.0 cm)
2	1 in. (2.5mm)
3	0 in (0 mm)
4	The muscles overlying the blade bone (supaspinatus, infraspinatus, and trapezius) shall be removed in their entirety.

Item No. 208D – Shoulder, Pectoral Meat - This item will consist of the pectoralis profundis muscle that is removed from any boneless shoulder item.

Item No. 209 - Breast - This item is derived from anterior portion of the carcass remaining after 'Separation B'. The rack (Item No. 204) and square-cut shoulder (Item No. 207) shall be removed leaving the ribs and sternum (brisket) portions intact by a straight cut that passes through the cartilaginous juncture of the first rib and sternum and a point that is not more than 4 inches ventral to the longissimus on the posterior (rack) end. The foreshank (Item No. 210) shall be removed by cutting through the natural seam and pectoralis superficialis. The diaphragm may be removed. However, if present, the membranous portion of the diaphragm shall be trimmed close to the lean. The heart fat shall be closely removed.

Option No.	Description
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1	When specified by the purchaser, the breast bones and associated rib bones (brisket) are removed during the shoulder/bracelet break (Separation B) by a straight cut between the 4 th and 5 th ribs (Cutting Style A) or 5 th and 6 th ribs (Cutting Style B). PSO 1 is the more common specification for this item.
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Item No. 209A - Ribs, Breast Bones Off - This item is prepared from Item No. 209 and shall consist of at least 7 ribs, and the intercostal muscles, *serratus ventralis*, and associated muscles immediately overlying the ribs. The cut shall be not less than 3.0 inches (7.5 cm) in width. The sternum and ventral edges of the costal cartilages shall be removed. The fell, *cutaneous trunci*, exterior fat cover, *latissimus dorsi*, and diaphragm shall be removed. This item shall be trimmed practically free of surface fat. This item is sometimes referred to as “Denver Style Ribs”.

Option No.	Description
1	Notched/Split: When specified, notching of lamb ribs shall be accomplished by making saw cuts across the ribs at 1.0 inch (2.5 cm) intervals. The saw cuts shall pass through the rib bones and intercostal meat while leaving the lean (<i>serratus ventralis</i>) intact.
2	Special/Frenched: When specified, the ribs shall be frenched. Prior to frenching the costal cartilages shall be removed by a straight cut parallel with the dorsal edge. The ribs will then be frenched by detaching the <i>serratus ventralis</i> and removing the intercostal meat from the rib bones for a distance of 2 inches (5 cm) from the ventral (sternum/costal cartilage) side. The <i>serratus ventralis</i> shall be rolled and tied to the dorsal edge.
3	The ribs are cut into individual portions by slicing between the rib bones through the intercostal meat and overlying muscles.

Item No. 209B - Shoulder, Ribs - This item may be derived from any square-cut IMPS shoulder item and shall include at least 4 ribs and the *intercostal* and *serratus ventralis* muscles. This item shall be trimmed practically free of surface fat. The dorsal edge shall have no evidence of the cartilaginous junctures of the ribs and thoracic vertebrae.

Option No.	Description
1	Notched/Split: When specified, notching of lamb ribs shall be accomplished by making saw cuts across the ribs at 1.0 inch (2.5 cm) intervals. The saw cuts shall pass through the rib bones and intercostal meat while

	leaving the lean (serratus ventralis) intact.
2	Special/Frenched: When specified, the ribs shall be frenched. Prior to frenching the costal cartilages shall be removed by a straight cut parallel with the dorsal edge. The ribs will then be frenched by detaching the serratus ventralis and removing the intercostals meat from the rib bones for a distance of 2 inches (5 cm) from the ventral (sternum/costal cartilage) side. The serratus ventralis shall be rolled and tied to the dorsal edge.
3	The ribs are cut into individual portions by slicing between the rib bones through the intercostal meat and overlying muscles.

Item No. 209C - Lamb Belly - This item includes the intact flank, breast portion ventral to the rack, and breast bones (sternum) and costal cartilages removed from the square-cut shoulder. It may be prepared from the carcass after removal of the legs anterior to the hip bone and hip bone cartilage (Separation C). It is removed by a straight cut passing through a point that is 3 inches ventral to the loin eye to the cartilaginous juncture of the first rib and sternum. The diaphragm may be removed. However, if present, the membranous portion of the diaphragm shall be removed close to the lean. Heart and pelvic fat shall be removed.

Option No.	Description
1	Purchaser may specify the inclusion of the flank portion from the leg by removing the flank from the inside portion of the legs and following the natural seam over the leg tip prior to their removal from the carcass.

Item No. 209D - Lamb Belly, Boneless – This item is derived from the lamb belly. All bones, cartilages, abdominal tunic, internal fat (kidney, pelvic, and heart), intercostal meat and fat exceeding ½ inch in depth shall be removed. The leg end shall be ‘squared’ so the rectus abdominis muscle (flank muscle) appears to be at least 50 percent of the width of the belly. Rib bones and costal cartilages shall be removed so that the underlying muscles (serratus ventralis and external oblique) are left intact.

