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**Washington, D.C.
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I **NSTITUTIONAL**

M **EAT**

P **URCHASE**

S **PECIFICATIONS**

**FOR FRESH VEAL AND CALF
SERIES 300**

APPROVED BY USDA

EFFECTIVE DATE - APRIL 1996
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INSTITUTIONAL MEAT PURCHASE SPECIFICATIONS

FOR FRESH VEAL AND CALF SERIES 300

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 ten documents:

General Requirements

Quality Assurance Provisions

Fresh Beef.....	Series 100
Fresh Lamb and Mutton	Series 200
Fresh Veal and Calf.....	Series 300
Fresh Pork.....	Series 400
Cured, Cured & Smoked, & Fully Cooked Pork Products.....	Series 500
Cured, Dried, and Smoked Beef Products	Series 600
Edible By-Products	Series 700
Sausage Products	Series 800

These specifications are recommended for use by any meat product procuring activity. For assurance that procured items comply with these detailed requirements, the USDA, through its Meat Grading and Certification Branch (MGCB), provides a voluntary Meat Certification Service. For labeling purposes, only product Certified by the MGCB may contain the letters "IMPS" on the product label. Purchasers desiring this service should contact:

USDA, MRP, AMS, Livestock and Seed Program
Meat Grading and Certification Branch
STOP 0248 Room 2628 S-Bldg
1400 Independence Ave. SW
Washington, D.C. 20250-0248 Phone: (202) 720-1113 FAX: (202)-690-4119

Internet Address: <http://www.ams.usda.gov/lsg/lc-mg.htm>

For any assistance regarding these documents and for additional copies, please contact:

USDA, MRP, AMS, Livestock and Seed Program
Standardization Branch
Stop 0254 Room 2628 S-Bldg
1400 Independence Ave. SW
Washington, D.C. 20250-0254 Phone: (202) 720-4486 FAX (202)-720-1112

IMPS Ordering Checklist

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 I. **ORDERING DATA TO BE SPECIFIED BY THE PURCHASER.**

- A. **Item Number** (See page 5.)
 - Special instructions
 - Purchaser Specified Options (PSO)
 - Added ingredients (NA)
 - Mechanical tenderization (NA)

- B. **Grade and Special Requirements** (See page 5.)

- C. **State of Refrigeration** (See page 6 and IMPS GENERAL REQUIREMENTS, section IA. MEAT HANDLING)
 - Chilled
 - Frozen

- D. **Fat Limitations** (See page 6.)

- E. **Portion Cut Weight, Thickness, and Shape** (applicable to portion cut items only)
See page 7.

- F. **Weight Range** (See weight range tables for cuts and roasts on pages 8-10.)

- G. **Netting and Tying** (See page 11.)

- H. **Packaging and Packing** (See page 11 and IMPS GENERAL REQUIREMENTS, section II. PACKAGING AND PACKING)

- I. **Quality Assurance** (See IMPS QUALITY ASSURANCE PROVISIONS)
 - Method of examination
 - Acceptable Quality Levels (AQLs)
 - Certification – (See page 11, and refer to the IMPS GENERAL REQUIREMENTS, Section III. USDA CERTIFICATION.

I. ORDERING DATA TO BE SPECIFIED BY PURCHASER

A. ITEM NUMBER

Special Instructions

The purchaser shall specify: (1) IMPS item number, Style (when applicable), product name, and weight range to be purchased; and (2) applicable options modifications, and special instructions to the requirements of the IMPS. All items are listed in **TABLE 1. INDEX OF IMPS VEAL AND CALF PRODUCTS AND WEIGHT RANGES**

The detailed requirements for each item are listed within the MATERIAL REQUIREMENTS and ITEM DESCRIPTIONS sections of this document. In conjunction with other markings that may be required in the GENERAL REQUIREMENTS and by Food Safety and Inspection Service (FSIS) Regulations, the IMPS item number, "Veal," or "Calf" and the product name from Table 1 shall be used for marking shipping containers.

Purchaser Specified Options

The purchaser will be allowed to specify options (tail length, special item descriptions, arm and chuck removal options, fat content) for individual IMPS items. Each PSO will be included in the contract and can vary from order to order depending on the options/needs specified by the purchaser.

Added Ingredients (NA)

Mechanical Tenderization (NA)

B. GRADE AND SPECIAL REQUIREMENTS - The purchaser may specify any item to be derived from veal and/or calf carcasses that have been officially USDA graded.

Grade – The purchaser may specify any of the following five official USDA quality grades:

U.S PRIME, U.S. CHOICE, U.S. GOOD, U.S. STANDARD, U.S. UTILITY

Veal and calf quality grades are determined by evaluation of carcass maturity, quality of lean, and conformation. There are no yield grades for veal and calf. The purchaser may specify a particular grade or range of grades. Information on grade criteria may be obtained from the Standardization Branch.

The official USDA grade designation will appear in any one or any combination of the following ways: (1) container markings, (2) on individual bags or wrapping material, or (3) legible roller brand appearing on the meat. The processor shall comply with Food Safety and Inspection Service (FSIS) grade labeling procedures.

CLASS - The Purchaser may specify the desired class.

1. VEAL
2. CALF

Differentiation between the classes "veal" and "calf" is made primarily on the basis of the color of lean. Typical veal carcasses have a grayish pink color of lean that is very smooth and velvety in texture. By contrast, typical calf carcasses have a grayish red color of lean. The more evidence of red color of lean correlates with advanced maturity and diet. The following table provides purchaser information and options for the various types of veal and calf available (For certification, options A-D cannot be verified unless an approved verification program is in place):

Carcass Weight

Option	Type	lbs.	kg	Color	Age	Diet
A	Bob veal	50-70	22-31	Light grayish-pink	< 21d	milk/formula
B	Intermediate veal	70-175	31-79	Grayish-pink	3-14 wk	milk/formula
C	Milk/Formula fed veal	175-225	79-102	Grayish-pink	14-18 wk	milk/formula
D	Special fed veal	225-300	102-136	Grayish-pink	18-20 wk	milk/formula
E	Calf	300+	136+	Grayish-red	18 wk +	grain/roughage

For labeling purposes, when option A, B, C, or D is specified, the product shall be labeled "Veal" (option A may be labeled "Bob Veal"). When option E is specified within a range of options (i.e., A-E), product shall be labeled "Veal or Calf." When only option E is specified, product shall be labeled "Calf." The individual types, A-D, cannot be verified by evaluation of carcasses or cuts. The purchaser may request documentation from the vendor, stating that carcasses or cuts are derived from the specified type(s) or contact the USDA, AMS, Meat Grading and Certification Branch for development of verification programs.

C. STATE OF REFRIGERATION – (See IMPS General Requirements for Details.)

1. Chilled
2. Frozen

D. FAT LIMITATIONS (TRIMMING OPTIONS)

Cuts and Roasts - Unless otherwise specified within the item description, the purchaser may specify one of the following trim levels for removal of surface fat and/or surface membrane ("silver" or "blue tissue") to be removed from the surfaces of cuts and roast.

Option	Maximum Average Fat Thickness ^{1/}	Maximum Fat At Any One Point
1	Untrimmed (Recommended for Carcasses, sides, saddles, large primal cuts)	Not Applicable
2	1/8 inch (3 mm)	1/4 inch (6 mm)
3	Practically Free (75% lean/seam surface exposed)	1/8 inch (3 mm)
4	Peeled/Denuded (remaining fat shall not exceed 1.0 inch in any dimension)	1/8 inch (3 mm)
5	Peeled/Denuded, Surface Membrane Removed (90% lean exposed)	1/8 inch (3 mm)

Chops - The purchaser shall specify one of the following maximum (at any one point) thickness of surface fat on the edges of the chop unless definite fat limitations are indicated in the detailed item descriptions. If not specified, fat thickness shall not exceed 1/4 inch (6 mm) at any one point.

Option	Maximum fat thickness at any one point for portion cuts ^{1/}
1	1/4 inch (6 mm)
2	1/8 inch (3 mm)
3	Practically free (75% lean/seam surface exposed, and remaining fat shall not exceed

	1/8 inch (3 mm))
4	Peeled/Denuded (remaining fat shall not exceed 1.0 inch in any dimension and/or 1/8 inch (3 mm) in thickness)
5	Peeled/Denuded, Surface Membrane Removed (90% lean exposed, and remaining fat shall not exceed 1/8 inch (3 mm))

^{1/}Note: When average fat thicknesses are specified in item descriptions, the appropriate "Maximum at Any One Point" limitation shall apply.

E. PORTION-CUT WEIGHT, THICKNESS, AND SHAPE ^{1/}

The purchaser shall specify the portion weight and/or thickness desired. For assistance in specifying weight, see weight range tables. Unless the purchaser specifies other portion weight and/or thickness tolerances, 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 (5 mm)	3/16 inch (5 mm)
More than 1 inch (25 mm)	+/- 1/4 inch (6 mm)	1/4 inch (6 mm)

PORTION WEIGHT TOLERANCES

Specified Weight	Weight Tolerance	Thickness Uniformity
Less than 6.0 ounces (170 g)	+/- 1/4 oz. (7 g)	3/16 inch (5 mm)
6.0 ounces (170 g) or more	+/- 1/2 oz. (14 g)	1/4 inch (6 mm)

^{1/} Thickness measurements not applicable within 1/4 (6 mm) inch of edge. Also, value listed under thickness uniformity is the maximum allowable difference between the thinnest and thickest measurement of an individual chop or steak.

