

USDA Nutrient Data Set for Retail Beef Cuts

Release 1.0

Prepared by
Kristine Y. Patterson, Marybeth L. Duvall, Juliette C. Howe (Ret.)
and Joanne M. Holden
Nutrient Data Laboratory (NDL)
Agricultural Research Service
U.S. Department of Agriculture

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U.S. Department of Agriculture
Agricultural Research Service
Beltsville Human Nutrition Research Center
Nutrient Data Laboratory
10300 Baltimore Avenue
Building 005, Room 107, BARC – West
Beltsville, Maryland 20705
Tel. 301-504-0646,
E-mail: ndlinfo@ars.usda.gov
Web site: <http://www.ars.usda.gov/nutrientdata>

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Purpose

This data set provides retailers with a tool to find the most accurate beef nutrient data for the purpose of on-pack nutrition labeling. This data set focuses on the beef cuts identified by the USDA Food Safety and Inspection Service (FSIS) for nutrition labeling and, in addition, some new Beef Value Cuts.

Introduction

Since 1997, nutrient composition data for beef products in the USDA National Nutrient Database for Standard Reference (SR) have been updated regularly. These updates have been important since changes in animal husbandry practices and industry procedures have led to the availability of leaner cuts, as well as the marketing of cuts not previously available. The USDA Nutrient Data Laboratory (NDL) has been involved in three different studies designed to update or expand the data on beef cuts in SR. These studies were the 1/8 Inch Study, the Beef Value Cuts (BVC) Study, and the Beef Nutrient Database Improvement Study Phase I (NDI Phase 1). In addition to providing current and accurate estimates for the beef data in SR, these new data are also useful for the industry to meet the USDA Food Safety and Inspection Service (FSIS) proposed labeling regulations for fresh, single-ingredient meats.

The 1/8 Inch Study was a collaborative research project conducted by USDA NDL, Texas A&M University, and sponsored by the National Cattleman's Beef Association (NCBA) on behalf of the Beef Checkoff. The objective of this study was to determine the physical characteristics and nutrient composition of 13 raw and cooked retail cuts that had been fabricated with fat trim levels representative of current retail cuts. This provided analytical that had not previously been available in SR.

The purpose of the BVC Study was to provide information on a new line of single muscle roasts and steaks, fabricated from the outside round, the knuckle, and the chuck shoulder clod. These cuts, introduced into the retail market in 2001-2002, include the top blade steak (Infraspinatus), shoulder top and center steaks (Triceps brachii), shoulder tender (Teres major), tip center (Rectus femoris), tip side (Vastus lateralis) and bottom round (Biceps femoris). USDA NDL in collaboration with NCBA on behalf of the Beef Checkoff and the University of Wisconsin conducted this study to determine the nutrient profile of the BVC for inclusion in SR. Since there is no separable fat present in the denuded single muscles of the BVC study, values for "Separable Lean Only" and "Separable Lean and Fat" are the same. Five of these six major cuts met the USDA definition of lean¹.

The NDI Phase I Study addressed all of the retail cuts from the beef chuck that lacked nutrient composition data in SR or where updates to existing SR data entries were needed. The study was conducted by USDA NDL, NCBA on behalf of the Beef Checkoff with collaboration of Colorado State (CSU), Texas A & M (TAMU), and Texas Tech (TTU). These universities were responsible for identifying and obtaining beef chuck primals at multiple packing plants in accordance with the study's sampling matrix, and with the fabrication of these primals into the

¹ The FSIS definition: The term "lean" may be used on the labels of meat or poultry products which possess no more than 10% fat, by weight. (http://www.access.gpo.gov/nara/cfr/waisidx_08/9cfr317_08.html)

required cuts. Only one cut from this study is included in this first version of the USDA Nutrient Data Set for Retail Beef Cuts. This beef cut, referred to as the Denver Cut (*Serratus ventralis*) steak, is an individual denuded muscle similar to the BVC cuts.

These research studies have ensured that the most accurate beef nutrient data currently available are now included in the National Nutrient Database for Standard Reference (SR) and will allow all other nutrient databases that link to the SR to have the most up-to-date nutrient data for use in nutrition research. Release of this dataset, a subset of SR data, will provide accurate nutrient data to vendors and for preparation of on-pack nutrient labels for various beef cuts including those that are most often marketed in the retail case.

Objective of Research

The objective of the research is to develop, update and maintain the food composition values for beef and beef products in the USDA National Nutrient Database for Standard Reference (SR) and to assure that estimates of nutrient data are current and accurate.

Methods And Procedures

Selection of Beef Samples

1/8 Inch Study

Carcasses (n=20) were selected from two packing plants, one in the Texas Panhandle and the other in Nebraska. Ten USDA Choice and ten USDA Select, yield grade 2 and 3, carcasses were selected for the study. These carcasses represented the approximate distribution found in the US beef supply according to the National Quality Beef Audit – 1998 (Boleman, S.L. et al., 1998). All carcasses were shipped to Texas A&M University for fabrication of the following retail cuts: arm roast, bottom round roast, bottom round steak, brisket – flat half, eye of round roast, flank steak, round tip roast, small-end rib steak, tenderloin steak, tri-tip (bottom sirloin butt) roast (boneless and defatted), top loin steak, top round steak, and top sirloin steak. Cuts were assigned randomly to the following external fat trim levels: 0.0 cm (0 inch trim), 0.3 cm (1/8 inch trim), or 0.6 cm (1/4 inch trim). Three of the cuts (flank steak, round tip roast, and tri-tip roast) had no external fat and were assigned to the 0.0 cm group for both preparations, raw and cooked. Dried muscle surfaces, extending chine bones, minor muscles, and muscle pieces were trimmed from all cuts. All cuts were vacuum packed individually, labeled, and frozen at -23°C for further dissection and cooking. Additional details on fabrication have been previously published (Wahrmund-Wyle, J.L. et al., 2000).

BVC Study

Animal products were obtained from an IBP (Tyson) plant near Sioux City, Iowa. This plant draws cattle from a large number of feedlots and has a nationwide product distribution. Twelve carcasses were identified by quality grade (high choice, average choice, and select) with yield grades of 2 or 3. Two carcasses were used for reserves and for training the meat cutting staff. There was sufficient product from 1 knuckle, 1 outside round, and 1 chuck clod to sample, prepare, and analyze five of the cuts. The Teres major is a very small muscle (~8 oz from 1 side) and would not provide a sufficient amount for all analyses. Therefore, one fifteen pound box of choice and one box of select Teres major muscles (yield grade unknown) were purchased from

the same plant. Each muscle was trimmed free of all external fat and heavy connective tissue. The denuded muscles were vacuum packaged and stored at -20°F until steak preparation.

NDI Phase I Study

Beef chuck primals were collected from six production point locations: Tolleson, AZ, Greely, CO, Dodge City, KS, Green Bay, WI, Plainview, TX, Omaha, NE, and Corpus Christi, TX, to ensure national representation of the product. The beef was collected using a statistically designed plan which dictated the carcasses to be obtained based on quality grade, yield grade, gender and genetics, and thereby reflected the availability of each type of carcass to the retail market. A total of 36 sample units were collected, each of which had two carcasses, matched in characteristics, to ensure sufficient product was available. Each of the 36 units was fabricated into 13 cuts using established study protocols.

Cooking Procedures

1/8 Inch Study

Retail cuts to be cooked were thawed overnight in a cooler at 5°C, weighed, and cooked as follows: arm roast, bottom round steak, and brisket were braised; bottom round roast, eye of round roast, round tip roast, and tri-tip roast were roasted; flank steak, small-end rib steak, tenderloin steak, top loin steak, top round steak, and top sirloin steak were broiled. For braising, cuts were browned for 4-8 min (time being size dependent) in a preheated (163°C) Farberware® Dutch Oven placed on top of a conventional range. After browning, the cuts were covered with 90-180ml distilled water, placed in a preheated conventional gas oven at 163°C and simmered in a covered vessel to an internal temperature of 85°C. Cuts for roasting were placed on wire racks with the fat side up, when possible, and cooked in a conventional gas oven (preheated to 163°C) to an internal temperature of 60°C. For broiling, cuts were cooked on electric Farberware® Open-Hearth Broilers (model 350A) to an internal temperature of 65°C. The internal temperatures of each retail cut were monitored by inserting copper constantan thermocouples into the geometric center of the cut; temperatures were recorded on Honeywell recorders. After cooking, cuts were wrapped in plastic wrap and chilled (2-3°C) overnight (Jones, D.K. et al., 1992). Each cut was weighed prior to and after cooking for calculation of cooking yield.

BVC Study

Muscles were cut into 1 inch thick steaks and weighed. Steaks were removed in pairs, one steak for raw analyses, the other to be cooked and analyzed in the cooked state. Steaks were cooked by grilling over a preheated portable gas grill; steaks were turned when the internal temperature reached the midway point between the starting temperature and the final internal temperature (including post-cooking temperature rise) of 70°C (medium degree of doneness). Steaks were placed on a wire rack for 3 min and then weighed to obtain the cooked weight. Raw and cooked steaks were stored at -30°C until preparation for nutrient analyses.

NDI Phase I Study

Currently the only beef cut from the NDI Phase I Study included in this table is the Denver Cut (Serratus ventralis) steak. The beef cut was prepared before cooking with all of the necessary weights and temperatures recorded. A Salton Two-sided electric grill with removable grill plates was used in the study. The grill was pre-heated according to the standard operating procedures and temperatures were recorded. For cooking, the beef samples were evenly spaced in center of cooking grate with proper identification. Each sample was cooked with the grill lid closed and to

an internal temperature of 70°C. Stainless steel tongs or spatulas were used to remove test samples from the grill. The time and internal product temperature were recorded for the samples when removed from heat. The beef samples were allowed to stand while monitoring the internal temperature rise until temperatures began to decline. The point right before the temperature declines (highest temperature reached) was the final internal temperature of the cooked sample. Raw and cooked steaks were stored at -30°C until preparation for nutrient analyses.

Dissection

1/8 Inch Study

All cuts, both raw and cooked, were carefully dissected to separate and weigh the various cut components. These components include separable lean, external fat, seam fat, and waste such as bone and heavy (non-edible) connective tissue. The separable lean includes muscle, intramuscular fat, and connective tissue that would be considered edible. External trim fat is the fat on the outside of the cut. Seam fat refers to intermuscular fat depots within the cut.