Item No. 210 - Foreshank - The foreshank shall be removed from the shoulder by straight cut exposing the humerus and removed from the brisket by a cut through the natural seam and may contain a portion of the web muscle (*pectoralis superficialis*). The trotter (lower foreshank) shall be removed at or above the knee joint.

The purchaser may specify one of the following options for **Item Nos. 229 and 229A**, described below. If not specified, product shall comply with Style A requirements.

Style: A: 9 ribs (ribs 5 - 13)
B: 8 ribs (ribs 6 - 13)

Item No. 229 - Hindsaddle, Long-Cut - This item is as described in Item No. 200 except that the shoulders shall be removed by a straight cut between the 4th and 5th ribs for Style A and between the 5th and 6th ribs for Style B.

Item No. 229A - Hindsaddle, Long-Cut, Trimmed - This item is as described in Item No. 229 except that flanks and breasts are removed by straight cuts ventral to, but no more than 4.0 inches (10.0 cm) from, the *longissimus dorsi* at the shoulder end, to a point that is immediately ventral to the *tensor fasciae latae* on the leg.

The purchaser may specify one of the following styles for **Item No. 230**. If not specified, product shall comply with Style A requirements.

Style: A: 13th rib remains with the hindsaddle
B: 13th rib remains with the foresaddle

Item No. 230 - Hindsaddle - This item is the posterior portion of the carcass after separation from the foresaddle by a cut which follows the natural curvature between the 12th and 13th ribs for Style A and posterior to the 13th rib for Style B. This item shall be practically free of all kidney and pelvic fat. The diaphragm and the hanging tender may be removed. However, if present, the membranous portion of the diaphragm shall be trimmed close to the lean.

The purchaser may specify one of the following styles for **Item Nos. 231, 232, 232A, 232B, and 232C**. If not specified, product shall comply with Style A requirements or as specified within the item description.

Style: A: Anterior to the 13th rib
B: Posterior to the 13th rib

Item No. 231 – Loins, Shortloins, Saddle - This item is prepared from Item No. 230. The legs shall be removed in accordance with separation c for Style A or B. This item shall be practically free of all kidney and lumbar fat. This item is commonly referred to as a “drop loin”.

Item No. 232 - Loins, Shortloins, Saddle, Trimmed - This item is as described in Item No. 231. The flank is removed by a straight cut which is not more than 4.0 inches (10.0 cm) from the *longissimus dorsi* at the rack end to a point on the leg end which is not more than 4.0 inches (10.0 cm) from, the *longissimus dorsi*. The diaphragm, hanging tenders and kidneys shall be removed.

PSO - The purchaser may specify one of the following tail length options for **Item Nos. 232A, 232B, and 232C**. If not specified, tail length will not be more than 4.0 inches (10 cm) from the ventral edge of the *longissimus dorsi* or as specified within the item description.

Option No.	Description
1	3 in. (7.5 cm)

2	2 in. (5 m)
3	1 in. (2.5mm)
4	0 in (0 mm)

Item No. 232A - Loin, Shortloin, Block-Ready, Trimmed - This item is as described in Item No. 232 except that it is a single loin and the flank is removed by a straight cut which is not more than the PSO from the *longissimus dorsi* at the rack end, to a point on the leg/sirloin end, which is not more than the PSO from the *longissimus dorsi*.

Option No.	Description
5	Purchaser may request the item be notched.

Item No. 232B - Loins, Double, Boneless- This item may be derived from any unsplit loin item of any style. The leg/sirloin end shall be derived in accordance with separation c for Style A or B. The flanks shall be removed by a straight cut which is not more than the PSO from the *longissimus dorsi*, at the rack end, to a point on the leg/sirloin end which is not more than the PSO from the *longissimus dorsi*. All bones, cartilages, hanging tenders, and tenderloins shall be removed while leaving the double boneless loins attached. This item may be netted or tied.

Item No. 232C - Loin, Single, Boneless - This item is as described in Item No. 232B except that it is a single loin.

Item No. 232D - Loin, Short Tenderloin - This item, which is similar to a short loin tenderloin, shall consist of the tenderloin portion of any loin item and shall consist of the *psaos major* and *psaos minor* only. The short tenderloin shall be practically free of fat. Bones, cartilage, and ragged edges shall be removed. A score into the tenderloin exceeding 0.5 inch (13 mm) in depth is not acceptable.

Item No. 232E - Flank, Untrimmed - This item shall contain the abdominal muscles ventral to the loin. Costal cartilages and rib bones shall be removed.

Option No.	Description
1	When the purchaser desires the flank steak muscle, the flank (rectus abdominis) muscle shall be separated from the rest of the untrimmed flank by removal from the tunic and abdominal membrane.

Item No. 233 - Legs - This item is prepared from the posterior portion of the carcass. The legs are separated from the carcass in accordance with separation c for Styles A and B.