F. WEIGHT RANGE OR SIZE - Refer to Table 1 for weight ranges for carcasses, primal cuts, sub primal cuts and roasts. Refer to Table 2 for recommended portion size for portion cuts. Purchaser may specify items as split.

Table 1. INDEX OF IMPS VEAL AND CALF 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.

Item

Weight Ranges (Pounds)

No.	Product Name	Range A	Range B	Range C	Range D	Range E
300	Carcass	50-70	70-175	175-225	225-300	300-up
303	Side	25-35	35-87	87-122	122-150	150-up
304	Foresaddle, 11 Ribs	25-34	34-86	86-120	120-147	147-up
304A	Forequarter, 11 Ribs.....	12-17	17-43	43-60	60-74	74-up
306	Hotel Rack, 7 Ribs	4-6	6-14	14-20	20-25	25-up
306A	Hotel Rack, 6 Ribs.....	3-5	5-13	13-19	19-24	24-up
306B	Hotel Rack, Chop-Ready, 7 Ribs.....	1-2	2-5	5-7	7-9	9-up
306C	Hotel Rack, Chop-Ready, 6 Ribs.....	1-2	2-4	4-6	6-8	8-up
306D	Hotel Rack, Chop-Ready, 7 Ribs, Frenched	1-2	2-5	5-7	7-9	9-up
306E	Hotel Rack, Chop-Ready, 6 Ribs, Frenched	1-2	2-4	4-6	6-8	8-up
307	Rack, Ribeye, 7 Ribs	0.5-2	2-4	4-6	6-9	9-up
307A	Rack, Ribeye, 6 Ribs	0.5-2	2-3	3-5	5-8	8-up
308	Chucks, 4 Ribs	14-20	20-49	49-69	69-85	85-up
308A	Chucks, 5 Ribs	14-19	19-45	45-65	65-80	80-up
309	Chucks, Square-Cut, 4 Ribs	11-16	16-39	39-55	55-68	68-up
309A	Chucks, Square-Cut, 5 Ribs	12-17	17-42	42-58	42-73	73-up
309B	Chuck, Square-Cut, 4 Ribs, Boneless	10-19	19-26	26-33	33-40	40-up
309C	Chuck, Square-Cut, 5 Ribs, Boneless	11-19	19-27	27-35	35-45	45-up
309D	Chuck, Square-Cut, 4 Ribs, Neck Off, Boneless, Tied	9-17	17-25	25-32	32-39`	39-up
309E	Chuck, Square-Cut, 5 Ribs, Neck Off, Boneless, Tied.....	10-18	18-26	26-34	34-44	44-up
309F	Chuck, Square-Cut, Neck Off, Arm Out, Boneless, Tied	6-12	12-19	19-26	26-38	38-up
309G	Chuck, Square-Cut, Clod Out, Boneless, Tied	9-15	15-20	20-30	30-38	38-up
310	Chuck, Outside Shoulder, Boneless	2-4	4-5	5-7	7-9	9-up
310A	Chuck, Shoulder Clod	1.5-3	3-4	4-6	6-9	9-up
310B	Chuck, Shoulder Clod, Roast	2-4	3-4	4-6	6-9	9-up
310C	Chuck, Chuck Tender.....	0.5-1	1-2			
310D	Chuck, Outside Shoulder.....	2-5	5-8	8-10	10-13	13-up
311	Chuck, Blade Portion, Neck Off, Boneless	7-13	13-21	21-28	28-38	38-up
311A	Chuck, Inside Roll, Boneless.....	4-9	9-13	13-16	16-19	19-up
311B	Chuck, Chuck Eye Roll, Boneless	2-3	3-5	5-7	7-10	10-up

Item No.	Product Name	Weight Ranges (Pounds)				
		Range A	Range B	Range C	Range D	Range E
311C	Chuck, Under Blade Roast, Boneless	2-6	6-9	9-12	12-15	15-up
312	Foreshank	1-2	2-3	3-4	4-5	5-up
313	Breast	3-4	4-10	10-15	15-18	18-up
314	Breast, with Pocket	3-4	4-10	10-15	15-18	18 up
323	Veal Short Ribs.....		Amount as Specified			
330	Hindsaddle, 2 Ribs.....	25-36	36-89	89-125	125-153	153-up
330A	Hindquarter, 2 Ribs	12-18	18-45	45-63	63-76	76-up
331	Loins	6-12	12-18	18-30	30-36	36-up
332	Loins, Trimmed	3-7	7-18	18-26	26-30	30-up
334	Legs	19-27	27-68	68-95	95-117	117-up
335	Leg, Boneless, Roast Ready, Tied.....	8-11	11-26	26-36	36-45	45-up
336	Leg, Shank Off, Boneless,					

	Roast Ready, Tied	7-10	10-24	24-34	34-42	42-up
337	Hindshank	1-2	2-5	5-6	6-8	8-up
338	Trimmings.....		Amount as Specified			
339	Trimmings, Special.....		Amount as Specified			
341	Back, 9 Ribs, Trimmed.....	8-13	13-32	32-46	46-58	58-up
342	Back, Strip, Boneless	3-5	5-10	10-15	15-20	20-up
344	Loin, Strip Loin, Boneless	2-3	3-5	5-7	7-8	8-up
344A	Loin, Strip Loin, Boneless, Special.....	1-2	2-3	3-4	4-5	5-up
346	Leg, Butt Tenderloin, Defatted.	1-1.5	1.5-up			
346A	Leg, Butt Tenderloin, Skinned	0.5-1	1-up			
347	Loin, Short Tenderloin	0.5-1	1-up			
349	Leg, Top Round, Cap On	3-8	8-12	12-14	14-16	16-up
349A	Leg, Top Round, Cap Off	3-8	8-10	10-13	13-15	15-up
350	Leg, Bottom, Heel Out.....	3-8	8-13	13-15	15-18	18-up
351	Leg, Sirloin Tip (Knuckle)	1-2	2-5	5-8	8-10	10-up
352	Leg, Sirloin, Cap Off, Tri-tip On	1-4	4-8	8-11	11-15	15-up
352A	Leg, Sirloin, Cap Off	1-3	3-7	7-10	10-13	13-up
363	Leg, TBS, 4 Part	8-11	11-27	27-38	38-47	47-up
363A	Leg, TBS, 3 Part	6-9	9-24	24-32	32-39	39-up
363B	Leg, BHS, 3 Part.....	6-12	12-27	27-35	35-42	42-up
389	Mixed Bones					
390	Marrow Bones.....					
391	Marrow.....					
395	Veal for Stewing		Amount as Specified			
395A	Veal for Kabobs		Amount as Specified			
396	Ground Veal.....		Amount as Specified			
396A	Ground Veal and Vegetable Protein Product		Amount as Specified			
396B	Veal Patty Mix.....		Amount as Specified			
397	Ground Veal, Special.....		Amount as Specified			
397A	Ground Veal and Vegetable Protein Product, Special		Amount as Specified			

Note: When single hotel racks, square-cut chucks, loins, legs, etc., are specified, their respective weight shall be one-half of that prescribed for double cuts in the table.

Note: Studies have shown that all carcasses within a given weight range will not produce cuts that are uniform in weight. Therefore, in ordering cuts, purchasing officials should specify the weight range(s) desired without regard to the carcass weight shown in the various ranges.

Table 2. INDEX OF IMPS VEAL AND CALF PORTION-CUT WEIGHT RANGES

Item No.	Product Name	Suggested Portion Weight Range (ounces)
1300	Cubed Steak.....	3-8
1301	Cubed Steak, Special.....	3-8
1302	Veal Slices.....	1-6
1306	Rack, Rib Chops, 7 Rib.....	4-8
1306A	Rack, Rib Chops, 6 Rib.....	4-8
1306B	Rack, Rib Chops, Cap Off, 7 Rib	4-8
1306C	Rack, Rib Chops, Cap Off, 6 Rib	4-8
1306D	Rack, Rib Chops, Frenched, 7 Rib.....	4-8
1306E	Rack, Rib Chops, Frenched, 6 Rib.....	4-8
1309	Chuck, Shoulder Arm Chops.....	4-8
1309A	Chuck, Shoulder Blade Chops	4-8
1312	Osso buco, Foreshank	2-8
1332	Loin Chops	4-8

1336	Cutlets	3-8
1337	Osso buco, Hindshank	2-8
1338	Veal Steak, Flaked and Formed, Frozen	3-8
1338A	Veal Steak, Flaked and Formed, Breaded, Frozen.....	3-8
1338B	Veal Steak, Sliced and Formed, Frozen.....	1-6
1349A	Leg, Top Round, Cap Off, Cutlets	1-6
1396	Ground Veal Patties	2-8
1396A	Ground Veal and Vegetable Protein Product Patties.....	2-8
1396B	Veal Patties	2-8
1397	Ground Veal Patties, Special	2-8
397A	Ground Veal Vegetable Protein Product Patties, Special.....	2-8

Note: Because it is impractical to list all portion weights that purchasers may desire, the listed portion weights are suggested only. Other portion weights may be specified if desired.