BVC Study

Samples required no further dissection after fabrication. Since these cuts are single denuded muscle cuts, there was no refuse such as bone, heavy connective tissue, or external fat to be removed.

NDI Phase I Study

The only cut included in this release of the tables is the Denver Cut (*Serratus ventralis*) steak. Like the cuts in the BVC Study, this is a single denuded muscle with no refuse or external fat to be dissected.

Compositing

1/8 Inch Study

Separable fat from all cuts were pooled to form raw and cooked composites. Both external and seam fat were included in these composites. The frozen dissected separable lean was placed in a Cuisinart® food processor and homogenized for 35s. Sample aliquots were frozen at -10°C until analyses.

BVC Study

Frozen samples, both raw and cooked, were homogenized individually for proximate and cholesterol analysis. These individual samples were composited for other nutrient analyses.

NDI Phase I Study

All beef cuts, both raw and cooked were frozen with liquid nitrogen, homogenized individually and analyzed for proximates at the respective universities. These sample cuts were then shipped to TTU for compositing with the same cuts from the other universities, using a statistically designed plan.

Nutrient Analysis

1/8 Inch Study

Individual samples, cooked and raw, were evaluated for the following food components: separable lean, external trim fat, seam fat, and waste (bone and heavy connective tissue). Cooking yields were also calculated based on initial (raw) and final cooked weights. Proximate

nutrients (moisture, total fat, ash, and protein) were determined on individual samples and composites of the separable fat. Raw and cooked samples of separable fat and the separable lean from the arm roast, bottom round steak, and top loin steak (trimmed to 1/8 inch external fat) were also analyzed for minerals (calcium, magnesium, potassium, manganese, iron, phosphorus, sodium, copper, zinc and selenium) and vitamins (niacin, thiamin, riboflavin, vitamins B6 and B12). Samples from the raw and cooked arm roast and separable fat were analyzed for vitamins A and E, total folate, and pantothenic acid. Raw samples from the arm roast were analyzed for amino acids. Data were released in SR-16 (2003).

BVC Study

Proximate nutrients (moisture, total fat, ash, and protein) and cholesterol were determined on individual muscle samples from the chuck clod, bottom round, and the knuckle, both raw and cooked. Composites of three samples from each of these muscle groups were pooled into composites and analyzed for fatty acids. No vitamins or minerals were determined for samples from the chuck clod or bottom round; NDL imputed these values based on nutrient values from the arm roast and bottom round. Individual samples from the knuckle muscles were also analyzed for minerals (calcium, magnesium, potassium, manganese, iron, phosphorus, sodium, copper, zinc and selenium) and vitamins (niacin, thiamin, riboflavin, vitamins B6 and B12). Samples from the raw and cooked knuckle muscles were also analyzed for Vitamins A and E. Two composites, each derived from three samples, were used in the determination of choline metabolites. A single nationally representative composite composed of two samples was used to prepare total folate for analysis. Cooking yields were also calculated based on initial (raw) and final cooked weights from all samples. These data were disseminated in SR-18 (2006).

NDI Phase I Study

Individual samples have been analyzed for proximates. Data for other nutrients are pending, therefore, the other nutrients for the Denver Cut in this release have been imputed from the Beef, chuck, shoulder clod, top blade, Infraspinatus, steak, select, raw and grilled (NDB# 23043 and 23044) and choice, raw and grilled (NDB# 23041 and 23042).

Nutrient Data Quality Control:

- Quality control samples have been included with each batch of 10-20 samples;
- Laboratories are expected to run their own in-house control materials and to report those results;
- Quality control samples include both materials developed by NDL cooperating laboratories and characterized with concurrent analysis of certified reference materials, as well as certified reference materials themselves;
- Blind duplicates have been randomly included along with the unknown samples;
- Only laboratories that NDL has validated as having the ability to accurately analyze samples for nutrient content have been used.

Details of analytical methods used in these studies are presented in Appendix A.

Table Format

The table heading provides a general descriptive name for the food item, the Uniform Retail Meat Identity Standards (URMIS) number, and the unique Nutrient Databank number identifying

the edible content of the cut, its preparation type, and cooking method: e.g., “lean and fat, raw”, “lean and fat, cooked, roasted” and “lean only, cooked, roasted”. Appendix B provides analytical values for the proximate nutrients of the raw, separable lean component. Column 1 identifies the nutrient. The nutrient value unit is presented in column 2. For raw preparations, nutrient values are expressed on a 100 g basis or a 115 g basis (columns 3-4). The 115 g (4 oz) value represents the amount of raw product needed to yield 85 g (3 oz) of cooked product. For cooked preparations (columns 5-6), data are presented on a 100 g or 85 g basis, which equals a serving of cooked meat. Column 7 provides NDL source codes. A source code of 1 indicates analytical data, source code 4 represents imputed or calculated data, and source code 7 is used when the nutrient content is assumed to be zero.

The beef cuts in this first dataset release are as follows (both choice and select grades are presented for each cut):

- Beef, round, outside round (Biceps femoris), steak, trimmed to 0" fat
- Beef, round, tip round, roast, trimmed to 0" fat
- Beef, loin, top sirloin, steak, trimmed to 1/8" fat
- Beef, loin, tenderloin, steak, trimmed to 1/8" fat
- Beef, flank, steak, trimmed to 0" fat
- Beef, loin, tri-tip, roast, trimmed to 0" fat
- Beef, chuck, shoulder clod, shoulder tender (Teres major), medallion, trimmed to 0" fat
- Beef, chuck, shoulder clod, top blade (Infraspinatus), steak, trimmed to 0" fat
- Beef, chuck, shoulder top and center (Triceps brachii), steak, trimmed to 0" fat
- Beef, chuck, Denver Cut (Serratus ventralis), steak, trimmed to 0" fat

Refer to Appendix C for a list of all other proposed retail beef cuts for mandatory nutrient labeling. All of the cuts are not in this release since revisions to these data are currently in process.

Data Dissemination

The USDA Nutrient Data Set for Beef is presented as a PDF file. Adobe Acrobat Reader® is needed to view the report of the database. A Microsoft® Excel spreadsheet has also been prepared and is available for downloading from this web site (<http://www.ars.usda.gov/nutrientdata>). The user can download the data set, free of charge, onto his/her own computer for use with other programs. The tables in the Excel spreadsheet are in the same format and layout as those in the PDF file.

References

Boleman, S.L., Boleman, W.W., et al., National Beef Quality Audit – 1995: Survey of producer-related defects and carcass quality and quantity attributes. *J Anim Sci*, (1998) 76: 96-103.

Wahrmund-Wyle, J.L., Harris, K.B., Savell, J.W., Beef Retail Cut composition: 1. Separable tissue components. *J Food Comp Anal*, (2000) 13: 233-242.

Jones, D.K., Savell, J.W., Cross, H.R., Effects of fat trim on the composition of beef retail cuts — 3. Cooking yields and fat retention of the separable lean. *J Muscle Foods* (1992) 3: 73-81.

U.S. Department of Agriculture, Food Safety and Inspection Service (FSIS). 2008. Title 9 Code of Federal Regulations Regarding Nutrition Labeling Access federal regulations regarding nutrition labeling citations 317.300 – 317-400. Food Safety and Inspection Service website: http://www.access.gpo.gov/nara/cfr/waisidx_08/9cfr317_08.html. (Accessed 9/22/2009)

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Beef, round, outside round (biceps femoris), steak, trimmed to 0" fat, select

Urmis No: 1462

NDB No: 23051 Lean and Fat, raw; 23052 Lean and Fat, cooked, grilled

Common names: Western Griller

Nutrient Name	Unit	N	Lean and Fat				Lean Only		Source Code ^[1]
			Raw		Cooked (Grilled)		Cooked (Grilled)		
			100g	115g	100g	85g	100g	85g	
Water	g	5	73	84	66	56	66	56	1
Energy	Kcal	0	129	148	166	141	166	141	4
Calories from fat	Kcal	0	34	40	47	40	47	40	4
Protein	g	5	22	25	28	24	28	24	1
Total lipid (fat)	g	5	4	4	5	4	5	4	1
Ash	g	5	1.06	1.21	1.20	1.02	1.20	1.02	1
Carbohydrate, by difference	g	0	0	0	0	0	0	0	7
Fiber, total dietary	g	0	0	0	0	0	0	0	7
Sugars, total	g	0	0	0	0	0	0	0	7
Calcium, Ca	mg	1	5.3	6.1	4.8	4.1	4.8	4.1	1
Iron, Fe	mg	1	2.9	3.3	3.1	2.7	3.1	2.7	1
Sodium, Na	mg	1	62	71	60	51	60	51	1
Vitamin C, total ascorbic acid	mg	0	0	0	0	0	0	0	7
Vitamin A	IU	1	0	0	0	0	0	0	1
Fatty acids, total saturated	g	0	1.4	1.6	1.7	1.5	1.7	1.5	4
Fatty acids, total trans	g	0	0.14	0.16	0.15	0.13	0.15	0.13	4
Cholesterol	mg	4	61	70	75	64	75	64	1
Magnesium, Mg	mg	1	24	28	26	22	26	22	1
Phosphorus, P	mg	1	217	250	237	201	237	201	1
Potassium, K	mg	1	360	414	368	313	368	313	1
Zinc, Zn	mg	1	4.3	5.0	5.7	4.8	5.7	4.8	1
Selenium, Se	mcg	1	30	35	41	35	41	35	1
Thiamin	mg	1	0.09	0.10	0.08	0.07	0.08	0.07	1
Riboflavin	mg	1	0.24	0.28	0.24	0.21	0.24	0.21	1
Niacin	mg	1	6.4	7.3	8.1	6.8	8.1	6.8	1
Pantothenic acid	mg	1	0.77	0.88	0.85	0.72	0.85	0.72	1
Vitamin B ₆	mg	1	0.72	0.83	0.66	0.56	0.66	0.56	1
Vitamin B ₁₂	mcg	1	3.6	4.2	4.4	3.7	4.4	3.7	1