The purchaser may specify one of the following styles for **Item Nos. 233A, 233B, 233C, AND 233D**. If not specified, product shall comply with Style A requirements or as specified within the item description.

Style: A: Leg is separated from the remainder of the carcass in accordance with separation c of the cutting instructions for Style A.

Style: B: Leg is separated from the remainder of the carcass in accordance with separation d of the cutting instructions for Style B.

Item No. 233A - Leg, Trotter Off - This item is prepared from Item No. 233. The legs are split, the trotters (lower hindshank) are removed at the break joint, and the gambrel cord is removed.

Item No. 233B - Leg, Shank Off - This item is as described in Item No. 233A. The hindshank is removed by a straight cut through the stifle joint and then follows the natural seam between the shank and the heel.

Item No. 233C- Leg, Trotter Off, Semi-Boneless. - This item is as described in 233A, except that the pelvic, vertebrae, tail bones, lean and fat overlying the pelvic bone, flank, and practically all cod and udder fat shall be removed.

Option No.	Description
1	The femur shall be removed
2	Frenched- the lean and fat shall be removed from the (lower hindshank) trotter end so the shank bone is exposed for a distance of 2.0 inches (5 cm).
3	The item may be halved by making a cut approximately 1.5 inches (3.8 cm) posterior to the head of the femur and perpendicular to the length of the femur bone. The 2 portions of approximate equal weight are packaged and sold together.

Purchaser may specify both PSO 1 and PSO 2, which is referred to as a “French carving leg”.

Item No. 233D - Leg, Shank Off, Semi-Boneless- This item is as described in Item No. 233C except that the hindshank is removed by a straight cut through the stifle joint and then follows the natural seam between the shank and the heel.

Option No.	Description
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1	Heel off- The heel is removed along with the shank through the natural seams between the biceps femoris (outside leg) and heel.
2	The item may be halved by making a cut approximately 2.5 inches (6.4 cm) posterior to the sirloin and perpendicular to the length of the femur bone. The 2 portions of approximate equal weight are packaged and sold together.

Item No. 233E - Leg, Sirloin Removed, Semi-Boneless- This item is as described in 233C except that the sirloin is removed from the leg by a straight cut as described in separation d for Style B. This item may also be referred to as Lamb Leg, Short Cut.

Option No.	Description
1	The femur shall be removed
2	Frenched- the lean and fat shall be removed from the (lower hindshank) trotter end so the shank bone is exposed for a distance of 2.0 inches (5 cm).
3	The item may be halved by making a cut approximately 1.5 inches (3.8 cm) posterior to the head of the femur and perpendicular to the length of the femur bone. The 2 portions of approximate equal weight are packaged and sold together.

Purchaser may specify both PSO 1 and PSO 2, which is referred to as a “ Short-Cut French carving leg”.

Item No. 233F - Leg, Hindshank - The hindshank shall be removed by a cut through the stifle joint and then follows the natural seam between the shank and the heel. The trotter (lower hindshank) is removed at the break joint and the gambrel cord is removed.

Option No.	Description
1	Frenched- the lean and fat shall be removed from the (lower hindshank) trotter end so the shank bone is exposed for a distance of 2.0 inches (5 cm).

Item No. 233G - Leg, Hindshank, Heel On - This item may be prepared from any shank-on leg and is removed by a straight cut through the stifle joint at an approximate right angle to the shank bone leaving the heel or any portion of the heel attached to the shank. The trotter (lower hindshank) is removed at the break joint and the gambrel cord is removed.

Option No.	Description
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1	Frenched- the lean and fat shall be removed from the (lower hindshank) trotter end so the shank bone is exposed for a distance of 2.0 inches (5 cm).
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Item No. 234 - Leg, Boneless - This boneless item is prepared from Item No. 233A. The loin end shall be exposed in accordance with separation c for Style A and separation d for Style B. The femur is removed by a cut through the natural seam between the knuckle and the inside portions. All bones, cartilages, sacrosciatic ligament and the lean and fat that overlies the ligament, popliteal and exposed lymph glands, gambrel cord, flank, and tendinous ends of the shank and knuckle exposing less than 75 percent lean on a cross-sectional cut shall be removed. The shank meat from the leg may be folded or placed into the femur cavity. This item shall be netted or tied.

Option No.	Description
1	Butterfly: Purchaser may specify that the inside and sirloin tip be 'butterflied' to yield a uniformly thick boneless leg for grilling. The sirloin tip is cut lengthwise beginning on the anterior side toward the void in the shank area, then the medial portion is folded into the shank cavity. The inside shall be butterflied by a knife cut beginning on the anterior side toward the heel portion of the leg.

Item No. 234A - Leg, Shank Off, Boneless - This is as described in Item No. 234 except that the shank shall be removed. The boneless leg shall be netted or tied.