In conjunction with other markings that may be required in the General Requirements and/or by Meat and Poultry Inspection Regulations, the IMPS item number, Class (Veal, Calf, or Veal or Calf), 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	Short-Cut - Sh-Cut	Square-Cut - Sq-Cut
Block Ready - B/R	Shoulder - Shld	Partially - Part
Boneless - Bnls	Sirloin - Sirln	Tenderloin - Tender
Roast - Rst	Ground - Grnd	Trimmed - Trmd
Center Cut - Cntr Cut	Heel Out - H/O	Forequarter - FQ
Roast-Ready - Rst-Rdy	Shank Off - S/O	Hindquarter - HQ

The above products names and abbreviations have been reviewed and approved by USDA, FSIS, Product Assessment Division, Food Standards and Ingredients Branch, Washington, D.C.

G. NETTING AND TYING

When tying is required, stretchable netting (or any other approved 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. Alternatively, roasts may be string-tied by loops of twine uniformly spaced at no more than 2.0-inch (5.0 cm) intervals girthwise (perpendicular to item length). When girthwise tying does not make roasts firm and compact, lengthwise tying shall also be used. For determining net weight, netting or strings are not considered as packaging materials.

H. PACKAGING AND PACKING

The purchaser shall specify packaging and packing for delivery of product. (See IMPS GENERAL REQUIREMENTS for details.)

I. QUALITY ASSURANCE

The purchaser may consult the IMPS QUALITY ASSURANCE PROVISIONS for options regarding product examination and lot acceptance criteria in terms of Acceptable Quality

Levels (AQLs).

USDA CERTIFICATION - When requested, the purchaser shall specify within a contract or purchase order that product shall be Certified by USDA, AMS, Meat Grading and Certification Branch. For more information regarding this service, contact:

**USDA, MRP, AMS, Livestock and Seed Program
Meat Grading and Certification Branch
Stop 0248, Room 2628 S-Bldg
1400 Independence Ave. SW
Washington, D.C. 20250-0248 Phone: (202) 720-1113 Fax-(202)-690-4119**

Internet Address: <http://www.ams.usda.gov/lsg/lm.mg.htm>

II. MATERIAL REQUIREMENTS

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

QUALITY

A. 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; i.e., 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 that 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. Meat 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 that have been previously certified in the fresh-chilled state, provided such cuts show no evidence of deterioration (e.g., shall show no evidence of discoloration, foreign odors, purge, or sticky surface slime that is not typical of product that has been properly handled, frozen, and stored). 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.

B. Lean Quality

All meat shall be practically free of bruises, blood clots, bloody tissue, blood discoloration, calluses, spinal cord portions, spleen, exposed blood vessels, cod and/or udder fat, or any other conditions that would negatively affect the use of the product.

Meat shall be of color normal to the specified class, and 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.

C. Cutting, Trimming, and Boning Cuts

The cutting, trimming, and boning of the cuts shall be accomplished with sufficient care to allow each cut to retain its identity and to avoid objectionable scores in the lean. Ragged edges shall be removed close to the lean surfaces. 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 of lean, fat, or bone shall be removed or included from an adjacent cut. All boneless cuts shall be free of bones and cartilage.

Except for steaks or chops that are cubed and/or knitted or unless otherwise specified in the individual item description, steaks 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. Portion-cut items shall be practically free of: (1) fractures, (2) tag ends, and (3) knife scores. Individual steaks shall remain intact (2) when suspended 0.5 inch (13 mm) from the outer edge.

Unless otherwise specified, the wholesale and fabricated cuts described in these specifications are double cuts. Single cuts are produced by cutting lengthwise centrally through the associated vertebrae (backbone).

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.

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 not to exceed 1.0 inch (25 mm) in any dimension and/or 1/8 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 not to exceed 1.0 inch (25 mm) in any dimension and/or 1/8 inch (3 mm) in depth at any point.

Peeled/Denuded, Surface Membrane Removed - When the surface membrane ("silver" or "blue" tissue) is required to be removed (skinned), the resulting cut surface shall expose at least 90% lean with remaining "flake" fat not to exceed 1/8 inch (3 mm) in depth.

Cuts and roast items - The maximum fat thickness at any one point is evaluated by visually determining the area of a cut that 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 (5 mm) in depth, one third was 0.3 inch (8 mm) in depth and one third was 0.4 inch (10 mm) in depth, then the average would be 0.3 inches (8 mm)).

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 that could affect the measurement.

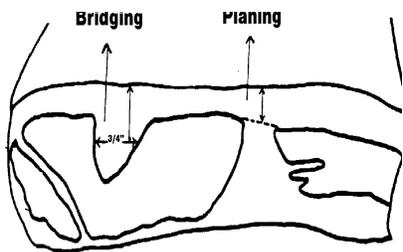


Figure 1

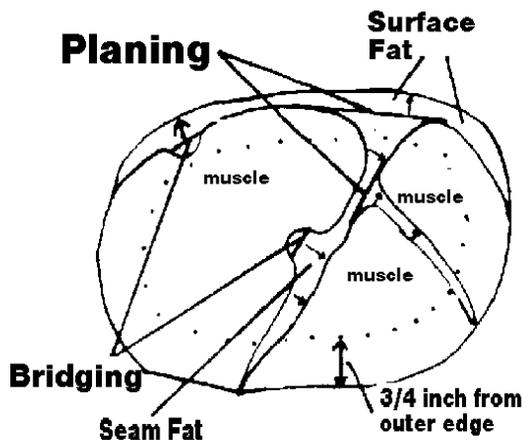
When a natural depression occurs in a muscle, only the fat above the portion of the depression that is more than 3/4 inch (19 mm) in width is considered. This method is known as "bridging." When a seam of fat occurs between adjacent muscles only the fat above the level of the involved muscles is measured. This method is known as "planing" (See Figure 1).

However, when fat limitations for "Peeled/Denuded" or "Peel/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.

Diced and chop 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 that 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 chops, 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 (See Figure 2).

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 thickest (widest) fat deposits between layers of lean (muscles) on any side of the cut 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 chops, 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 3/4 inch (19 mm) from the contour (projected perimeter when symmetrically formed or unformed) of the outer edge of the steak (See Figure 2). However, when fat limitations for “Peeled/Denuded” or “Peel/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.

Figure 2

D. CHOP- or BLOCK-READY - Chop or block-ready indicates that the cuts are ready to be further processed into chops simply by using a knife. Chop or block-ready items have the chine bone removed by a cut that exposes lean between the ribs and the feather bone/vertebrae junctures and does not score the *longissimus dorsi*. For rack items: the item is split, and the feather bones, blade bone and its related cartilage, backstrap, and the muscles associated with the blade bone (lifter muscles) have been removed. The lifter muscles are the: *trapezius*, *infraspinatus*, *latissimus dorsi*, *rhomboideus*, and *subscapularis*. Loin items that are chop/block-ready are: split, the rib bones have been removed, the cavity is clean, and the flank has been removed by a straight cut that is no more than 1.0 inch (25 mm) ventral to the *longissimus dorsi* on the rib or sirloin ends.

III. ITEM DESCRIPTIONS

Item No. 300 - Carcass - This item is the unsplit carcass with not more than two tail vertebrae remaining attached. The hanging tender and diaphragm may be removed, but, if remaining, the membranous portion of the diaphragm shall be trimmed close to the lean.

Item No. 303 - Side - A side consists of one half of the carcass and is produced by splitting the carcass through the vertebral column (backbone), exposing the spinal cord groove at least 75 percent of the length of the side. The hanging tender and the diaphragm may be removed, but, if not removed, the membranous portion of the diaphragm shall be trimmed close to the lean.

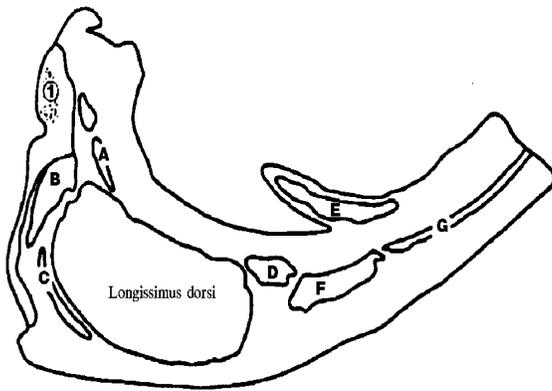
Item No. 304 - Foresaddle, 11 Ribs - This item is the anterior portion of the carcass after removal of the hindsaddle by a cut following the natural curvature between the 11th and 12th ribs, with the 1st through the 11th ribs remaining with the foresaddle. The diaphragm may be removed, but, if not removed, the membranous portion shall be trimmed close to the lean. The foresaddle shall be practically free of the thymus gland and heart fat.