^[1] Source codes: SC =1 – Analytical data, SC= 4 – Imputed data and # of observations set at 0, SC=7 - Assumed zero

Beef, round, outside round (biceps femoris), steak, trimmed to 0" fat, choice

Urmis No: 2277

NDB No: 23049 Lean and Fat, raw; 23050 Lean and Fat, cooked, grilled

Common names: Western Griller

Nutrient Name	Unit	N	Lean and Fat				Lean Only		Source Code ^[1]
			<i>Raw</i>		<i>Cooked (Grilled)</i>		<i>Cooked (Grilled)</i>		
			100g	115g	100g	85g	100g	85g	
Water	g	8	72	82	63	54	63	54	1
Energy	Kcal	0	150	173	191	162	191	162	4
Calories from fat	Kcal	0	59	68	75	64	75	64	4
Protein	g	8	21	24	27	23	27	23	1
Total lipid (fat)	g	8	7	8	8	7	8	7	1
Ash	g	8	1.04	1.19	1.14	0.97	1.14	0.97	1
Carbohydrate, by difference	g	0	0	0	0	0	0	0	7
Fiber, total dietary	g	0	0	0	0	0	0	0	7
Sugars, total	g	0	0	0	0	0	0	0	7
Calcium, Ca	mg	2	4.6	5.3	4.9	4.1	4.9	4.1	1
Iron, Fe	mg	2	2.3	2.7	2.9	2.5	2.9	2.5	1
Sodium, Na	mg	2	63	72	57	48	57	48	1
Vitamin C, total ascorbic acid	mg	0	0	0	0	0	0	0	7
Vitamin A	IU	2	0	0	0	0	0	0	1
Fatty acids, total saturated	g	0	2.3	2.6	3.0	2.5	3.0	2.5	4
Fatty acids, total trans	g	0	0.19	0.21	0.24	0.20	0.24	0.20	4
Cholesterol	mg	6	61	70	78	67	78	67	1
Magnesium, Mg	mg	2	24	28	25	22	25	22	1
Phosphorus, P	mg	2	209	240	232	197	232	197	1
Potassium, K	mg	2	338	388	361	306	361	306	1
Zinc, Zn	mg	2	3.8	4.3	4.8	4.1	4.8	4.1	1
Selenium, Se	mcg	2	33	38	45	38	45	38	1
Thiamin	mg	2	0.06	0.07	0.06	0.05	0.06	0.05	1
Riboflavin	mg	2	0.19	0.21	0.20	0.17	0.20	0.17	1
Niacin	mg	2	6.4	7.3	7.3	6.2	7.3	6.2	1
Pantothenic acid	mg	2	0.65	0.75	0.76	0.65	0.76	0.65	1
Vitamin B ₆	mg	2	0.72	0.83	0.68	0.58	0.68	0.58	1
Vitamin B ₁₂	mcg	2	4.7	5.4	3.8	3.3	3.8	3.3	1

^[1] Source codes: SC =1 – Analytical data, SC= 4 – Imputed data and # of observations set at 0, SC=7 - Assumed zero

Beef, round, tip round, roast, trimmed to 0" fat, select

Urmis No: 1525

NDB No: 13488 Lean and Fat, raw; 13423 Lean and Fat, cooked, roasted; 13426 Lean Only, cooked, roasted

Common names:

Nutrient Name	Unit	N	Lean and Fat				Lean Only		Source Code ^[1]
			<i>Raw</i>		<i>Cooked (Roasted)</i>		<i>Cooked (Roasted)</i>		
			100g	115g	100g	85g	100g	85g	
Water	g	10	73	84	66	56	68	58	1
Energy	Kcal	0	145	167	181	154	149	127	4
Calories from fat	Kcal	0	57	65	68	58	39	33	4
Protein	g	10	21	24	27	23	27	23	1
Total lipid (fat)	g	10	6	7	8	6	4	4	1
Ash	g	10	1.01	1.16	1.12	0.95	1.16	0.99	1
Carbohydrate, by difference	g	0	0	0	0	0	0	0	7
Fiber, total dietary	g	0	0	0	0	0	0	0	7
Sugars, total	g	0	0	0	0	0	0	0	7
Calcium, Ca	mg	0	22.9	26.3	6.8	5.8	5.9	5.0	4
Iron, Fe	mg	0	1.6	1.8	2.2	1.8	2.3	1.9	4
Sodium, Na	mg	0	58	67	35	30	36	31	4
Vitamin C, total ascorbic acid	mg	0	0	0	0	0	0	0	7
Vitamin A	IU	1	0	0	0	0	0	0	1
Fatty acids, total saturated	g	0	2.5	2.9	2.8	2.4	1.6	1.3	4
Cholesterol	mg	0	31	36	86	73	62	53	4
Magnesium, Mg	mg	0	22	25	18	15	18	16	4
Phosphorus, P	mg	0	196	225	169	144	177	150	4
Potassium, K	mg	0	327	376	218	186	230	195	4
Zinc, Zn	mg	0	3.8	4.3	4.5	3.9	4.8	4.0	4
Selenium, Se	mcg	0	24	28	26	23	34	29	4
Thiamin	mg	0	0.09	0.1	0.07	0.06	0.07	0.06	4
Riboflavin	mg	0	0.11	0.13	0.13	0.11	0.15	0.13	4
Niacin	mg	0	6.1	7.0	4.5	3.8	4.7	4.0	4
Pantothenic acid	mg	0	0.59	0.68	0.52	0.44	0.68	0.58	4
Vitamin B ₆	mg	0	0.62	0.71	0.35	0.3	0.36	0.31	4
Vitamin B ₁₂	mcg	0	1.2	1.4	1.4	1.2	1.4	1.2	4

^[1] Source codes: SC =1 – Analytical data, SC= 4 – Imputed data and # of observations set at 0, SC=7 - Assumed zero

Beef, round, tip round, roast, trimmed to 0" fat, choice

Urmis No: 2340

NDB No: 13487 Lean and Fat, raw; 13422 Lean and Fat, cooked, roasted; 13425 Lean Only, cooked, roasted

Common names:

Nutrient Name	Unit	N	Lean and Fat				Lean Only		Source Code ^[1]
			Raw		Cooked (Roasted)		Cooked (Roasted)		
			100g	115g	100g	85g	100g	85g	
Water	g	10	71	82	64	54	66	56	1
Energy	Kcal	0	156	179	196	166	176	150	4
Calories from fat	Kcal	0	70	80	80	68	58	49	4
Protein	g	10	20	23	27	23	28	24	1
Total lipid (fat)	g	10	8	9	9	8	6	5	1
Ash	g	10	0.99	1.14	1.10	0.94	1.12	0.95	1
Carbohydrate, by difference	g	0	0	0	0	0	0	0	7
Fiber, total dietary	g	0	0	0	0	0	0	0	7
Sugars, total	g	0	0	0	0	0	0	0	7
Calcium, Ca	mg	0	15.1	17.4	5.8	5.0	5.7	4.9	4
Iron, Fe	mg	0	1.8	2.1	2.2	1.9	2.4	2.1	4
Sodium, Na	mg	0	51	59	35	30	36	31	4
Vitamin C, total ascorbic acid	mg	0	0	0	0	0	0	0	7
Vitamin A	IU	1	0	0	0	0	0	0	1
Fatty acids, total saturated	g	0	3.1	3.5	3.3	2.8	2.3	2.0	4
Cholesterol	mg	0	38	44	101	86	91	77	4
Magnesium, Mg	mg	0	21	25	17	15	19	16	4
Phosphorus, P	mg	0	191	220	164	139	174	148	4
Potassium, K	mg	0	309	356	216	184	225	191	4
Zinc, Zn	mg	0	3.7	4.2	4.4	3.8	4.8	4.1	4
Selenium, Se	mcg	0	24	28	28	24	31	27	4
Thiamin	mg	0	0.08	0.09	0.06	0.05	0.06	0.05	4
Riboflavin	mg	0	0.14	0.16	0.15	0.13	0.17	0.14	4
Niacin	mg	0	6.1	7.1	4.9	4.2	5.3	4.5	4
Pantothenic acid	mg	0	0.59	0.68	0.53	0.45	0.54	0.46	4
Vitamin B ₆	mg	0	0.6	0.69	0.36	0.31	0.39	0.33	4
Vitamin B ₁₂	mcg	0	1.7	2.0	1.6	1.4	1.6	1.4	4

^[1] Source codes: SC =1 – Analytical data, SC= 4 – Imputed data and # of observations set at 0, SC=7 - Assumed zero

Beef, loin, top sirloin, steak, trimmed to 1/8" fat, select

Urmis No: 1422

NDB No: 13934 Lean and Fat, raw; 13935 Lean and Fat, cooked, broiled; 23588 Lean Only, cooked, broiled

Common names:

Nutrient Name	Unit	N	Lean and Fat				Lean Only		Source Code ^[1]
			Raw		Cooked (Broiled)		Cooked (Broiled)		
			100g	115g	100g	85g	100g	85g	
Water	g	10	67	77	60	51	65	56	1
Energy	Kcal	0	189	217	230	196	170	145	4
Calories from fat	Kcal	0	100	115	114	97	45	38	4
Protein	g	10	21	24	27	23	29	25	1
Total lipid (fat)	g	10	11	13	13	11	5	4	1
Ash	g	10	1.08	1.24	1.11	0.94	1.20	1.02	1
Carbohydrate, by difference	g	0	0	0	0	0	0	0	7
Fiber, total dietary	g	0	0	0	0	0	0	0	7
Sugars, total	g	0	0	0	0	0	0	0	7
Calcium, Ca	mg	0	23.6	27.2	21.9	18.6	21.1	18.0	4
Iron, Fe	mg	0	1.5	1.7	1.7	1.4	1.8	1.5	4
Sodium, Na	mg	0	53	61	57	49	62	53	4
Vitamin C, total ascorbic acid	mg	0	0	0	0	0	0	0	7
Vitamin A	IU	1	0	0	0	0	0	0	1
Fatty acids, total saturated	g	0	4.5	5.2	5.0	4.3	1.9	1.6	4
Cholesterol	mg	0	41	47	67	57	46	39	4
Magnesium, Mg	mg	0	21	25	23	20	25	22	4
Phosphorus, P	mg	0	194	223	217	184	238	203	4
Potassium, K	mg	0	321	369	345	294	386	328	4
Zinc, Zn	mg	0	3.5	4.1	4.9	4.2	5.4	4.6	4
Selenium, Se	mcg	0	24	28	29	25	37	31	4
Thiamin	mg	0	0.07	0.08	0.08	0.07	0.08	0.07	4
Riboflavin	mg	0	0.11	0.13	0.14	0.12	0.16	0.14	4
Niacin	mg	0	5.5	6.4	7.1	6.0	8.6	7.3	4
Pantothenic acid	mg	0	0.59	0.68	0.54	0.46	0.58	0.49	4
Vitamin B ₆	mg	0	0.57	0.66	0.59	0.5	0.65	0.55	4
Vitamin B ₁₂	mcg	0	1.0	1.1	1.4	1.2	1.4	1.2	4