Option No.	Description
1	Butterfly: Purchaser may specify that the inside and sirloin tip be 'butterflied' to yield a uniformly thick boneless leg for grilling. The sirloin tip is cut lengthwise beginning on the anterior side toward the void in the shank area, then the medial portion is folded into the shank cavity. The inside shall be butterflied by a knife cut beginning on the anterior side toward the heel portion of the leg.

Item No. 234B - Leg, 2-Way, Boneless - This item is as described in Item No. 234A except that the boneless leg shall be separated through the natural seams into 2 portions, bottom (outside and sirloin tip) and inside. Each portion shall be individually packaged and packed into the same container.

Item No. 234C - Leg, Bottom, Boneless - This boneless item may be prepared from the outside (*biceps femoris* and *semitendinosus*) and sirloin tip (*quadriceps femoris* group and *tensor fasciae latae*) portions of any IMPS boneless leg item. Presence of the *gluteus medius* and heel (*gastrocnemius* and *super digital flexor* muscles) are optional.

PSO - The purchaser may specify any one or a combination of the following options for **Item No. 234C**:

Option No.	Description
1	The <i>gluteus medius</i> shall remain.
2	The heel and popliteal lymph gland shall be removed by cutting through the natural seam.
3	Butterfly: Purchaser may specify that the cut be butterflied by cutting the sirloin tip (<i>quadriceps femoris</i> group and <i>tensor fasciae latae</i> muscles) lengthwise toward the void in the shank area. Fold the butterflied sirloin tip into the void of the shank area to create a uniformly shaped cut. This option is often referred to as an inside-out (IO) leg

Item No. 234D - Leg, Outside, Boneless - This boneless item may be prepared from the outside (*biceps femoris* and *semitendinosus*) portion of any IMPS boneless leg item. The *gluteus medius* shall also be included unless the purchaser specifies that it not be. The heel (*gastrocnemius* and *super digital flexor* muscles) and popliteal lymph gland shall be removed by cutting through the natural seam. When larger-sized roasts are requested, two outside portions shall be reversed, and the boned surfaces placed together and netted or tied to produce a uniformly thick roast

Item No. 234E - Leg, Inside, Boneless - This boneless item may be prepared from the inside portion of any IMPS boneless leg item and shall consist of the *semimembranosus*, *adductor* and firmly attached muscles. The inside is separated from the bottom and knuckle portions along the natural seams. When specified by the purchaser, the boned surfaces of two inside portions shall be placed together and netted or tied to produce a uniformly thick roast.

Option No.	Description
1	The <i>gracilis muscle (cap)</i> shall be removed by cutting through the natural seams

Item No. 234F - Leg, Sirloin Tip, Boneless - This boneless item shall consist of the knuckle portion (*quadriceps femoris* group) and *tensor fasciae latae* of any IMPS boneless leg item. The sirloin tip is separated from the inside and outside portions along the natural seams. All bones, cartilages and tendinous ends exposing less than 75 percent lean on a cross-sectional cut shall be removed.

Item No. 234G – Top Sirloin, Boneless - This boneless item is prepared from the muscles (*biceps femoris*, *gluteus medius*, *gluteus accessories*, and *gluteus profundus*) lying between the C and D separation points of style B. The bottom sirloin shall be removed by cutting along the natural seam (between the *gluteus medius* and the *rectus femoris*) continuing to the outside surface leaving a portion of the *tensor fasciae latae* attached to the boneless top sirloin. All bones, cartilages, sacrosciatic ligament, and the lean and fat that overlies the ligament, shall be removed.

Option No.	Description
1	The biceps femoris (cap) shall be removed by cutting through the natural seams
2	The tenderloin shall be removed.
3	The tensor fascia latae shall remain attached to the sirloin.

The purchaser may specify one of the following styles for **Item Nos. 235 and 236**. If not specified, product shall comply with Style A requirements.

Style: A: 9 ribs (ribs 5 - 13)
 B: 8 ribs (ribs 6 - 13)

Item No. 235 - Back - This item consists of the rack, loin, flanks, and plates intact. The shoulders shall be removed by a straight cut between the 4th and 5th ribs for style A and between the 5th and 6th ribs for Style B. The legs shall be removed in accordance with separation c for Styles A or B. The diaphragm may be removed. However, if present, the membranous portion of the diaphragm shall be trimmed close to the lean. This item shall be practically free of all internal fat.

Item No. 236 - Back, Trimmed - This item is as described in Item No. 235 except that the flanks and plates are removed by a straight cut that is ventral to, but no more than 4.0 inches (10.0 cm) from the *longissimus dorsi* on both the shoulder and leg ends. The kidneys and hanging tenders shall be removed.

Item No. 238 - Trimmings - Trimmings may be prepared from any portion of the carcass which yields product that meets the end item requirements. All fell, bones, cartilages, backstrap, heavy connective tissue, and lymph glands shall be removed.

The fat content shall be specified by the purchaser and verified by one of the following PSO for

Item No. 238. If not specified, fat content shall be verified with PSO B requirements.