Item No. 304A - Forequarter, 11 Ribs - This item is the anterior portion of Item No. 303 after the removal of Item No. 304 - Hindquarter, 2 Ribs or one-half of Item No. 304 - Foresaddle, 11 Ribs. The diaphragm may be removed, but, if not removed, the membranous portion shall be trimmed close to the lean.

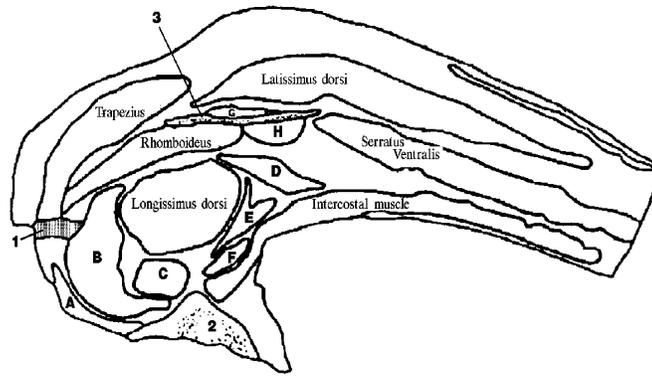
Item No. 306 - Hotel Rack, 7 Ribs - This item is prepared from Item No. 304 and shall have 7 ribs (ribs 5 - 11). The chucks and breasts are removed by 2 straight cuts. The chucks are removed by a straight cut between the 4th and 5th ribs. The breasts are removed by a straight cut across the ribs, that is not more than 4.0 inches (10.0 cm) from the outer tip of the *longissimus dorsi* (ribeye muscle). The ribeye muscle shall be approximately equal to or larger than the *complexus* muscle on the cut surface of the chuck end.

Item No. 306A - Hotel Rack, 6 Ribs - This item is prepared from Item No. 304 and shall have 6 ribs (ribs 6 - 11). The chucks and breast are removed by 2 straight cuts. The chucks are removed by a cut between the 5th and 6th ribs. The breasts are removed by a straight cut across the ribs that is not more than 4.0 inches (10.0 cm) from the outer tip of the

Rack Loin Separation



Rack Chuck Separation (between 5th-6th Ribs)



longissimus dorsi. The *longissimus dorsi* shall be approximately twice as large as the *complexus* muscle on the cut surface of the chuck end.

Item No. 306B - Hotel Rack, Chop-Ready, 7 Ribs - This item is as described in Item No. 306 except that it is a single rack. Refer to the Material Requirements for the description of Chop-ready.

Item No. 306C - Hotel Rack, Chop-Ready, 6 Ribs - This item is as described in Item No. 306A except that it is a single rack. Refer to the Material Requirements for the description of Chop-ready.

A. *Quadratus Lumborum*
B. *Multifidus dorsi*
C. *Spinalis dorsi*
D. *Longissimus Costarum*

E. *Diaphragm*
F. *Serratus dorsalis posterior*
G. *Oliquis abdominis Externus*
€ *Thoracic vertebra*

A. *Multifidus dorsi*
B. *Spinalis dorsi*
C. *Complexus*
D. *Serratus dorsalis*

E. *Longissimus dorsi*
F. *Levatores costarum*
G. *Infraspinatus*
H. *Subscapularis*

€ *Ligamentum nuchae*
€ *Thoracic vertebra*
∠ *Scapula*

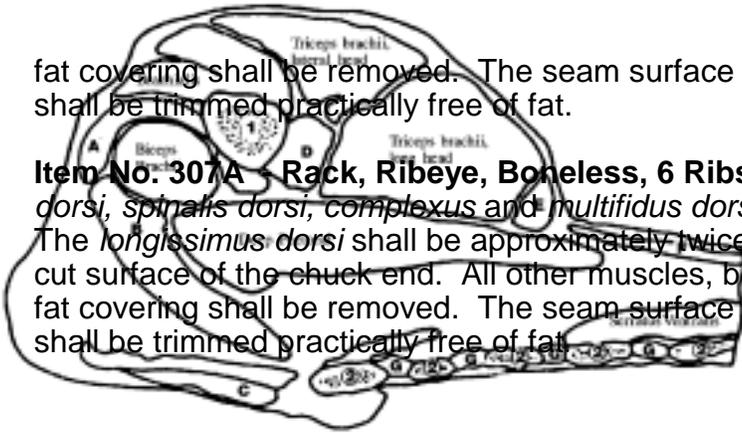
Item No. 306D - Hotel Rack, Chop-Ready, 7 Ribs, Frenched - This item is as described in Item No. 306B except that the breast side of the ribs shall be frenched (removal of the intercostal meat and lean and fat between and over the ribs). Exposed portions of the rib bones shall not exceed 1.5 inches (3.8 cm) and the remaining intercostal meat and lean and fat over the rib bones shall not exceed 2.5 inches (6.3 cm) from the ventral edge of the *longissimus dorsi*.

Item No. 306E - Hotel Rack, Chop-Ready, 6 Ribs, Frenched - This item is as described in Item No. 306C 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 the rib bones shall not exceed 1.5 inches (3.8 cm) and the remaining intercostal meat and lean and fat over the rib bones shall not exceed 2.5 inches (6.3 cm) from the ventral edge of the *longissimus dorsi*.

Item No. 307 - Rack, Ribeye, Boneless, 7 Ribs - This item consists of the *longissimus dorsi*, *spinalis dorsi*, *complexus* and *multifidus dorsi* muscles of one-half of Item No. 306. The *longissimus dorsi* shall be approximately equal to or larger than the *complexus* muscle on the cut surface of the chuck end. All other muscles, bones, cartilages, backstrap, and the exterior

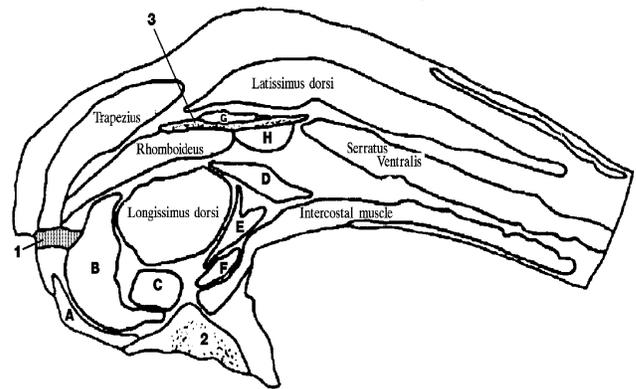
Chuck Breast Separation (between 5th-6th Ribs)

fat covering shall be removed. The seam surface overlying the *spinalis* and *longissimus dorsi* shall be trimmed practically free of fat.



Item No. 307A - Rack, Ribeye, Boneless, 6 Ribs - This item consists of the *longissimus dorsi*, *spinalis dorsi*, *complexus* and *multifidus dorsi* muscles of one-half of Item No. 306A. The *longissimus dorsi* shall be approximately twice as large as the *complexus* muscle on the cut surface of the chuck end. All other muscles, bones, cartilage, backstrap, and the exterior fat covering shall be removed. The seam surface overlying the *spinalis* and *longissimus dorsi* shall be trimmed practically free of fat.

Rack Chuck Separation (between 5th-6th Ribs)



- A. Brachiocephalicus
- B. Superficial pectoral
- C. Sterno-cleido mastoid
- D. Triceps brachii, medical head

- E. Tensor fascia antibrachial
- F. Cutaneous trunci
- G. Intercostal muscles

- ∈ Humerus
- ∉ Ribs

- A. Multifidus dorsi
- B. Spinalis dorsi
- C. Complexus
- D. Serratus dorsalis
- E. Longissimus
- F. Levatores Costarum
- G. Infraspinatus
- H. Subscapularis
- ∈ Ligamentum Nuchae
- ∉ Thoracic vertebra
- ∠ Scapula

Item No. 308 - Chucks, 4 Ribs - The chucks are that portion of the foresaddle remaining after removal of the hotel rack and plate portion of the breast by a straight cut between the 4th and 5th ribs.

Item No. 308A - Chucks, 5 Ribs - The chucks are that portion of the foresaddle remaining after

removal of the hotel racks and plate portion of the breasts by a straight cut between the 5th and 6th ribs.

Item No. 309 - Chucks, Square-Cut, 4 Ribs - This item is as described in Item No. 308 except that the foreshanks and brisket portion to the breasts are removed by a straight cut perpendicular to the rack side, that passes through the cartilaginous juncture of the first rib and the sternum.

Item No. 309A - Chucks, Square-Cut, 5 Ribs - This item is as described in Item No. 308 except that the foreshanks and brisket portion of the breasts are removed by a straight cut perpendicular to the rack side that passes through the cartilaginous juncture of the first rib and the sternum.