^[1] Source codes: SC =1 – Analytical data, SC= 4 – Imputed data and # of observations set at 0, SC=7 - Assumed zero

Beef, loin, top sirloin, steak, trimmed to 1/8" fat, choice

Urmis No: 2237

NDB No: 13931 Lean and Fat, raw; 13932 Lean and Fat, cooked, broiled; 23629 Lean Only, cooked, broiled

Common names:

Nutrient Name	Unit	N	Lean and Fat				Lean Only		Source Code ^[1]
			Raw		Cooked (Broiled)		Cooked (Broiled)		
			100g	115g	100g	85g	100g	85g	
Water	g	10	65	75	57	48	63	54	1
Energy	Kcal	0	214	246	257	218	187	159	4
Calories from fat	Kcal	0	129	148	142	121	60	51	4
Protein	g	10	20	23	27	23	30	25	1
Total lipid (fat)	g	10	14	16	16	13	7	6	1
Ash	g	10	0.97	1.12	1.10	0.94	1.20	1.02	1
Carbohydrate, by difference	g	0	0	0	0	0	0	0	7
Fiber, total dietary	g	0	0	0	0	0	0	0	7
Sugars, total	g	0	0	0	0	0	0	0	7
Calcium, Ca	mg	0	25.2	28.9	17.7	15.0	16.6	14.1	4
Iron, Fe	mg	0	1.5	1.7	1.8	1.5	2.0	1.7	4
Sodium, Na	mg	0	51	58	54	46	61	52	4
Vitamin C, total ascorbic acid	mg	0	0	0	0	0	0	0	7
Vitamin A	IU	1	0	0	0	0	0	0	1
Fatty acids, total saturated	g	0	5.8	6.6	6.2	5.3	2.6	2.2	4
Cholesterol	mg	0	52	60	83	70	63	53	4
Magnesium, Mg	mg	0	20	23	22	18	25	21	4
Phosphorus, P	mg	0	181	208	201	171	231	196	4
Potassium, K	mg	0	309	356	327	278	369	314	4
Zinc, Zn	mg	0	3.6	4.1	4.8	4.1	5.6	4.7	4
Selenium, Se	mcg	0	22	25	29	25	34	29	4
Thiamin	mg	0	0.05	0.06	0.07	0.06	0.07	0.06	4
Riboflavin	mg	0	0.08	0.09	0.12	0.10	0.14	0.12	4
Niacin	mg	0	6.4	7.4	7.3	6.2	7.8	6.6	4
Pantothenic acid	mg	0	0.58	0.67	0.53	0.45	0.52	0.44	4
Vitamin B ₆	mg	0	0.54	0.62	0.53	0.45	0.55	0.47	4
Vitamin B ₁₂	mcg	0	1.1	1.3	1.8	1.5	1.6	1.4	4

^[1] Source codes: SC =1 – Analytical data, SC= 4 – Imputed data and # of observations set at 0, SC=7 - Assumed zero

Beef, loin, tenderloin, steak, trimmed to 1/8" fat, select

Urmis No: 1386

NDB No: 13923 Lean Only, raw; 13924 Lean and Fat, cooked, broiled; 23587 Lean Only, cooked, broiled

Common names: Beef Medallions, Filet Mignon

Nutrient Name	Unit	N	Lean and Fat				Lean Only		Source Code ^[1]
			<i>Raw</i>		<i>Cooked (Broiled)</i>		<i>Cooked (Broiled)</i>		
			100g	115g	100g	85g	100g	85g	
Water	g	10	61	71	57	48	63	53	1
Energy	Kcal	0	249	287	262	223	194	165	4
Calories from fat	Kcal	0	166	191	149	126	70	59	4
Protein	g	10	19	22	26	23	29	25	1
Total lipid (fat)	g	10	18	21	17	14	8	7	1
Ash	g	10	0.90	1.04	1.09	0.93	1.20	1.02	1
Carbohydrate, by difference	g	0	0	0	0	0	0	0	7
Fiber, total dietary	g	0	0	0	0	0	0	0	7
Sugars, total	g	0	0	0	0	0	0	0	7
Calcium, Ca	mg	0	22.2	25.5	21.6	18.3	21.1	18.0	4
Iron, Fe	mg	0	1.4	1.6	1.6	1.4	1.8	1.5	4
Sodium, Na	mg	0	50	57	57	48	62	53	4
Vitamin C, total ascorbic acid	mg	0	0	0	0	0	0	0	7
Vitamin A	IU	1	0	0	0	0	0	0	1
Fatty acids, total saturated	g	0	7.5	8.6	6.5	5.5	3.0	2.5	4
Cholesterol	mg	0	68	78	87	74	73	62	4
Magnesium, Mg	mg	0	20	23	23	19	25	22	4
Phosphorus, P	mg	0	182	209	214	182	238	203	4
Potassium, K	mg	0	300	346	340	289	386	328	4
Zinc, Zn	mg	0	3.3	3.8	4.9	4.1	5.4	4.6	4
Selenium, Se	mcg	0	23	26	29	25	37	31	4
Thiamin	mg	0	0.07	0.08	0.08	0.07	0.08	0.07	4
Riboflavin	mg	0	0.11	0.13	0.14	0.12	0.15	0.13	4
Niacin	mg	0	5.2	6.0	6.9	5.9	8.5	7.2	4
Pantothenic acid	mg	0	0.55	0.63	0.52	0.44	0.57	0.48	4
Vitamin B ₆	mg	0	0.54	0.62	0.58	0.49	0.64	0.54	4
Vitamin B ₁₂	mcg	0	0.9	1.1	1.4	1.2	1.4	1.2	4

^[1] Source codes: SC =1 – Analytical data, SC= 4 – Imputed data and # of observations set at 0, SC=7 - Assumed zero

Beef, loin, tenderloin, steak, trimmed to 1/8" fat, choice

Urmis No: 2201

NDB No: 13920 Lean Only, raw; 13921 Lean and Fat, cooked, broiled; 23628 Lean Only, cooked, broiled

Common names: Beef Medallions, Filet Mignon

Nutrient Name	Unit	N	Lean and Fat				Lean Only		Source Code ^[1]
			Raw		Cooked (Broiled)		Cooked (Broiled)		
			100g	115g	100g	85g	100g	85g	
Water	g	11	62	71	56	47	62	52	1
Energy	Kcal	0	246	283	273	232	206	175	4
Calories from fat	Kcal	0	161	185	160	136	82	70	4
Protein	g	11	20	23	26	22	29	25	1
Total lipid (fat)	g	11	18	21	18	15	9	8	1
Ash	g	11	0.94	1.08	1.01	0.86	1.10	0.94	1
Carbohydrate, by difference	g	0	0	0	0	0	0	0	7
Fiber, total dietary	g	0	0	0	0	0	0	0	7
Sugars, total	g	0	0	0	0	0	0	0	7
Calcium, Ca	mg	0	24.7	28.4	17.2	14.6	16.0	13.6	4
Iron, Fe	mg	0	1.4	1.6	1.8	1.5	2.0	1.7	4
Sodium, Na	mg	0	50	57	52	44	59	51	4
Vitamin C, total ascorbic acid	mg	0	0	0	0	0	0	0	7
Vitamin A	IU	1	0	0	0	0	0	0	1
Fatty acids, total saturated	g	0	7.2	8.3	7.0	6.0	3.5	3.0	4
Cholesterol	mg	0	65	75	93	79	85	72	4
Magnesium, Mg	mg	0	20	23	21	18	24	21	4
Phosphorus, P	mg	0	177	204	196	166	223	190	4
Potassium, K	mg	0	303	348	318	270	358	304	4
Zinc, Zn	mg	0	3.5	4.0	4.7	4.0	5.4	4.6	4
Selenium, Se	mcg	0	21	25	28	24	33	28	4
Thiamin	mg	0	0.05	0.06	0.07	0.06	0.08	0.07	4
Riboflavin	mg	0	0.08	0.09	0.12	0.1	0.15	0.13	4
Niacin	mg	0	6.4	7.4	7.2	6.1	8.6	7.3	4
Pantothenic acid	mg	0	0.58	0.67	0.52	0.44	0.57	0.48	4
Vitamin B ₆	mg	0	0.53	0.61	0.53	0.45	0.6	0.51	4
Vitamin B ₁₂	mcg	0	1.1	1.3	1.7	1.5	1.8	1.5	4

^[1] Source codes: SC = 1 – Analytical data, SC= 4 – Imputed data and # of observations set at 0, SC=7 - Assumed zero

Beef, flank, steak, trimmed to 0" fat, select

Urmis No: 1584

NDB No: 13971 Lean and Fat, raw; 13949 Lean and Fat, cooked, broiled; 23655 Lean Only, cooked, broiled

Common names:

Nutrient Name	Unit	N	Lean and Fat				Lean Only		Source Code ^[1]
			<i>Raw</i>		<i>Cooked (Broiled)</i>		<i>Cooked (Broiled)</i>		
			100g	115g	100g	85g	100g	85g	
Water	g	10	72	83	65	55	66	56	1
Energy	Kcal	0	145	167	183	156	178	151	4
Calories from fat	Kcal	0	54	63	64	55	58	50	4
Protein	g	10	21	24	28	24	28	24	1
Total lipid (fat)	g	10	6	7	7	6	6	6	1
Ash	g	10	0.98	1.13	1.13	0.96	1.13	0.96	1
Carbohydrate, by difference	g	0	0	0	0	0	0	0	7
Fiber, total dietary	g	0	0	0	0	0	0	0	7
Sugars, total	g	0	0	0	0	0	0	0	7
Calcium, Ca	mg	0	24.1	27.7	22.3	18.9	20.0	17.0	4
Iron, Fe	mg	0	1.5	1.8	1.7	1.4	1.7	1.5	4
Sodium, Na	mg	0	54	62	58	50	59	50	4
Vitamin C, total ascorbic acid	mg	0	0	0	0	0	0	0	7
Vitamin A	IU	1	0	0	0	0	0	0	1
Fatty acids, total saturated	g	0	2.5	2.9	3.0	2.5	2.7	2.3	4
Cholesterol	mg	0	30	34	39	33	43	36	4
Magnesium, Mg	mg	0	22	25	24	20	24	20	4
Phosphorus, P	mg	0	197	227	220	187	226	192	4
Potassium, K	mg	0	326	375	351	299	365	311	4
Zinc, Zn	mg	0	3.6	4.1	5.0	4.3	5.1	4.3	4
Selenium, Se	mcg	0	25	28	30	25	35	30	4
Thiamin	mg	0	0.08	0.09	0.08	0.07	0.08	0.07	4
Riboflavin	mg	0	0.12	0.13	0.15	0.12	0.15	0.13	4
Niacin	mg	0	5.7	6.5	7.3	6.2	8.2	6.9	4
Pantothenic acid	mg	0	0.60	0.69	0.55	0.47	0.55	0.47	4
Vitamin B ₆	mg	0	0.59	0.67	0.61	0.52	0.62	0.53	4
Vitamin B ₁₂	mcg	0	1.0	1.2	1.4	1.2	1.3	1.1	4

^[1] Source codes: SC =1 – Analytical data, SC= 4 – Imputed data and # of observations set at 0, SC=7 - Assumed zero

Beef, flank, steak, trimmed to 0" fat, choice

Urmis No: 2399

NDB No: 13065 Lean and Fat, raw; 13067 Lean and Fat, cooked, broiled; 13070 Lean Only, cooked, broiled

Common names:

Nutrient Name	Unit	N	Lean and Fat				Lean Only		Source Code ^[1]
			Raw		Cooked (Broiled)		Cooked (Broiled)		
			100g	115g	100g	85g	100g	85g	
Water	g	10	69	80	63	54	64	54	1
Energy	Kcal	0	165	190	202	171	194	165	4
Calories from fat	Kcal	0	75	86	84	71	75	64	4
Protein	g	10	21	24	28	23	28	24	1
Total lipid (fat)	g	10	8	10	9	8	8	7	1
Ash	g	10	1.02	1.17	1.06	0.90	1.07	0.91	1
Carbohydrate, by difference	g	0	0	0	0	0	0	0	7
Fiber, total dietary	g	0	0	0	0	0	0	0	7
Sugars, total	g	0	0	0	0	0	0	0	7
Calcium, Ca	mg	0	26.8	30.9	17.6	15.0	15.2	12.9	4
Iron, Fe	mg	0	1.6	1.8	1.8	1.5	1.8	1.6	4
Sodium, Na	mg	0	54	62	53	45	56	48	4
Vitamin C, total ascorbic acid	mg	0	0	0	0	0	0	0	7
Vitamin A	IU	1	0	0	0	0	0	0	1
Fatty acids, total saturated	g	0	3.4	4.0	3.8	3.3	3.5	2.9	4
Cholesterol	mg	0	41	47	51	43	55	47	4
Magnesium, Mg	mg	0	22	25	22	18	23	20	4
Phosphorus, P	mg	0	193	222	201	170	211	179	4
Potassium, K	mg	0	330	379	326	277	338	287	4
Zinc, Zn	mg	0	3.8	4.4	4.8	4.1	5.1	4.3	4
Selenium, Se	mcg	0	23	27	29	25	31	27	4
Thiamin	mg	0	0.06	0.06	0.07	0.06	0.07	0.06	4
Riboflavin	mg	0	0.09	0.10	0.12	0.10	0.14	0.12	4
Niacin	mg	0	6.8	7.9	7.5	6.4	8.2	7.0	4
Pantothenic acid	mg	0	0.62	0.71	0.54	0.46	0.55	0.46	4
Vitamin B ₆	mg	0	0.57	0.66	0.55	0.47	0.58	0.49	4
Vitamin B ₁₂	mcg	0	1.2	1.4	1.8	1.5	1.7	1.5	4

^[1] Source codes: SC =1 – Analytical data, SC= 4 – Imputed data and # of observations set at 0, SC=7 - Assumed zero

Beef, loin, tri-tip, roast, trimmed to 0" fat, select

Urmis No: 1429

NDB No: 13958 Lean and Fat, raw; 13957 Lean and Fat, cooked, roasted; 23649 Lean Only, cooked, roasted

Common names:

Nutrient Name	Unit	N	Lean and Fat				Lean Only		Source Code ^[1]
			Raw		Cooked (Roasted)		Cooked (Roasted)		
			100g	115g	100g	85g	100g	85g	
Water	g	10	71	81	63	54	66	56	1
Energy	Kcal	0	157	181	201	171	179	152	4
Calories from fat	Kcal	0	69	79	88	75	63	53	4
Protein	g	10	21	24	26	22	27	23	1
Total lipid (fat)	g	10	8	9	10	8	7	6	1
Ash	g	10	1.06	1.22	1.06	0.9	1.09	0.93	1
Carbohydrate, by difference	g	0	0	0	0	0	0	0	7
Fiber, total dietary	g	0	0	0	0	0	0	0	7
Sugars, total	g	0	0	0	0	0	0	0	7
Calcium, Ca	mg	0	23.7	27.2	21.4	18.2	19.6	16.7	4
Iron, Fe	mg	0	1.5	1.7	1.6	1.4	1.7	1.4	4
Sodium, Na	mg	0	53	61	56	48	58	49	4
Vitamin C, total ascorbic acid	mg	0	0	0	0	0	0	0	7
Vitamin A	IU	1	0	0	0	0	0	0	1
Fatty acids, total saturated	g	0	2.8	3.2	3.6	3.1	2.5	2.1	4
Cholesterol	mg	0	58	67	74	63	59	50	4
Magnesium, Mg	mg	0	21	25	23	19	24	20	4
Phosphorus, P	mg	0	194	223	212	180	222	188	4
Potassium, K	mg	0	321	369	338	287	359	305	4
Zinc, Zn	mg	0	3.5	4.1	4.8	4.1	5.0	4.3	4
Selenium, Se	mcg	0	24	28	29	24	34	29	4
Thiamin	mg	0	0.07	0.08	0.08	0.07	0.08	0.07	4
Riboflavin	mg	0	0.11	0.13	0.14	0.12	0.14	0.12	4
Niacin	mg	0	5.5	6.4	6.9	5.9	7.9	6.8	4
Pantothenic acid	mg	0	0.59	0.68	0.52	0.44	0.54	0.46	4
Vitamin B ₆	mg	0	0.57	0.66	0.58	0.49	0.6	0.51	4
Vitamin B ₁₂	mcg	0	1.0	1.1	1.4	1.2	1.3	1.1	4

^[1] Source codes: SC =1 – Analytical data, SC= 4 – Imputed data and # of observations set at 0, SC=7 - Assumed zero

Beef, loin, tri-tip, roast, trimmed to 0" fat, choice

Urmis No: 2244

NDB No: 13956 Lean and Fat, raw; 13955 Lean and Fat, cooked, roasted; 23647 Lean Only, cooked, roasted

Common names:

Nutrient Name	Unit	N	Lean and Fat				Lean Only		Source Code ^[1]
			Raw		Cooked (Roasted)		Cooked (Roasted)		
			100g	115g	100g	85g	100g	85g	
Water	g	9	69	80	62	53	64	54	1
Energy	Kcal	0	174	200	221	188	193	164	4
Calories from fat	Kcal	0	86	98	111	95	88	74	4
Protein	g	9	21	24	26	22	26	22	1
Total lipid (fat)	g	9	10	11	12	11	10	8	1
Ash	g	9	1.00	1.15	1.03	0.88	1.06	0.90	1
Carbohydrate, by difference	g	0	0	0	0	0	0	0	7
Fiber, total dietary	g	0	0	0	0	0	0	0	7
Sugars, total	g	0	0	0	0	0	0	0	7
Calcium, Ca	mg	0	25.5	29.3	16.6	14.1	14.5	12.3	4
Iron, Fe	mg	0	1.5	1.7	1.7	1.4	1.8	1.5	4
Sodium, Na	mg	0	51	59	50	43	54	46	4
Vitamin C, total ascorbic acid	mg	0	0	0	0	0	0	0	7
Vitamin A	IU	1	0	0	0	0	0	0	1
Fatty acids, total saturated	g	0	3.5	4.0	4.5	3.9	3.5	3.0	4
Cholesterol	mg	0	72	83	94	80	83	71	4
Magnesium, Mg	mg	0	21	24	20	17	22	19	4
Phosphorus, P	mg	0	183	211	189	161	202	172	4
Potassium, K	mg	0	313	360	308	261	324	275	4
Zinc, Zn	mg	0	3.6	4.2	4.5	3.8	4.9	4.2	4
Selenium, Se	mcg	0	22	25	27	23	30	25	4
Thiamin	mg	0	0.05	0.06	0.06	0.05	0.07	0.06	4
Riboflavin	mg	0	0.09	0.10	0.11	0.10	0.13	0.11	4
Niacin	mg	0	6.7	7.7	7.0	5.9	7.8	6.6	4
Pantothenic acid	mg	0	0.60	0.69	0.51	0.43	0.52	0.44	4
Vitamin B ₆	mg	0	0.56	0.64	0.51	0.43	0.55	0.47	4
Vitamin B ₁₂	mcg	0	1.1	1.3	1.7	1.4	1.6	1.4	4

^[1] Source codes: SC =1 – Analytical data, SC= 4 – Imputed data and # of observations set at 0, SC=7 - Assumed zero

Beef, chuck, shoulder clod, shoulder tender (teres major), medallion, trimmed to 0" fat, select