PSO: A - Fat content shall be declared on the product label
 B - Contractor shall submit documentation of fat analysis to purchaser
 C - Fat content certified by AMS (see Quality Assurance Provisions)
 D - Samples selected by AMS and sent to purchaser designated laboratory

Item No. 239 - Special Trimmings - Trimmings may be prepared from any portion of the carcass which yields product that meets the end item requirements. Unless otherwise specified, shank and heel meat shall be excluded. Unless otherwise specified, trimmings shall consist of pieces which have a surface area on one side which is no less than 6.0 square inches (15.0 square cm) and are no less than 0.3 inch (8 mm) thick at any point. All fell, bones, cartilages, backstrap, heavy connective tissue, detached *cutaneous* muscles, and lymph glands shall be removed. Trimmings

shall be practically free of surface and seam fat. The purchaser may specify this item to be further fabricated into strips for stir fry or fajitas.

The purchaser may specify one of the following styles for **Item Nos. 242, 243, and 244**. If not specified, product shall comply with Style A requirements.

Style: A - Contains the 13th rib

B - Does not contain the 13th rib

Item No. 242 - Loins, Full - This item consists of the loins and sirloins intact. The racks shall be removed in accordance with separation b. The legs shall be removed in accordance with separation d. This item shall be practically free of all kidney and lumbar fat.

Item No. 243 - Loins, Full, Trimmed - This item is as described in Item No. 242, except that the flank shall be removed by a straight cut starting at a point on the rack end that is ventral to, but no more than 4.0 inches (10.0 cm) from the *longissimus dorsi* muscle to a point immediately ventral to the *tensor fasciae latae*. The diaphragm, hanging tenders and kidneys shall be removed.

Item No. 244 - Loin, 3-Way, Boneless- This item shall consist of the following IMPS items which are packaged in the same container: Item No. - 232C - Loin, Boneless Item No. - 234G - Sirloin, Boneless Item No. – 246 - Tenderloin

Item No. 245 - Sirloin - This item is separated from the carcass as described for separations c and d within Style B. The flank is removed by a straight cut from a point which is not more than 4.0 inches (10.0 cm) from the *gluteus medius* to a point which is not more than 0.25 inch (6 mm) from the *tensor fasciae latae*.

Item No. 246 - Tenderloin - This item is derived any loin item that has a bone-in sirloin attached to it that was removed from the leg at point of separation D in style B, and shall consist of the *psoas major*, *psoas minor*, and *iliacus* (wing). The portion of the *psoas minor* which is not firmly attached shall be removed. All bones and cartilages shall be removed. The tenderloin shall be trimmed practically free of kidney fat.

Item No. 295 - Lamb for Stewing - This item shall be prepared from any portion of the carcass which yields product that meets the end item requirements. Meat from the heel and shank is not acceptable. All bones, cartilage, backstrap, heavy connective tissue, exposed large blood vessels, and any exposed lymph glands shall be removed. The boneless meat shall be hand diced or processed through a dicing machine (grinding not permitted). Not less than 85 percent, by weight, of the resulting pieces shall be of a size which is equivalent of not less than a 0.5 inch (13 mm) cube or more than a 1.25 inches (3.1 cm) cube and no individual surface on these pieces shall exceed 2.5 inches (6.2 cm) in length. (When specified, this item may be prepared from yearling mutton or mutton. In which case the name shall be changed to yearling mutton or mutton, as applicable). Purchaser may specify product be prepared from specific cuts (leg, sirloin, loin, rack, or square-cut shoulder) and product shall be labeled accordingly.

Item No. 295A - Lamb for Kabobs - This item is as described in Item No. 295 except that it must be prepared from the leg portion of the carcass. In addition, unless otherwise specified, at least 90

percent, by weight, of the resulting dices shall be of a size equivalent to not less than a 0.75 inches (19 mm) cube or not more than a 1.25 inches (3.1 cm) cube and no individual surface shall be more than 2.5 inches (6.2 cm) in length.

Option No.	Description
1	Purchaser may allow the item to be prepared from any portion of the carcass as described in Item No. 295 .

Item No. 296 - Ground Lamb - (When specified, this item may be prepared from yearling mutton or mutton. In which case the name shall be changed to yearling mutton or mutton, as applicable).

Material - Ground lamb shall be prepared from any portion of a lamb carcass. The meat shall be free of fell, bones, cartilages, exposed lymph glands, heavy connective tissue and the tendinous ends of shanks and sirloin tips to a point which exposes at least 75 percent lean on a cross-sectional cut. Unless otherwise specified, ground lamb may be derived from previously certified boneless meat which has been frozen and stockpiled. The purchaser may specify the maximum amount of previously certified frozen boneless meat that can be mixed with fresh-chilled meat prior to final grinding.