Item No. 309B - Chuck, Square-Cut, 4 Ribs, Boneless - This item is prepared from one half of Item No. 309. The shoulder clod shall be separated (with or without the *supraspinatus* attached) but packaged with the boneless chuck. The shoulder clod may be separated prior to removal of the brisket and shank. The *longissimus dorsi* shall be approximately equal to or larger than the *complexus* muscle on the cut surface of the rack end. The *deep pectoral* muscle shall extend past the 3rd rib mark and may extend past the 4th rib mark, provided it is tapered in appearance. All bones, cartilage, backstrap, and the prescapular lymph gland and surrounding fat in excess of 0.5 inch (13 mm) shall be removed.

Item No. 309C - Chuck, Square-Cut, 5 Ribs, Boneless - This item is prepared from one half of Item No. 309A. The shoulder clod shall be separated (with or without the *supraspinatus* attached) but packaged with the boneless chuck. The shoulder clod may be separated prior to removal of the brisket and shank. The *longissimus dorsi* shall be approximately twice as large as the *complexus* muscle on the cut surface of the rack end. The *deep pectoral* muscle shall extend past the 3rd rib mark and shall not extend past the 5th rib mark. All bones, cartilage, backstrap, and the prescapular lymph gland and surrounding fat in excess of 0.5 inch (13 mm) shall be removed.

Item No. 309D - Chuck, Square-Cut, 4 Ribs, Neck Off, Boneless, Tied - This item is as described in Item No. 309B except that the neck shall be removed by a straight cut approximately perpendicular to the neck vertebrae along a line where the neck joins the shoulder. The shoulder clod shall be replaced in its natural position, the boneless chuck shall be rolled with the *longissimus dorsi* lengthwise of the roll, and the roast shall be netted or tied. When smaller roasts are specified, the boneless chuck shall be separated by cuts at right angles to its length.

Item No. 309E - Chuck, Square-Cut, 5 Ribs, Neck Off, Boneless, Tied - This item is as described in Item No. 309C except that the neck shall be removed by a straight cut approximately perpendicular to the neck vertebrae along a line where the neck joins the shoulder. The shoulder clod shall be replaced in its natural position, the boneless chuck shall be rolled with the *longissimus dorsi* lengthwise of the roll, and the roast shall be netted

or tied. When smaller roasts are specified, the boneless chuck shall be separated by cuts at right angles to its length.

Item No. 309F - Chuck, Square-Cut, Neck Off, Arm Out, Boneless, Tied - This item is as described in Item No. 309D or 309E except that the arm portion shall be removed and the shoulder clod shall be separated (but packaged with the boneless chuck) and trimmed in accordance with Item No. 310B. The arm portion shall be removed from the blade portion (after separation of the clod) by a straight cut, approximately perpendicular with the rack end that is ventral to, but not more than 3.0 inches (7.5 cm) from the *longissimus dorsi* at the rack end. The boneless blade portion and the shoulder clod shall be netted or tied separately and placed into the same container.

Item No. 309G - Chuck, Square-Cut, Clod Out, Boneless, Tied - This item is the same as Item No. 309B or 309C, except that the shoulder clod (with or without the *supraspinatus* attached) shall be excluded. The boneless chuck shall be rolled with the *longissimus dorsi* lengthwise of the roll and netted or tied.

Item No. 310 - Chuck, Outside Shoulder, Boneless - This item is as described in Item No. 310D except that all bones and cartilage shall be removed. The tendons on the elbow end shall be trimmed to be even with the lean. Unless otherwise specified by the purchaser, this item shall be netted or tied.

Item No. 310A - Chuck, Shoulder Clod - This item is the same as Item No. 310 except that the *supraspinatus* shall be removed. Unless otherwise specified by the purchaser, this item shall be netted or tied.

Item No. 310B - Chuck, Shoulder Clod, Roast - The shoulder clod roast is the same as Item No. 310A except all sides shall be trimmed so that the clod is not less than 0.5 inch (13 mm) thick at any point. If specified, clod shall be split lengthwise, the ends reversed, the boned surfaces placed together, and netted or tied. Also, if specified, larger roasts may be produced by reversing the ends of two clods, placing the boned surfaces together and netting or tying.

Item No. 310C - Chuck, Chuck Tender - This item consists of the *supraspinatus*, which lies along the dorsal side of the medial ridge of the blade bone and shall be separated from adjacent muscles through the natural seams.

Item No. 310D - Chuck, Outside Shoulder - This item shall consist of the shank, humerus, and blade bone and associated muscles of the chuck. It may be prepared from the chuck prior to removal of the rack and breast. This item is prepared by cutting through the *superficial pectoral* (web muscle) and following the natural seam to a point immediately medial to the blade cartilage. The thick end (arm end) shall include the shank and humerus bones and overlying lean (*latissimus dorsi*, *triceps brachii* group, and 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. 311 - Chuck, Blade Portion, Neck Off, Boneless - This item is as described in

Item No. 309F except that the clod portion (with or without the *supraspinatus*) shall be excluded. Unless otherwise specified by the purchaser, this item shall be netted or tied.

Item No. 311A - Chuck, Inside Roll, Boneless - This is as described in Item No. 311 except that the *supraspinatus* and the *trapezius* (chuck cover) shall be removed. This item consists of the large muscle system of the blade portion that lies beneath the blade and *trapezius* consisting of the *longissimus dorsi*, *complexus*, *rhomboideus*, *spinalis dorsi*, *complexus*, *multifidus dorsi*, *serratus ventralis*, *splenius* and may contain the *subscapularis*. The neck shall be removed by a straight cut approximately parallel to the rack end and is anterior to, but not more than 0.5 inch (13 mm) from, the *serratus ventralis* muscle. Unless otherwise specified below, the arm portion shall be removed by a straight cut that is at an approximate right angle to the rib end and is not more than 3.0 inches (7.6 cm), ventral from the *longissimus dorsi* at the rack end and not more than 4.0 inches (10.2 cm) from the *complexus* at the neck end. When smaller roasts are specified, a straight cut, perpendicular to its length, shall divide the chuck roll into approximately equal portions. Unless otherwise specified by the purchaser, this item shall be netted or tied.

PSO = The purchaser may specify alternative arm removal options:

Maximum distance from <i>Longissimus</i> on the rack end.	Maximum distance from the <i>complexus</i> on the neck end.
1. 2.0 inches (5.1cm)	3.0 inches (7.6)
2. 1.0 inch (25 mm)	2.0 inches (5.1)
3. 0.0 inch	1.0 inch (25 mm)

Item No. 311B - Chuck, Chuck Eye Roll, Boneless - This item is derived from Item No. 311A. The chuck eye roll is the large muscle system consisting of the *longissimus dorsi*, *spinalis dorsi*, *multifidus dorsi*, *splenius*, and *complexus* muscles. It is separated from the inside roll by cutting through the natural seams. This item shall be practically free of surface fat. All bones, cartilage, backstrap, *rhomboideus*, *serratus ventralis*, and *intercostal* meat shall not be present. Unless otherwise specified by the purchaser, this item shall be netted or tied.

Item No. 311C - Chuck, Under Blade Roast, Boneless - The item is the remaining portion of the inside roll after removal of the chuck eye roll. It shall consist of the *serratus ventralis*, *rhomboideus* and may contain the *subscapularis* muscles. This item shall be practically free of surface fat. All bones, cartilage, backstrap, neck meat and *intercostal* meat shall be removed. Unless otherwise specified by the purchaser, this item shall be netted or tied.

Item No. 312 - Foreshank - This item is the foreleg portion from the chuck. A cross-section of the arm bone (humerus) shall be exposed. The foreshank is separated from the brisket by cutting through the natural seam. A small portion of the *pectoralis superficialis* may remain attached to the foreshank.

Item No. 313 - Breast - The breast consists of the plate and brisket portions of the forequarter (intact) and shall contain 11 ribs. The diaphragm may be removed, but, if present, the membranous portion shall be trimmed close to the lean. The heart fat shall be removed.

Item No. 314 - Breast, with Pocket - This item is as described in Item No. 313. A pocket shall be formed by cutting through the flesh along the rack edge adjacent to the ribs, leaving not less than 1.0 inch (25 mm) or more than 1.5 inches (3.8 cm) of lean intact along the chuck edge, the belly edge, and the flank edge of the breast. There shall be no scores through the outside muscles covering the pocket.

Item No. 323 - Veal Short Ribs - This item is derived from the rib section of any rack and/or breast. This item shall contain at least one rib but no more than 5 ribs, the *serratus ventralis* (which shall run continuous across the cut surface on at least the dorsal side), and the intercostal muscles. This item shall be practically free of surface fat and contain no costal cartilages. The *latissimus dorsi* shall be removed. The purchaser shall specify the number of ribs and the width (distance between the dorsal and ventral sides) of the rib sections.

Item No. 330 - Hindsaddle, 2 Ribs - The hindsaddle is the posterior portion of the carcass remaining after the removal of the Item No. 304 by a cut following the natural curvature between the 11th and 12th ribs, with the 12th and 13th ribs remaining with the hindquarter. The hanging tender and diaphragm may be removed, but, if present, the membranous portion shall be trimmed close to the lean.