Urmis No: 1030

NDB No: 23036 Lean and Fat, raw; 23065 Lean and Fat, cooked, grilled

Common names: Tender Medallions

Nutrient Name	Unit	N	Lean and Fat				Lean Only		Source Code ^[1]
			Raw		Cooked (Grilled)		Cooked (Grilled)		
			100g	115g	100g	85g	100g	85g	
Water	g	5	73	84	66	56	66	56	1
Energy	Kcal	0	142	163	172	146	172	146	4
Calories from fat	Kcal	0	52	60	58	49	58	49	4
Protein	g	5	21	24	26	22	26	22	1
Total lipid (fat)	g	5	6	7	6	5	6	5	1
Ash	g	5	0.90	1.03	1.00	0.85	1.00	0.85	1
Carbohydrate, by difference	g	0	0	0	0	0	0	0	7
Fiber, total dietary	g	0	0	0	0	0	0	0	7
Sugars, total	g	0	0	0	0	0	0	0	7
Calcium, Ca	mg	1	5.0	5.7	4.8	4.1	4.8	4.1	1
Iron, Fe	mg	1	2.4	2.7	2.6	2.2	2.6	2.2	1
Sodium, Na	mg	1	60	69	58	49	58	49	1
Vitamin C, total ascorbic acid	mg	0	0	0	0	0	0	0	7
Vitamin A	IU	1	0	0	0	0	0	0	1
Fatty acids, total saturated	g	0	2.0	2.3	1.7	1.4	1.7	1.4	4
Fatty acids, total trans	g	0	0.21	0.24	0.18	0.15	0.18	0.15	4
Cholesterol	mg	4	58	67	80	68	80	68	1
Magnesium, Mg	mg	1	25	28	24	21	24	21	1
Phosphorus, P	mg	1	219	252	223	190	223	190	1
Potassium, K	mg	1	366	421	348	296	348	296	1
Zinc, Zn	mg	1	4.4	5.0	5.2	4.4	5.2	4.4	1
Selenium, Se	mcg	1	32	37	38	33	38	33	1
Thiamin	mg	1	0.09	0.10	0.07	0.06	0.07	0.06	1
Riboflavin	mg	1	0.27	0.31	0.35	0.30	0.35	0.30	1
Niacin	mg	1	5.6	6.4	5.5	4.7	5.5	4.7	1
Pantothenic acid	mg	1	0.92	1.06	0.85	0.72	0.85	0.72	1
Vitamin B ₆	mg	1	0.52	0.60	0.62	0.52	0.62	0.52	1
Vitamin B ₁₂	mcg	1	5.1	5.9	6.0	5.1	6.0	5.1	1

^[1] Source codes: SC =1 – Analytical data, SC= 4 – Imputed data and # of observations set at 0, SC=7 - Assumed zero

Beef, chuck, shoulder clod, shoulder tender (teres major), medallion, trimmed to 0" fat, choice

Urmis No: 1845

NDB No: 23034 Lean and Fat, raw; 23035 Lean and Fat, cooked, grilled

Common names: Tender Medallions

Nutrient Name	Unit	N	Lean and Fat				Lean Only		Source Code ^[1]
			<i>Raw</i>		<i>Cooked (Grilled)</i>		<i>Cooked (Grilled)</i>		
			100g	115g	100g	85g	100g	85g	
Water	g	8	73	84	66	56	66	56	1
Energy	Kcal	0	145	167	181	154	181	154	4
Calories from fat	Kcal	0	57	66	69	59	69	59	4
Protein	g	8	21	24	26	22	26	22	1
Total lipid (fat)	g	8	6	7	8	7	8	7	1
Ash	g	8	0.91	1.05	1.03	0.88	1.03	0.88	1
Carbohydrate, by difference	g	0	0	0	0	0	0	0	7
Fiber, total dietary	g	0	0	0	0	0	0	0	7
Sugars, total	g	0	0	0	0	0	0	0	7
Calcium, Ca	mg	2	4.7	5.4	5.3	4.5	5.3	4.5	1
Iron, Fe	mg	2	2.0	2.3	2.6	2.2	2.6	2.2	1
Sodium, Na	mg	2	59	68	60	51	60	51	1
Vitamin C, total ascorbic acid	mg	0	0	0	0	0	0	0	7
Vitamin A	IU	2	0	0	0	0	0	0	1
Fatty acids, total saturated	g	0	2.3	2.7	2.7	2.3	2.7	2.3	4
Fatty acids, total trans	g	0	0.22	0.25	0.25	0.21	0.25	0.21	4
Cholesterol	mg	6	56	65	76	65	76	65	1
Magnesium, Mg	mg	2	23	27	25	22	25	22	1
Phosphorus, P	mg	2	200	229	227	193	227	193	1
Potassium, K	mg	2	339	390	361	306	361	306	1
Zinc, Zn	mg	2	4.0	4.6	5.3	4.5	5.3	4.5	1
Selenium, Se	mcg	2	31	35	39	33	39	33	1
Thiamin	mg	2	0.09	0.10	0.08	0.07	0.08	0.07	1
Riboflavin	mg	2	0.24	0.27	0.22	0.19	0.22	0.19	1
Niacin	mg	2	4.6	5.3	5.0	4.3	5.0	4.3	1
Pantothenic acid	mg	2	0.78	0.90	0.86	0.73	0.86	0.73	1
Vitamin B ₆	mg	2	0.52	0.59	0.59	0.50	0.59	0.50	1
Vitamin B ₁₂	mcg	2	4.0	4.6	4.7	4.0	4.7	4.0	1

[1] Source codes: SC =1 – Analytical data, SC= 4 – Imputed data and # of observations set at 0, SC=7 - Assumed zero

Beef, chuck, shoulder clod, top blade (infraspinatus), steak, trimmed to 0" fat, select

Urmis No: 1166

NDB No: 23043 Lean and Fat, raw; 23044 Lean and Fat, cooked, grilled

Common names: Flat Iron Steak

Nutrient Name	Unit	N	Lean and Fat				Lean Only		Source Code ^[1]
			<i>Raw</i>		<i>Cooked (Grilled)</i>		<i>Cooked (Grilled)</i>		
			100g	115g	100g	85g	100g	85g	
Water	g	5	71	82	62	53	62	53	1
Energy	Kcal	0	166	191	212	180	212	180	4
Calories from fat	Kcal	0	83	95	104	88	104	88	4
Protein	g	5	19	22	25	21	25	21	1
Total lipid (fat)	g	5	9	11	12	10	12	10	1
Ash	g	5	0.94	1.08	0.93	0.79	0.93	0.79	1
Carbohydrate, by difference	g	0	0	0	0	0	0	0	7
Fiber, total dietary	g	0	0	0	0	0	0	0	7
Sugars, total	g	0	0	0	0	0	0	0	7
Calcium, Ca	mg	1	6.3	7.3	5.5	4.7	5.5	4.7	1
Iron, Fe	mg	1	2.6	3.0	3.1	2.6	3.1	2.6	1
Sodium, Na	mg	1	75	86	76	64	76	64	1
Vitamin C, total ascorbic acid	mg	0	0	0	0	0	0	0	7
Vitamin A	IU	1	0	0	0	0	0	0	1
Fatty acids, total saturated	g	0	3.5	4.0	4.4	3.8	4.4	3.8	4
Fatty acids, total trans	g	0	0.34	0.39	0.49	0.42	0.49	0.42	4
Cholesterol	mg	4	66	76	83	71	83	71	1
Magnesium, Mg	mg	1	23	26	24	20	24	20	1
Phosphorus, P	mg	1	198	228	211	179	211	179	1
Potassium, K	mg	1	324	373	333	283	333	283	1
Zinc, Zn	mg	1	7.5	8.6	9.6	8.2	9.6	8.2	1
Selenium, Se	mcg	1	32	36	39	33	39	33	1
Thiamin	mg	1	0.14	0.16	0.08	0.07	0.08	0.07	1
Riboflavin	mg	1	0.26	0.30	0.38	0.32	0.38	0.32	1
Niacin	mg	1	3.5	4.0	4.1	3.5	4.1	3.5	1
Pantothenic acid	mg	1	0.99	1.14	1.07	0.91	1.07	0.91	1
Vitamin B ₆	mg	1	0.36	0.41	0.41	0.35	0.41	0.35	1
Vitamin B ₁₂	mcg	1	5.2	6.0	6.2	5.3	6.2	5.3	1

^[1] Source codes: SC =1 – Analytical data, SC= 4 – Imputed data and # of observations set at 0, SC=7 - Assumed zero

Beef, chuck, shoulder clod, top blade (infraspinatus), steak, trimmed to 0" fat, choice

Urmis No: 1981

NDB No: 23041 Lean and Fat, raw; 23042 Lean and Fat, cooked, grilled

Common names: Flat Iron Steak

Nutrient Name	Unit	N	Lean and Fat				Lean Only		Source Code ^[1]
			<i>Raw</i>		<i>Cooked (Grilled)</i>		<i>Cooked (Grilled)</i>		
			100g	115g	100g	85g	100g	85g	
Water	g	8	70	81	62	53	62	53	1
Energy	Kcal	0	182	210	228	194	228	194	4
Calories from fat	Kcal	0	102	117	122	104	122	104	4
Protein	g	8	19	22	25	21	25	21	1
Total lipid (fat)	g	8	11	13	14	12	14	12	1
Ash	g	8	0.88	1.01	0.94	0.80	0.94	0.80	1
Carbohydrate, by difference	g	0	0	0	0	0	0	0	7
Fiber, total dietary	g	0	0	0	0	0	0	0	7
Sugars, total	g	0	0	0	0	0	0	0	7
Calcium, Ca	mg	2	5.1	5.9	6.2	5.2	6.2	5.2	1
Iron, Fe	mg	2	2.2	2.6	2.8	2.4	2.8	2.4	1
Sodium, Na	mg	2	74	86	78	66	78	66	1
Vitamin C, total ascorbic acid	mg	0	0	0	0	0	0	0	7
Vitamin A	IU	2	0	0	0	0	0	0	1
Fatty acids, total saturated	g	0	4.2	4.8	5.4	4.6	5.4	4.6	4
Fatty acids, total trans	g	0	0.39	0.45	0.52	0.44	0.52	0.44	4
Cholesterol	mg	6	65	75	83	70	83	70	1
Magnesium, Mg	mg	2	20	23	23	19	23	19	1
Phosphorus, P	mg	2	178	204	199	169	199	169	1
Potassium, K	mg	2	302	347	317	269	317	269	1
Zinc, Zn	mg	2	6.6	7.6	8.8	7.5	8.8	7.5	1
Selenium, Se	mcg	2	29	33	37	31	37	31	1
Thiamin	mg	2	0.08	0.09	0.07	0.06	0.07	0.06	1
Riboflavin	mg	2	0.21	0.24	0.25	0.21	0.25	0.21	1
Niacin	mg	2	3.4	3.9	3.7	3.2	3.7	3.2	1
Pantothenic acid	mg	2	0.93	1.07	0.88	0.75	0.88	0.75	1
Vitamin B ₆	mg	2	0.38	0.43	0.38	0.32	0.38	0.32	1
Vitamin B ₁₂	mcg	2	5.0	5.7	5.7	4.9	5.7	4.9	1