Processing - The boneless meat shall be ground at least once through a plate having holes not larger than 1.0 inch (25 mm) in diameter. Alternatively, boneless lamb may be chopped or machine-cut by any method provided the texture and appearance of the product after final grinding is typical of ground lamb prepared by grinding only. Unless otherwise specified, final grinding shall be through a plate having holes 1/8 inch (3 mm) in diameter. Lamb shall be thoroughly blended at least once prior to final grinding. However, the ground lamb shall not be mixed after final grinding. Initial reduction in size, blending, and final grinding shall be a continuous sequence.

Fat Content - Unless otherwise specified, the fat content shall not exceed 20 percent. However, the purchaser may specify any fat content provided it does not exceed 30 percent and may specify discount ranges.

The fat content may be verified by one of the following PSO for **Item No. 296**. If not specified, fat content shall be verified with PSO A requirements.

- PSO: A - Fat content shall be declared on the product label
- B - Contractor shall submit documentation of fat analysis to purchaser
- C - Fat content certified by AMS (see Quality Assurance Provisions)
- D - Samples selected by AMS and sent to purchaser designated laboratory

Item No. 296A - Ground Lamb and Soy Protein Product - This item is approved for use in Child Nutrition Programs and is as described in Item No. 296 except that soy protein product (SPP) shall be added. Source (e.g., soy), Type (flour, concentrate, or isolate), and Texture (granular or textured) of SPP shall be specified by the purchaser. The SPP may be used dry, partially hydrated, or fully hydrated. If not specified, the dry SPP shall be fully hydrated to yield a minimum of 18

percent protein. To determine the maximum amount of water to be mixed with the dry SPP to yield 18 percent protein in the mixture, the following equation shall be used:

$$\frac{[\text{Percent protein on "as is" basis}] - 1}{18} = x$$

x = maximum pounds of water to be added to each pound of dry SPP.

The SPP shall be hydrated for the length of time listed on the product label. If this information is not available, the product shall be hydrated until all water is absorbed. The purchaser shall specify any level of substitution of hydrated SPP in the combined finished product up to 30 percent. If not specified, the maximum percent of hydrated protein product in the combined finished product shall not exceed 20 percent. The hydrated SPP shall be used in the same working day in which it was hydrated. The hydrated SPP shall be blended with the raw meat (in the specified ratio) following the initial reduction in size.

SPP hydrated and frozen by the SPP manufacturer may be used provided that:

(1) the protein content of the hydrated product (as specifically stated on the manufacturer's label) is not less than 18 percent; (2) the product may be tempered, but not thawed, prior to use; and (3) additional water may not be added directly to the meat.

The SPP must meet the nutritional specifications established by the USDA, Food and Nutrition Service Regulations. To ensure compliance, the SPP used must have information on the label stating, "This product meets USDA-FNS requirements for use in meeting a portion of the meat/meat alternate requirement of the child nutrition programs. Labeling of the finished product must reflect the terms "Soy Protein Product" or "Textured Soy Protein Product" as appropriate in the ingredient statement (e.g., textured soy protein product (Soy Flour, Zinc Oxide, Niacinamide, Ferrous Sulfate, Copper Gluconate, Vitamin A Palmitate, Calcium Pantothenate, Thiamine Mononitrate (B1), Pyridoxine Hydrochloride (B6), Riboflavin (B2), Cyanocobalamin (B12)).

8.3 PORTION CUT DESCRIPTIONS

Item No. 1200 - Cubed Steaks - Cubed steaks shall be prepared from any portion of the carcass which yields product that meets the end-item requirements. However, shank and heel meat shall be excluded. Unless otherwise specified, the steaks shall be cubed (while in the fresh chilled state) twice at approximate right angles. Knitting of 2 or more pieces and folding the meat when cubing is permissible. After cubing, surface and seam fat shall not exceed 15 percent of the total area on either side of the steak. Individual steaks shall remain intact when suspended 0.5 inch (13 mm) from the outer edge. The steaks shall be free of heavy connective tissue, bones, cartilages, and lymph glands.

Item No. 1201 - Cubed Steaks, Special - This item is as described in Item No. 1200 except the steaks shall be prepared from any combination of lean from the leg, sirloin, loin, rack, or square-cut shoulder sections (excluding shank and heel meat) of the carcass. Knitting of 2 or more pieces and folding the meat when cubing is not permissible.

Item No. 1202 - Braising Steaks, Swiss - Braising steaks shall be prepared from any combination of lean from the leg, loin, sirloin, rack, or square-cut shoulder sections (excluding shank and heel meat) of the carcass which yields product that meets the end-item requirements. The steaks shall be free of heavy connective tissue, bones, cartilages, and lymph glands. When specified, the raw materials or the steaks shall be mechanically tenderized by using the multiple probe method (pinning) not more than one time. Pressing, knitting, or folding two pieces of meat together is not permissible. Surface and seam fat shall not exceed an average of 1/8 inch (3 mm) in thickness and the thickness at any one point shall not exceed 0.25 inch (6 mm). Surface fat, measuring 0.1 (2 mm) inch or more in thickness, shall not exceed 50 percent of the circumference of the steak. Individual steaks shall remain intact when suspended 0.5 inch (13 mm) from the outer edge. Alternatively, the purchaser may specify surface and seam fat limitations in terms of maximum surface area percentage. Both surface and seam fat of the total cut surface on either side of the steak shall not exceed the percentage specified by the purchaser.