Item No. 330A - Hindquarter, 2 Ribs - This item is prepared from Item No. 303. The hindquarter is separated from the forequarter by a cut following the natural curvature between the 11th and 12th ribs, with the 12th and 13th ribs remaining with the hindquarter. The hanging tender and diaphragm may be removed, but, if not removed, the membranous portion of the diaphragm shall be trimmed close to the lean.

Item No. 331 - Loins - The loin is the anterior portion of Item No. 330, after removal of the legs. The legs shall be removed by a straight cut perpendicular to the back bone through a point immediately anterior to the hip bone, leaving no part of the hip bone cartilage on the loin.

Item No. 332 - Loins, Trimmed - The trimmed loin is as described in Item No. 331 except that the flank portions shall be removed by a straight cut that is not more than 4.0 inches (10.0 cm) from the outer tip of the *longissimus dorsi* (loin eye muscle). The kidneys and the kidney knobs shall be removed. The lumbar fat shall be trimmed so that it does not exceed 0.5 inch (13 mm) in thickness at the leg end. From the leg end, the fat shall be tapered down to the lean surface at a point not beyond 3/4 of the length of the loin.

Item No. 334 - Legs - The legs are that portion of the hindsaddle remaining after the removal of Item No. 331.

Item No. 335 - Leg, Boneless, Roast Ready, Tied - This item is prepared from one-half of Item No. 334. The round bone shall be removed by a cut through the natural seam between the top round and the knuckle. The meat from the shank shall be folded into or separated and placed into the femur bone cavity (shank meat may only be derived from one shank). The flank, practically all cod or udder fat, and surface fat in excess of 0.5 inch (13 mm) in thickness shall be removed. All bones, cartilage, lean and fat overlying the aitch bone (oyster), sacrosclatic ligament, the gambrel cord and the heavy connective tissue surrounding the kneecap shall be removed. This item shall be netted or tied.

Item No. 336 - Leg, Shank Off, Boneless, Roast Ready, Tied - This item is as described in Item No. 335, except that the shank shall be removed by a cut through the stifle joint that follows the natural seam between the shank and the heel. This item shall be netted or tied.

Item No. 337 - Hindshank - This item is prepared from Item No. 334. The hindshank shall be removed by a cut through the stifle joint that follows the natural seam between the shank and the heel. All hock bones and the gambrel cord shall be removed.

Item No. 338 - Trimmings - Trimmings may be prepared from any portion of the carcass that yields product that meets the end item requirements and is not ground or mechanically reduced in size. All bones, cartilage, backstrap, heavy connective tissue, and lymph glands shall be removed.

PSO = The purchaser shall specify fat content using one of the following options.
If not specified, fat content shall be verified with option 2 requirements.

- PSO:**
- 1 - Fat content shall be declared on the product label
 - 2 - Contractor shall submit documentation of fat analysis to purchaser
 - 3 - Fat content certified by AMS (see Quality Assurance Provisions)
 - 4 - Samples selected by AMS and sent to a purchaser-designated laboratory

Item No. 339 - Special Trimmings - Special trimmings may be prepared from any portion of the carcass that 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 that have a surface area on one side which is no less than 6.0 square inches (15.0 square cm) and is no less than 0.3 inch (8 mm) thick at any point. All, bones, cartilage, 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.

Item No. 341 - Back, Trimmed - This item consists of the racks and loins attached. The legs are removed by a straight cut perpendicular to the back bone through a point immediately anterior to the hip bone, leaving no part of the hip bone cartilage on the loin. The plates and flanks are removed by a straight cut that is not more than 4.0 inches (10.0 cm) from the outer tip of the *longissimus dorsi*. The kidneys and kidney knobs shall be removed, and the lumbar fat shall be trimmed so that it does not exceed 0.5 inch (13 mm) in thickness at the leg end. The lumbar fat shall be tapered down to the lean surface at a point not beyond 75% the length of the loin portion.

The purchaser may specify the following options:

- PSO:**
- 1 - The chucks removed by a straight cut between the 4th and 5th ribs. (Back, Trimmed-9 rib)
 - 2 - The chucks removed by a straight cut between the 5th and 6th ribs. (Back, Trimmed-8 rib)

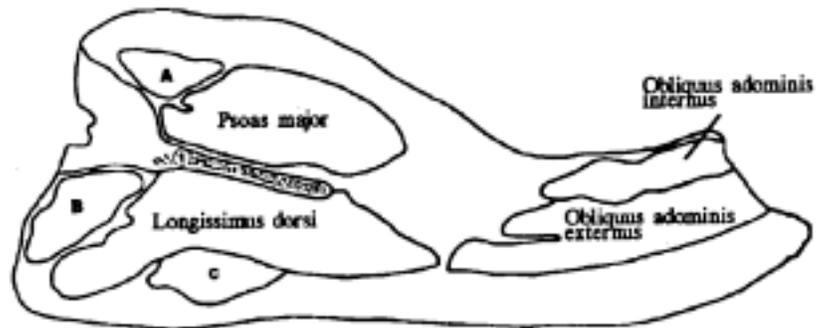
Item No. 342 - -Back, Strip, Boneless - This item is derived from the back and shall consist of the single boneless strip loin and the boneless rack, ribeye attached. The flanks and plates shall be removed immediately ventral to the *longissimus dorsi*. The *longissimus dorsi* shall be approximately equal to or larger than the *complexus* on the cut surface of the chuck end and the gluteus medius shall be present on the cut surface on the leg end. All

bones, cartilage, backstrap, and muscles associated with the blade bone shall be removed. Unless otherwise specified, the strip may be partially cut (butterflied) in the center and folded, so that the boned surfaces are placed together, to facilitate packaging.

Item No. 344 - Loin, Strip

Loin, Boneless - This item is prepared from one-half of Item Nos. 331 or 332. The flank edge shall be removed by a straight cut that is not more than 1.0 inch (25 mm) from the outer tip of the *longissimus dorsi*. The tenderloin, all bones and cartilage shall be removed. Surface fat shall not exceed 0.5 inch (13 mm) at any point.

Loin Leg Separation



- A Psoas minor
- B Multifidus dorsi
- C Gluteus medius
- ① Lumbar vertebra

Item No. 344A - Loin, Strip

Loin, Boneless, Special - This item is as described in Item No. 344 except that the flank is removed adjacent to the *longissimus dorsi*. The fat covering and the thick opaque membranous "skin" surface of the major eye muscles shall be removed, leaving a smooth surface on the boneless strip loin.

Item No. 346 - Leg, Butt Tenderloin, Defatted - This item is that portion of the tenderloin removed from Item No. 334 and shall consist of the *psaos major*, *psaos minor*, and *iliacus*. The butt tenderloin shall be practically free of all fat.

Item No. 346A - Leg, Butt Tenderloin, Skinned - This item is the same as Item No. 346 except that the *psaos minor* is removed and the principal membranous tissue over the *psaos major* shall be removed.

Item No. 347 - Loin, Short Tenderloin - This item is that portion of the tenderloin removed from Item Nos. 331 or 332. Practically all fat and the *psaos minor* shall be removed.

Item No. 349 - Leg, Top (Inside) Round, Cap On - The top round is prepared from Item No. 334 and shall consist of the *semimembranosus*, *adductor*, *gracilis*, and firmly attached minor muscles (*pectineus*, *ilio psaos*, and *sartorius*). The top round is separated from the outside and knuckle portions along the natural seams.

Item No. 349A - Leg, Top (Inside) Round, Cap Off - This item is as described in Item No. 349, except that the cap (*gracilis*) muscle and *gracilis* membrane shall be removed. The purchaser may specify that the minor muscles (*pectineus*, *ilio psaos*, and *sartorius*) shall be removed along with the *gracilis* by cutting through the natural seams.

Item No. 350 - Leg, Bottom (Gooseneck), Heel Out - This boneless item may be prepared from the outside (*biceps femoris* and *semitendinosus*) portion of any IMPS boneless leg item. The presence of the *gluteus medius* is optional. The *gastrocnemius* (*heel*) and *super*

digital flexor muscles), *sacrosciatic* ligament, and popliteal lymph gland shall be removed by cutting through the natural seam.

Item No. 351 - Leg, Sirloin Tip (Knuckle) - This boneless item shall consist of the knuckle portion (*rectus femoris*, *vastus lateralis*, *vastus medialis*, and *vastus intermedius*) and cap (*tensor fasciae latae*) muscles, and may contain a small portion of the *sartorius* of any IMPS boneless leg item. The knuckle is separated from the inside and outside portions along the natural seams. All bones, cartilage, silver skin, *obliquus abdominis internus*, and tendinous ends exposing less than 75 percent lean on a cross-sectional cut shall be removed.

Item No. 352 - Leg, Hip, Cap Off, Tri-Tip Attached, Boneless - The hip is the top sirloin portion of the leg with the tri-tip (*tensor fasciae latae*) from the sirloin tip firmly attached. The hip is removed from the leg by a straight cut approximately perpendicular to the length of the leg passing anterior to the protuberance of the femur. The *biceps femoris*, (cap), *obliquus abdominis internus* (flap), and the knuckle portion (*rectus femoris*, *vastus lateralis*, *vastus medialis*, and *vastus intermedius*) shall be removed. All bones, cartilage, exposed lymph glands, and heavy connective tissue overlying the *tensor fasciae latae* and *sacrosciatic* ligament shall be removed.