Item No. 1204B - Rib Chops - These chops shall be prepared from any bone-in rack item of specified style which yields product that meets the end-item requirements. The feather bones, exterior fat cover, fell membrane, backstrap, blade bone, and the *trapezius*, *infraspinatus*, and *latissimus dorsi* shall be removed. When style is not specified, racks shall comply with Style A requirements. Tail length shall be a PSO.

PSO = The purchaser may specify one of the following tail length options for **Item No. 1204B**. If not specified, tail length will not be more than 4.0 inches (10 cm) from the ventral edge of the *longissimus dorsi* or as specified within the item description.

Option No.	Description
1	3 in. (7.5 cm)
2	2 in. (5 m)
3	1 in. (2.5mm)
4	0 in (0 mm)

Item No. 1204C - Rib Chops, Frenched - This item is as described in Item No. 1204B except that the breast side of the ribs shall be frenched (removal of the *intercostal* meat and lean and fat over the ribs). Exposed portions of rib bones shall not exceed 2 inches (5 cm) in length and the remaining *intercostal* meat and lean and fat over the rib bones shall not exceed 2 inch (5 cm) from the longissimus dorsi muscle. The weight of each chop will determine the the number of bones per chop unless purchaser specifies that each chop have a specific number of bones regardless of weight.

Item No. 1204D - Rib Chops, Cap Off , Frenched - This item is as described in Item No. 1204C except that the muscles firmly attached below the blade bone (*rhomboideus* and *subscapularis*) shall be removed.

Item No. 1204F - Rib Chops, Frenched to Eye - This item is as described in Item No. 1204D except that this item is frenched immediately ventral to the *longissimus dorsi* muscle and the rib bone length shall not exceed 4.0 inches (10 cm), unless otherwise specified by the purchaser.

Item No. 1207 - Shoulder Chops - Shoulder chops shall be prepared from both the arm and blade bone sections of a Single Square-cut Shoulder - Item No. 207. Unless otherwise specified, shoulder chops shall consist of the arm and blade chops.

Style A: Arm chops - Are derived from the arm portion of Item No. 207 and shall contain a cross section of the humerus and shall be cut approximately parallel to the ventral (shank) side of the shoulder. The rib bones and *intercostal* meat shall be removed.

Option No.	Description
1	Rib bones are left attached if seam fat is less than .25 inch (6 mm) between the pectoral muscle and rib bones.

Style B: Blade chops - Are derived from the blade (dorsal) portion of Item No. 207. These chops shall contain a portion of the blade bone and shall be cut approximately parallel to the rib bones.

Option No.	Description
1	PSO 1- Chops may be prepared “country style” by cutting the chops between the blade bone and the rib bone to a point ending near the feather bone.

Item 1209- Short Rib, Bone-In - This item may be prepared from any lamb shoulder or breast item as described in Item Nos. 206 or 209. The bone in short ribs shall consist of the ribs, intercostals meat, and the intact serratus ventralis muscle. The serratus ventralis muscle shall be continuous across both the dorsal and ventral side of the specified portion. The ribs shall be cut flanken style by cutting them at a right angle to the rib bones. Purchaser may specify both the width of the cut and the number of ribs in each portion.

Option No.	Description
1	The ribs shall come from the shoulder portion only.

PSO - The purchaser may specify one of the following tail length options for **Item Nos. 1232A, 1232B, and 1232C**. If not specified, tail length will not be more than 4.0 inches (10 cm) from the ventral edge of the *longissimus dorsi* or as specified within the item description.

Option No.	Description
1	3 in. (7.5 cm)
2	2 in. (5 m)
3	1 in. (2.5mm)
4	0 in (0 mm)

Item No. 1232A - Loin Chops - These chops shall be prepared from any bone-in loin item which yields product that meets the end-item requirements and shall contain no portion of the hipbone. The flank edge shall not exceed the PSO for tail length options. “T-bone” chops are those chops that include the presence of the tenderloin (psoas major) muscle.

Item No. 1232B - Loin Chops, Double, Boneless - Loin chops shall be prepared from any IMPS double, boneless loin item. Chops shall remain firmly attached. The flank edge shall not exceed the PSO for tail length options.

Item No. 1232C - Loin Chops, Single, Boneless - The chops shall be prepared from any IMPS single, boneless loin item. The flank edge shall not exceed the PSO for tail length options.

Item No. 1233E - Leg, Center-Cut Steaks – This item may be prepared from any bone-in leg item that yields product that meets the end item requirements. A cross section of the femur bone (no other bones shall be present) shall be present on both sides of each steak.