Item No. 352A - Leg, Hip, Cap Off, Boneless - This item is as described in Item No. 352 except that the *tensor fasciae latae* is removed.

Item No. 363 - Leg, TBS, 4 Parts - This item shall consist of the top, bottom, sirloin tip, and hip portions of the leg (Item Nos. 349, 350, 351, and 352). Each portion shall be individually packaged and pack into the same container.

Item No. 363A - Leg, TBS, 3 Parts - This item shall consist of the top, bottom, and sirloin tip portions of the leg (Item Nos. 349, 350, and 351). Each portion shall be individually packaged and pack into the same container.

Item No. 363B - Leg, BHS, 3 Parts - This item shall consist of the bottom, hip, and sirloin tip portions of the leg (Item Nos. 350, 351, and 352). Each portion shall be individually packaged and pack into the same container.

Item No. 395 - Veal (or Calf) for Stewing - Diced meat 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. Dices shall be free of bones, cartilage, heavy connective tissues, and lymph glands. To facilitate dicing, meat may be frozen and/or tempered, one time only. The meat shall be either hand-diced or processed through a dicing machine (grinding is not permitted). At least 75 percent, by weight of the resulting dices shall be of a size equivalent to a 0.75 inch (19 mm) to 1.5 inch (3.8 cm) cube; have no individual surface on any dice more than 2.5 inches (6.4 cm) in length; and not exceed 1/8 inch (3 mm) fat thickness at any point.

Item No. 395A - Veal (or Calf) for Kabobs - This item is as described in Item No. 395 except (unless otherwise specified) at least 90 percent, by weight, of the resulting dices shall be of size equivalent to not less than a 0.75 inch (19 mm) cube or not more than a 1.5 inch (3.8 cm) cube, and no individual surface shall be more than 3.0 inches (7.5 cm) in length. The fat thickness of the surface and/or seam fat shall not exceed 1/8 (3 mm) at any point.

Item No. 396 - Ground Veal (or Calf) -

Material - Ground veal (or calf) shall be prepared from any portion of the carcass (graded or ungraded). The meat shall be free of bones, cartilage, prefemoral, popliteal, and prescapular and other exposed lymph glands, heavy connective tissue, and the tendinous ends of shanks and knuckles to a point that exposes at least 75 percent lean on a cross-sectional cut. Unless otherwise specified, ground veal (or calf) may be derived from previously certified boneless meat that 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 veal (or calf) may be chopped or machine-cut by any method, provided the texture and appearance of the product after final grinding is typical of ground veal (or calf) prepared by grinding only. Unless otherwise specified, final grinding shall be through a plate having holes 1/8 inch (3 mm) in diameter. Veal (or calf) may be thoroughly blended at least once prior to final grinding. However, the ground veal (or calf) shall not be mixed after final grinding. Initial reduction in size, blending, and final grinding shall be a continuous sequence.

The purchaser may specify that product shall be coarse ground. When specified, the boneless meat shall be ground once through a plate having holes no larger than 1.0 inch (25 mm) and no smaller than 5/8 inch (16 mm) in diameter. Product name shall include "Coarse Ground."

Fat Content - Unless otherwise specified, the fat content shall not exceed 15 percent. However, the purchaser may specify any fat content, provided it is between 10 and 20 percent, and may specify discount ranges.

PSO = The purchaser may specify that fat content may be verified by one of the following options. If not specified, fat content shall be verified with option 2 requirements.

- PSO:**
- 1 - Fat content shall be declared on the product label
 - 2 - Contractor shall submit documentation of fat analysis to purchaser
 - 3 - Fat content certified by AMS (see Quality Assurance Provisions)
 - 4 - Samples selected by AMS and sent to a purchaser designated laboratory

Item No. 396A - Ground Veal (or Calf) and Vegetable Protein Product - This item is approved for use in Child Nutrition Programs and is as described in Item No. 396 except that vegetable protein product (VPP) shall be added. Source (e.g., soy), Type (flour, concentrate, or isolate), and Texture (granular or textured) of VPP shall be specified by the purchaser. The VPP may be used dry, partially hydrated, or fully hydrated. If not specified, the dry VPP 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 VPP to yield 18 percent protein in the mixture, the following equation shall be used:

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

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

The VPP 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 VPP 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 VPP shall be used in the same working day in which it was hydrated. The hydrated VPP shall be blended with the raw meat (in the specified ratio) following the initial reduction in size.

VPP hydrated and frozen by the VPP 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 18.00 percent; (2) the product may be tempered, but not thawed, prior to use; and (3) no additional water may be added.

The VPP must meet the nutritional specifications established by the USDA, Food and Nutrition Service Regulations. To ensure compliance, the VPP 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 "Vegetable Protein Product" or "Textured Vegetable Protein Product" as appropriate in the ingredient statement (e.g., textured vegetable 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)).

Item No. 396B - Veal (or Calf) Patty Mix - This item is as described in Item No. 396A except that the VPP does not need to meet FNS regulations.

Item No. 397 - Ground Veal (or Calf), Special - This item is as described in Item No. 396 except that not less than 50 percent, by weight, of any combination of boneless primal rounds, loins, ribs, or square-cut chucks or subprimals derived from the primal portions (e.g., chuck rolls, clods, sirloin tips, etc.) of the carcass shall be used. The remaining portion, not to exceed 50 percent by weight, may be composed of trimmings or cuts from any portion of the carcass. The purchaser may specify a grade requirement for the "primal" portion and/or the remaining portion. Formulation requirements shall be determined on a boneless basis. Primal or subprimal cuts that have more than a minor amount of lean removed are not eligible for the primal portion.

Item No. 397A - Ground Veal (or Calf) and Vegetable Protein Product, Special - This item is as described in Item No. 397 except that vegetable protein product shall be added as described in Item No. 396A.

DETAILED REQUIREMENTS FOR PORTION CUTS

Item No. 1300 - Cubed Steak, Boneless - 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. The steaks shall be free of heavy connective tissue, bones, cartilages and lymph glands. Unless otherwise specified, the steaks shall be cubed no more than 2 times. Knitting of 2 or more pieces and folding the meat when cubing is acceptable. 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 from any

point 0.5 inch (13 mm) from the outer edge.

Item No. 1301 - Cubed Steak, Boneless, Special - This item is the same as Item No. 1300 except that the steaks shall be prepared from any combination of lean from the leg, loin, rib, or square-cut chuck sections of the carcass. Knitting of 2 or more pieces of meat or folding of the meat is not acceptable. Purchaser may specify products be prepared from specific primal cuts (leg, loin, rib, or square-cut chuck), and product shall be labeled accordingly.

Item No. 1302 - Veal Slices, Boneless - This item shall be prepared from any combination of lean from the leg, loin, rib, or square-cut chuck sections (excluding shank and heel meat) of the carcass which yields product that meets the end-item requirements. The slices shall be free of heavy connective tissue, bones, cartilage, and lymph glands. When specified, the raw materials or the slices 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 0.25 inch (6 mm) in thickness at any point. Individual slices 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 slice shall not exceed the percentage specified by the purchaser. The purchaser may specify that products be prepared from specific primal cuts (leg, loin, rib, or square-cut chuck), and the product shall be labeled accordingly.

The purchaser may specify one of the following tail length options for the following rack items. 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.

PSO: 1 - 2 in. (5.0 cm)
 2 - 1 in. (25 mm)
 3 - 0 in. (0 mm)

Item No. 1306 - Rack, Rib Chops, 7 Rib - Rib chops shall be prepared from one-half of Item No. 306. The protruding edge of the chine bone shall be removed by a cut along the dorsal edge of the spinal cord groove, which does not score the eye muscle. Tail length shall be as specified by the purchaser.

Item No. 1306A - Rack, Rib Chops, 6 Rib - Rib chops shall be prepared from one-half of Item No. 306A. The protruding edge of the chine bone shall be removed by a cut along the dorsal edge of the spinal cord groove, which does not score the eye muscle. Tail length shall be as specified by the purchaser.

Item No. 1306B - Rack, Rib Chops, Cap Off, 7 Rib - Rib chops shall be prepared from any bone-in, 7-rib rack item that yields product that meets the end-item requirements. The protruding edge of the chine bone shall be removed by a cut along the dorsal edge of the spinal cord groove and does not score the *longissimus dorsi* muscle. The cap (blade bone, related cartilage, and muscles immediately above (*trapezius, infraspinatus, latissimus dorsi*) and immediately below (*rhomboideus, subscapularis*) the blade bone) shall be removed. Tail length shall be as specified by the purchaser.

Item No. 1306C - Rack, Rib Chops, Cap Off, 6 Rib - Rib chops shall be prepared from any bone-in, 6-rib rack item that yields product that meets the end-item requirements. The protruding edge of the chine bone shall be removed by a cut along the dorsal edge of the

spinal cord groove and does not score the eye (*longissimus dorsi*) muscle. The cap (blade bone, and muscles immediately above (*trapezius, infraspinatus, latissimus dorsi*) and below (*rhomboideus, subscapularis*) the blade bone, and related cartilage) shall be removed. Tail length shall be as specified by the purchaser.