Item No. 1233G - Lamb Osso Buco, Hindshank - This item shall be prepared from Item No. 233G. The hindshank portions shall be cut to a thickness specified by the purchaser. The slices shall be cut approximately perpendicular to the bone length so as to display a cross-section surface at least 75 percent lean on each side.

Item No. 1234 - Leg Chops, Boneless - This item shall be prepared from any boneless IMPS Leg Item (234 series) of specified style, except that shank and heel meat shall be excluded. When style is not specified, then boneless legs shall comply with Style A requirements.

Item No. 1234A - Leg, Cutlet, Boneless - This item shall be derived from any combination of the following boneless IMPS items (inside, outside, sirloin tip, and/or sirloin). All shank and heel meat shall be excluded, and the cutlets shall be free of any heavy connective tissue, cartilages, and lymph glands and trimmed of fat to meet purchaser specifications. When specified by the purchaser this item shall be cubed. Knitting of 2 or more pieces and folding the meat when cubing is not permissible.

Item No. 1296 - Ground Lamb Patties - The patties shall be prepared from Item No. 296.

Item No. 1296A - Ground Lamb and Soy Protein Product Patties - The patties shall be prepared from Item No. 296A.

Item No. 1297 - Lamb Steaks, Flaked and Formed, Frozen - The steaks shall be prepared from boneless lamb that complies with the material requirements of Item No. 296 and shall be flaked (grinding is not permitted) and formed. The flaking and forming process shall be in compliance with FSIS Regulations. Product shall comply with fat content requirements of Item No. 296. The purchaser shall specify shape and weight of steaks. When specified, the product shall be breaded and labeled appropriately. The breading and its application shall be in accordance with FSIS Regulations.

Item No. 1297A - Lamb Sandwich Steaks, Flaked, Chopped, Formed and Wafer Sliced, Frozen - The steaks shall be prepared from boneless lamb that complies with the material requirements of Item No. 296. The flaking, chopping, forming, and slicing process shall be in compliance with FSIS Regulations and shall produce steaks which are moderately fine textured. Product shall comply with fat content requirements of Item No. 296. Each steak shall consist of two or more thin slices weighing approximately one ounce each. No more than a minor amount of green/brown/gray rings shall be present. Steaks shall be packaged with paper separators between each steak. Unless otherwise specified, slices shall be approximately 4.75 x 7.5 inches (11.9 x 18.8 cm). The purchaser shall specify weight and/or number of slices per steak.

Item No. 1297B - Lamb Steaks, Sliced and Formed, Frozen - The steak shall be prepared from boneless lamb that complies with Item No. 239. The slicing and forming process shall be in accordance with FSIS Regulations. Ingredients may be added for the purpose of tenderizing and binding and shall appear on product label. The purchaser shall specify weight, shape, and/or thickness of steaks.

9.0 Glossary

Anterior – Toward the front of the carcass, or forward of.

Blast Frozen – Products are frozen rapidly at extremely low temperatures ($\leq -10^{\circ}\text{F}$) in conjunction with high-velocity air movement around the product.

Block Ready – A cut that is marketed ready for further processing or portioning.

BRT – Boned, rolled and tied (or netted).

Butterfly – To split cuts and roasts in half, leaving the halves hinged on one edge.

Carcass – The dressed, harvested animal containing two “sides”.

Center Cut – Term used to indicate the interior portion of a cut after removal of outer edges or ends to create a more desirable, uniform portion.

Chain – The side muscle of the tenderloin.

Chilled – A temperature related term generally used to describe “fresh” product.

Chine Bone – A part of the backbone that remains after the carcass is split.

Comminuted – Reduction of meat particle size, using such methods as grinding, dicing and chopping.

Dorsal to – Toward the upper or top line of the carcass away from the navel.

End Cuts – Cuts made from the ends of primal or sub-primal cuts. Ends often lack the uniformity of the adjacent cuts.

Evisceration – The process of removing the internal organs from the carcass during harvest.

Frenched – The process by which the bone is exposed after removing the *M. intercostales interni* and/or the lean and fat surrounding it to provide a decorative appearance.

Fresh – Refers to meats that have not been canned, cured, smoked, or cooked. In addition to the above, the product must never have been frozen.

Frozen – Refers to meats that have been reduced in temperature to below the freezing temperature of meat (<28°F).

IM – Acronym for Individual Muscle designating that a cut is composed of one muscle only.

IQF – Acronym for Individually Quick Frozen. Refers to cuts that have been individually quick frozen at extremely low temperatures immediately after processing.

Lateral – Away from the median plane that divides the carcass vertically into right and left sides.

Medial – Towards the median plane that divides the carcass vertically into right and left sides.

Net Weight – Weight of the contents of a container after the weight of the packaging and packing materials has been deducted.

Posterior to – Towards the rear of the carcass, or backward of.

Primal Cuts – Basic major cuts into which carcasses and sides are separated.

Side – One matched half of a lamb carcass.

Sub-Primal Cuts – Smaller cuts derived from primal cuts.

Ventral – Toward the belly of the carcass away from the upper or top line.