Item No. 1306D - Veal Rack, Rib Chops, Frenched, 7 Rib - This item is as described in Item Nos. 306B or 306D except that the tail length shall not exceed 3.0 inches (7.5 cm) from the *longissimus dorsi*. In preparing this item the breast side of the rib bones shall be frenched. Frenching is accomplished by the exclusion of the intercostal meat and the lean and fat over the ribs. When completed, the exposed portions of the rib bone shall not exceed 1.5 inches (3.8 cm) in length. A purchaser may alternatively specify the chop to be frenched immediately ventral to the *longissimus dorsi*.

Item No. 1306E - Rack, Rib Chops, Frenched, 6 Rib - This item is as described in Item Nos. 306C or 306E except that the tail length shall not exceed 3.0 inches (7.5 cm) from the *longissimus dorsi*. In preparing this item the breast side of the rib bones shall be frenched. Frenching is accomplished by the exclusion of the intercostal meat and the lean and fat over the ribs. When completed, the exposed portions of the rib bone shall not exceed 1.5 inches (3.8 cm) in length. A purchaser may alternatively specify the chop to be frenched immediately ventral to the *longissimus dorsi*.

Item No. 1309 - Chuck, Shoulder Arm Chops - Arm chops are prepared from one half of Item No. 309. Arm chops 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.

Item No. 1309A - Chuck, Shoulder Blade Chops - Blade chops are derived from the blade (dorsal) portion of Item No. 309. These chops shall contain a portion of the blade bone and shall be cut approximately parallel to the rib bones.

Item No. 1312 - Osso buco, Foreshank - This item shall be prepared from Item No. 312. The shanks shall be sliced cross-sectionally into widths specified by the purchaser. Slices shall expose at least 75% lean on both sliced surfaces.

Item No. 1332 - Loin Chops - Loin chops shall be prepared from one-half of a single loin, Item No. 332. The flank edge on individual chops shall be removed in accordance with the specified tail length options. Loin chops shall contain no portion of the hip bone or related cartilage.

The purchaser may specify one tail length option. If not specified, tail length will not be more than 3.0 inches (7.5 cm) from the ventral edge of the *longissimus dorsi*.

PSO: 1 - 2 in. (5.0 cm)
 2 - 1 in. (25 mm)
 3 - 0 in. (0 mm)

Item No. 1336 - Cutlets, Boneless - Cutlets shall be prepared from Item No. 336. The shank and heel meat shall be excluded. All fat and surface membranous tissue shall be removed. The muscles may be split length wise and sliced across the grain to obtain the specified size cutlets. If specified by the purchaser, each cutlet shall be cubed twice and

shall retain the original approximate shape of the cut being cubed. Knitting of two or more pieces or folding of the meat is not acceptable.

Item No. 1337 - Osso buco, Hindshank - This item shall be prepared from Item No. 337. The shanks shall be sliced cross-sectionally into widths specified by the purchaser. Slices shall expose at least 75% lean on both sliced surfaces.

Item No. 1338 - Veal Steak, Flaked and Formed, Frozen - The steaks shall be prepared from boneless veal (or calf) that complies with the material requirements of Item No. 396 and shall be flaked and formed (grinding is not permitted). The flaking and forming process shall be in compliance with FSIS Regulations. Product shall comply with fat content requirements of Item No. 396. When specified, the flaked and formed steaks may be cubed (the term "cubed" may be included within the product label). The purchaser shall specify shape and weight of steaks.

Item No. 1338A - Veal Steak, Flaked and Formed, Breaded, Frozen - This item is as described in **Item No. 1338** except that the product shall be breaded. The amount and application of coating and breading materials shall be in accordance with FSIS Regulations. The purchaser shall specify shape and weight of steaks.

Item No. 1338B - Veal Steak, Sliced and Formed, Frozen - The steak shall be prepared from boneless veal that complies with Item No. 339. 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 the product label. The purchaser shall specify weight, shape, and/or thickness of steaks.

Item No. 1349A - Leg, Top Round, Cap Off, Cutlets, Boneless - This item shall be prepared from Item No. 349A. All fat and membranous tissue shall be removed from the muscle surfaces. If specified by the purchaser, each cutlet shall be cubed twice and shall retain the original approximate shape of the cut being cubed. Knitting of two or more pieces or folding of the meat is not acceptable.

Item No. 1396 - Ground Veal (or Calf) Patties - The patties shall be prepared from Item No. 396.

Item No. 1396A - Ground Veal (or Calf) and Vegetable Protein Product Patties - The patties shall be prepared from Item No. 396A.

Item No. 1396B - Veal Patties - The patties shall be prepared from Item No. 396B.

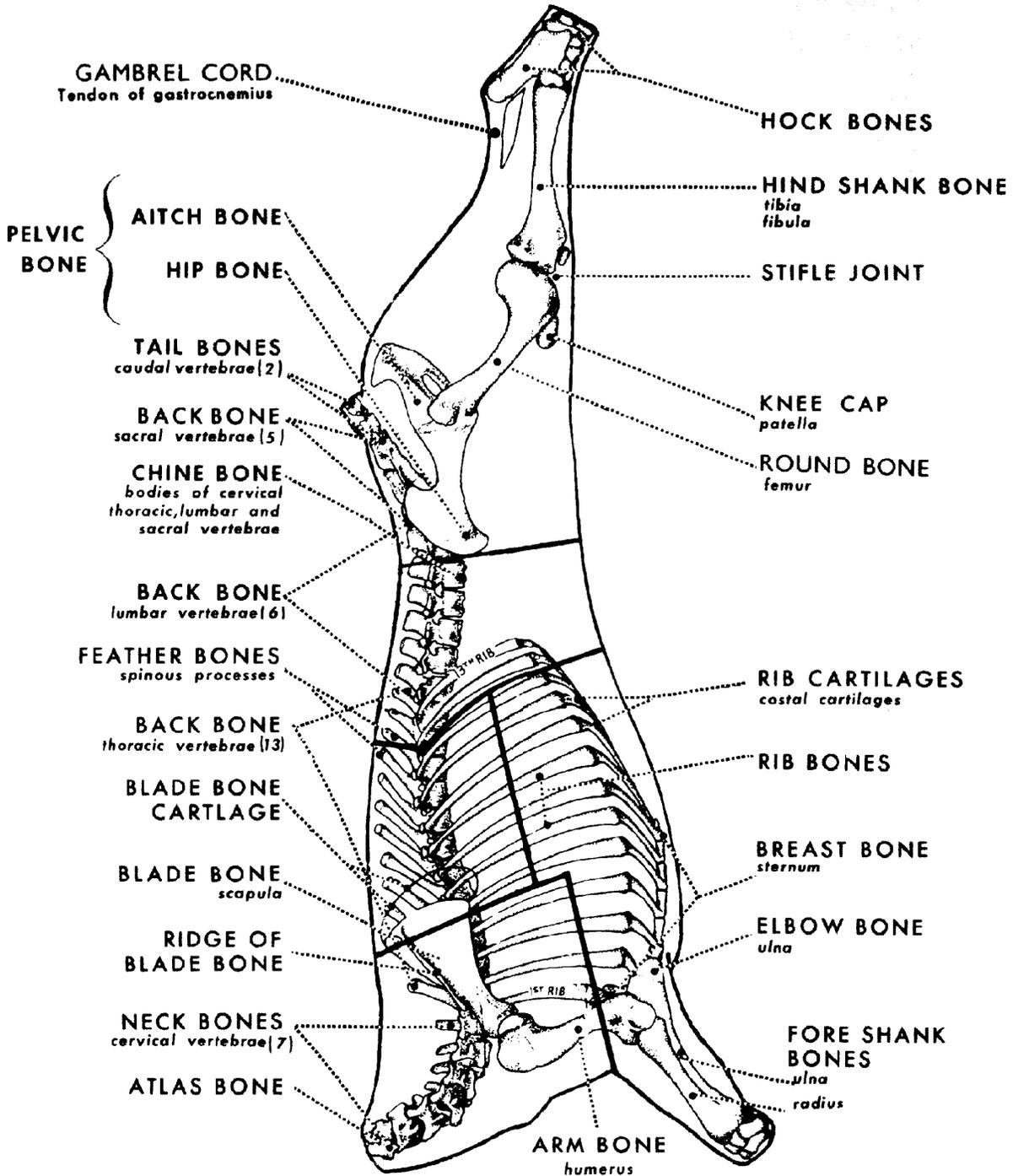
Item No. 1397 - Ground Veal (or Calf) Patties, Special - The patties shall be prepared from Item No. 397.

Item No. 1397A - Ground Veal (or Calf) and Vegetable Protein Product Patties, Special - The patties shall be prepared from Item No. 397A.

IMPS3AOF

VEAL SKELETAL CHART

Location, Structure and Names of Bones



Courtesy of National Livestock and Meat Board