^[1] Source codes: SC =1 – Analytical data, SC= 4 – Imputed data and # of observations set at 0, SC=7 - Assumed zero

Beef, chuck, shoulder top and center (triceps brachii), steak, trimmed to 0" fat, select

Urmis No: 1162

NDB No: 23039 Lean and Fat, raw; 23040 Lean and Fat, cooked, grilled

Common names: Ranch Steak

Nutrient Name	Unit	N	Lean and Fat				Lean Only		Source Code ^[1]
			Raw		Cooked (Grilled)		Cooked (Grilled)		
			100g	115g	100g	85g	100g	85g	
Water	g	5	73	83	65	55	65	55	1
Energy	Kcal	0	140	161	176	150	176	150	4
Calories from fat	Kcal	0	50	57	62	53	62	53	4
Protein	g	5	21	24	27	23	27	23	1
Total lipid (fat)	g	5	6	6	7	6	7	6	1
Ash	g	5	0.88	1.01	1.07	0.91	1.07	0.91	1
Carbohydrate, by difference	g	0	0	0	0	0	0	0	7
Fiber, total dietary	g	0	0	0	0	0	0	0	7
Sugars, total	g	0	0	0	0	0	0	0	7
Calcium, Ca	mg	1	4.5	5.1	5.0	4.3	5.0	4.3	1
Iron, Fe	mg	1	2.6	3.0	3.2	2.8	3.2	2.8	1
Sodium, Na	mg	1	58	66	62	53	62	53	1
Vitamin C, total ascorbic acid	mg	0	0	0	0	0	0	0	7
Vitamin A	IU	1	0	0	0	0	0	0	1
Fatty acids, total saturated	g	0	1.8	2.1	2.2	1.9	2.2	1.9	4
Fatty acids, total trans	g	0	0.19	0.22	0.24	0.21	0.24	0.21	4
Cholesterol	mg	4	58	67	77	66	77	66	1
Magnesium, Mg	mg	1	25	29	28	24	28	24	1
Phosphorus, P	mg	1	221	254	249	212	249	212	1
Potassium, K	mg	1	370	426	401	341	401	341	1
Zinc, Zn	mg	1	6.0	6.9	7.6	6.4	7.6	6.4	1
Selenium, Se	mcg	1	32	37	44	38	44	38	1
Thiamin	mg	1	0.09	0.10	0.09	0.08	0.09	0.08	1
Riboflavin	mg	1	0.25	0.29	0.34	0.29	0.34	0.29	1
Niacin	mg	1	5.3	6.1	5.5	4.7	5.5	4.7	1
Pantothenic acid	mg	1	0.86	0.99	0.95	0.81	0.95	0.81	1
Vitamin B ₆	mg	1	0.62	0.71	0.59	0.5	0.59	0.5	1
Vitamin B ₁₂	mcg	1	4.7	5.4	5.7	4.9	5.7	4.9	1

^[1] Source codes: SC =1 – Analytical data, SC= 4 – Imputed data and # of observations set at 0, SC=7 - Assumed zero

Beef, chuck, shoulder top and center (triceps brachii), steak, trimmed to 0" fat, choice

Urmis No: 1977

NDB No: 23037 Lean and Fat, raw; 23038 Lean and Fat, cooked, grilled

Common names: Ranch Steak

Nutrient Name	Unit	N	Lean and Fat				Lean Only		Source Code ^[1]
			Raw		Cooked (Grilled)		Cooked (Grilled)		
			100g	115g	100g	85g	100g	85g	
Water	g	5	72	83	65	55	65	55	1
Energy	Kcal	0	143	164	184	157	184	157	4
Calories from fat	Kcal	0	55	63	73	62	73	62	4
Protein	g	5	20	23	26	22	26	22	1
Total lipid (fat)	g	5	6	7	8	7	8	7	1
Ash	g	5	0.91	1.05	1.03	0.88	1.03	0.88	1
Carbohydrate, by difference	g	0	0	0	0	0	0	0	7
Fiber, total dietary	g	0	0	0	0	0	0	0	7
Sugars, total	g	0	0	0	0	0	0	0	7
Calcium, Ca	mg	1	4.5	5.2	4.8	4.1	4.8	4.1	1
Iron, Fe	mg	1	2.1	2.5	2.6	2.2	2.6	2.2	1
Sodium, Na	mg	1	61	70	59	50	59	50	1
Vitamin C, total ascorbic acid	mg	0	0	0	0	0	0	0	7
Vitamin A	IU	1	0	0	0	0	0	0	1
Fatty acids, total saturated	g	0	2.1	2.4	3.0	2.6	3.0	2.6	4
Fatty acids, total trans	g	0	0.20	0.23	0.29	0.25	0.29	0.25	4
Cholesterol	mg	4	57	65	74	63	74	63	1
Magnesium, Mg	mg	1	24	27	24	21	24	21	1
Phosphorus, P	mg	1	212	243	223	190	223	190	1
Potassium, K	mg	1	347	399	342	290	342	290	1
Zinc, Zn	mg	1	5.3	6.0	6.9	5.8	6.9	5.8	1
Selenium, Se	mcg	1	30	34	40	34	40	34	1
Thiamin	mg	1	0.07	0.08	0.07	0.06	0.07	0.06	1
Riboflavin	mg	1	0.23	0.26	0.27	0.23	0.27	0.23	1
Niacin	mg	1	5.1	5.9	5.2	4.4	5.2	4.4	1
Pantothenic acid	mg	1	0.73	0.84	0.78	0.66	0.78	0.66	1
Vitamin B ₆	mg	1	0.67	0.77	0.57	0.48	0.57	0.48	1
Vitamin B ₁₂	mcg	1	3.6	4.1	4.6	3.9	4.6	3.9	1

^[1] Source codes: SC =1 – Analytical data, SC= 4 – Imputed data and # of observations set at 0, SC=7 - Assumed zero

Beef, chuck, Denver Cut (serratus ventralis), steak, trimmed to 0" fat, select

Urmis No: No number assigned

NDB No¹ :

Common names: Denver Cut

Nutrient Name	Unit	N	Lean and Fat				Lean Only		Source Code ^[2]
			Raw		Cooked (Grilled)		Cooked (Grilled)		
			100g	115g	100g	85g	100g	85g	
Water	g	12	71	81	61	52	61	52	1
Energy	Kcal	0	157	181	212	181	212	181	4
Calories from fat	Kcal	12	78	90	107	91	107	91	4
Protein	g	12	20	23	26	22	26	22	1
Total lipid (fat)	g	12	9	10	12	10	12	10	1
Ash	g	12	0.93	1.07	1.03	0.88	1.03	0.88	1
Carbohydrate, by difference	g	0	0	0	0	0	0	0	7
Fiber, total dietary	g	0	0	0	0	0	0	0	7
Sugars, total	g	0	0	0	0	0	0	0	7
Calcium, Ca	mg	0	6.7	7.7	5.7	4.8	5.7	4.8	4
Iron, Fe	mg	0	2.8	3.2	3.2	2.7	3.2	2.7	4
Sodium, Na	mg	0	79	91	78	66	78	66	4
Vitamin C, total ascorbic acid	mg	0	0	0	0	0	0	0	7
Vitamin A	IU	0	0	0	0	0	0	0	4
Fatty acids, total saturated	g	0	3.3	3.8	4.6	3.9	4.6	3.9	4
Cholesterol	mg	0	67	78	86	73	86	73	4
Magnesium, Mg	mg	0	24	27	24	21	24	21	4
Phosphorus, P	mg	0	209	241	218	185	218	185	4
Potassium, K	mg	0	342	394	344	292	344	292	4
Zinc, Zn	mg	0	7.9	9.1	9.9	8.4	9.9	8.4	4
Selenium, Se	mcg	0	33	38	41	34	41	34	4
Thiamin	mg	0	0.14	0.16	0.08	0.07	0.08	0.07	4
Riboflavin	mg	0	0.26	0.30	0.40	0.34	0.40	0.34	4
Niacin	mg	0	3.5	4.1	4.2	3.6	4.2	3.6	4
Pantothenic acid	mg	0	1.00	1.15	1.11	0.95	1.11	0.95	4
Vitamin B ₆	mg	0	0.36	0.42	0.43	0.36	0.43	0.36	4
Vitamin B ₁₂	mcg	0	5.3	6.1	6.4	5.5	6.4	5.5	4

¹: NDB No. to be assigned^[2] Source codes: SC =1 – Analytical data, SC= 4 – Imputed data and # of observations set at 0, SC=7 - Assumed zero

Beef, chuck, Denver Cut (serratus ventralis), steak, trimmed to 0" fat, choice

Urmis No: No number assigned

NDB No ¹:

Common names: Denver Cut

Nutrient Name	Unit	N	Lean and Fat				Lean Only		Source Code ^[2]
			Raw		Cooked (Grilled)		Cooked (Grilled)		
			100g	115g	100g	85g	100g	85g	
Water	g	24	68	78	59	50	59	50	1
Energy	Kcal	0	178	205	226	193	226	193	4
Calories from fat	Kcal	24	98	112	119	101	119	101	4
Protein	g	24	19	22	26	22	26	22	1
Total lipid (fat)	g	24	11	12	13	11	13	11	1
Ash	g	24	0.90	1.03	0.97	0.83	0.97	0.83	1
Carbohydrate, by difference	g	0	0	0	0	0	0	0	7
Fiber, total dietary	g	0	0	0	0	0	0	0	7
Sugars, total	g	0	0	0	0	0	0	0	7
Calcium, Ca	mg	0	5.8	6.7	7.0	5.9	7.0	5.9	4
Iron, Fe	mg	0	2.5	2.9	3.2	2.7	3.2	2.7	4
Sodium, Na	mg	0	84	97	89	75	89	75	4
Vitamin C, total ascorbic acid	mg	0	0	0	0	0	0	0	7
Vitamin A	IU	0	0	0	0	0	0	0	4
Fatty acids, total saturated	g	0	4.0	4.6	5.3	4.5	5.3	4.5	4
Cholesterol	mg	0	69	80	89	76	89	76	4
Magnesium, Mg	mg	0	23	26	26	22	26	22	4
Phosphorus, P	mg	0	200	230	226	192	226	192	4
Potassium, K	mg	0	340	391	360	306	360	306	4
Zinc, Zn	mg	0	7.4	8.5	10.0	8.5	10.0	8.5	4
Selenium, Se	mcg	0	33	38	42	36	42	36	4
Thiamin	mg	0	0.08	0.09	0.07	0.06	0.07	0.06	4
Riboflavin	mg	0	0.21	0.25	0.26	0.22	0.26	0.22	4
Niacin	mg	0	3.4	3.9	3.9	3.3	3.9	3.3	4
Pantothenic acid	mg	0	0.95	1.09	0.93	0.79	0.93	0.79	4
Vitamin B ₆	mg	0	0.38	0.44	0.40	0.34	0.40	0.34	4
Vitamin B ₁₂	mcg	0	5.0	5.8	6.1	5.2	6.1	5.2	4

¹: NDB No. to be assigned

^[2] Source codes: SC = 1 – Analytical data, SC= 4 – Imputed data and # of observations set at 0, SC=7 - Assumed zero

Appendix A – Analytical methods		
NUTRIENT	TECHNIQUE	METHOD
Nitrogen	Combustion	AOAC 968.06 Protein (Crude) in Animal Feed ¹
Fat	Extraction	Folch, J, et al. (1957) ²
	Acid hydrolysis	AOAC 954.02 Fat (Crude) or Ether Extract in Pet Food
Ash	Gravimetric	AOAC 923.03 Ash of Flour
Moisture	Forced air	AOAC 950.46 Moisture in Meat
Minerals	Inductively coupled plasma (ICP)	AOAC 985.01 + 984.27
Selenium	Hybride generation	AOAC 986.15 Arsenic, Cadmium, Lead, Selenium and Zinc in Human and Pet Foods
Retinol	High performance liquid chromatography (HPLC)	AOAC 974.29 + Thompson and Duval (1989) ³
Thiamin	Fluorometric	AOAC 942.23 + 953.17 + 957.17
Riboflavin	Microbiological	AOAC 940.33 + 960.46 + US Pharmacopeia ⁴ , 23 rd rev., pp. 1749-1750
Niacin	Microbiological	AOAC 944.13 + 960.46 + 985.34 + US Pharmacopeia, 23 rd rev., pp. 1743-1745
Pantothenic Acid	Microbiological	AOAC 945.74 + 960.46 + US Pharmacopeia, 23 rd rev., pp.257-258
Vitamin B6	Microbiological	AOAC 961.15 + Atkin, et al., (1943) ⁵
Vitamin B12	Microbiological	AOAC 952.20 + 960.46 + US Pharmacopeia, 23 rd rev., pp. 435
Fatty acids	Gas chromatography (GC)	AOAC 996.06 Fat (Total, Saturated and Monosaturated) in foods
Cholesterol	GC/Direct saponification	AOAC 994.10 Cholesterol in Foods

¹ Official Methods of Analysis of AOAC International (2000) 17th Ed., AOAC International, Gaithersburg, MD, USA.

² Folch J, Less M, Stanley GHS. (1957) A simple method for the isolation and purification of total lipides from animal tissues. J. Bio. Chem. 226:497-509.

³ Thompson J and Duval S. (1989) Vitamin A in foods. J. Micronutrient Anal. 6:147-159.

⁴ US Pharmacopeia (1995) 23rd rev., United States Pharmacopeial Convention, Inc. Rockville, MD.

⁵ Atkin L, Schultz AS, Williams WL, and Frey CN. (1943) Yeast microbiological methods for determination of vitamins – pyridoxine. Indust. Eng. Chem., Analytical Ed. 15(2):141-144

Appendix B: Nutrient content of separable lean meat, raw

* The following cuts were not included in this appendix: the outside round, the chuck shoulder top and center, and the chuck shoulder clod. For these denuded single muscles, values for “Separable Lean Only” and “Separable Lean and Fat” are the same since there is no separable fat present.

Description	Nutrient	Unit	100g	N	Source Code
Beef, flank, separable lean only, trimmed to 0" fat, choice, raw	Water	g	68.72	10	1
	Protein	g	21.72	10	1
	Total lipid (fat)	g	6.29	10	1
	Ash	g	0.99	10	1

Description	Nutrient	Unit	100g	N	Source Code
Beef, tenderloin, separable lean only, trimmed to 1/8" fat, select, raw	Water	g	71.11	10	1
	Protein	g	22.06	10	1
	Total lipid (fat)	g	5.93	10	1
	Ash	g	1.05	10	1

Description	Nutrient	Unit	100g	N	Source Code
Beef, top sirloin, separable lean only, trimmed to 1/8" fat, select, raw	Water	g	73.31	10	1
	Protein	g	22.27	10	1
	Total lipid (fat)	g	3.54	10	1
	Ash	g	1.19	10	1

Description	Nutrient	Unit	100g	N	Source Code
Beef, tenderloin, separable lean only, trimmed to 1/8" fat, choice, raw	Water	g	70.17	10	1
	Protein	g	22.17	10	1
	Total lipid (fat)	g	7.07	10	1
	Ash	g	1.08	10	1

Description	Nutrient	Unit	100g	N	Source Code
Beef, top sirloin, separable lean only, trimmed to 1/8" fat, choice, raw	Water	g	72.51	10	1
	Protein	g	21.91	10	1
	Total lipid (fat)	g	4.62	10	1
	Ash	g	1.09	10	1

Description	Nutrient	Unit	100g	N	Source Code
Beef, bottom sirloin, tri-tip, separable lean only, trimmed to 0" fat, choice, raw	Water	g	71.33	10	1
	Protein	g	21.17	10	1
	Total lipid (fat)	g	7.06	10	1
	Ash	g	1.02	10	1

Description	Nutrient	Unit	100g	N	Source Code
Beef, bottom sirloin, tri-tip, separable lean only, trimmed to 0" fat, select, raw	Water	g	73.48	10	1
	Protein	g	21.34	10	1
	Total lipid (fat)	g	4.21	10	1
	Ash	g	1.10	10	1

Description	Nutrient	Unit	100g	N	Source Code
Beef, round, tip round, separable lean only, trimmed to 0" fat, choice, raw	Water	g	73.98	10	1
	Protein	g	20.76	10	1
	Total lipid (fat)	g	4.55	10	1
	Ash	g	1.02	10	1

Description	Nutrient	Unit	100g	N	Source Code
Beef, round, tip round, separable lean only, trimmed to 0" fat, select, raw	Water	g	74.99	10	1
	Protein	g	21.38	10	1
	Total lipid (fat)	g	3.35	10	1
	Ash	g	1.04	10	1

Description	Nutrient	Unit	100g	N	Source Code
Beef, flank, separable lean only, trimmed to 0" fat, select, raw	Water	g	72.84	10	1
	Protein	g	21.43	10	1
	Total lipid (fat)	g	5.00	10	1
	Ash	g	0.99	10	1

Appendix C: Proposed Cuts for Mandatory Beef Labeling

Cut	Fat Trim Level	Select	Choice
Beef, ground beef, regular (28% fat), without added seasonings	----	Refer to Ground Beef calculator (http://www.ars.usda.gov/Services/docs.htm?docid=13933)	
Beef, ground beef, 17% fat	----	Refer to Ground Beef calculator (http://www.ars.usda.gov/Services/docs.htm?docid=13933)	
Beef, loin, top loin, steak, trimmed	0"	13447 Lean and Fat, cooked, broiled; 13450 Lean Only, cooked, broiled	13446 Lean and Fat, cooked, broiled; 13449 Lean Only, cooked, broiled
	1/8"	13913 Lean and Fat, raw	13911 Lean and Fat, raw
Beef, Ribeye, Lip On, bone-in, steak	1/8"	(NDB# to be assigned)	(NDB# to be assigned)
Beef, Ribeye, Lip On, bone-in, roast	1/8"	(NDB# to be assigned)	(NDB# to be assigned)
Beef, round, top round, steak	0"	13969 Lean and Fat, cooked, broiled; 13493 Lean Only, cooked, broiled	13968 Lean and Fat, cooked, broiled; 13492 Lean Only, cooked, broiled
	1/8"	13898 Lean and Fat, raw	13894 Lean and Fat, raw
Beef, round, bottom round, steak	0"	13404 Lean and Fat, cooked, braised; 13413 Lean Only, cooked, braised	13401 Lean and Fat, cooked, braised; 13410 Lean Only, cooked, braised
	1/8"	13874 Lean and Fat, raw	13871 Lean and Fat, raw
Beef, round, eye round, steak	0"	13417 Lean and Fat, cooked, roasted; 13420 Lean Only, cooked, roasted	13416 Lean and Fat, cooked, roasted; 13419 Lean Only, cooked, roasted
	1/8"	13881 Lean and Fat, raw	13879 Lean and Fat, raw
Beef, chuck, arm pot roast	0"	13375 Lean and Fat, cooked, braised; 13378 Lean Only, cooked, braised	13374 Lean and Fat, cooked, braised; 13377 Lean Only, cooked, braised
	1/8"	13813 Lean and Fat, raw	13811 Lean and Fat, raw
Beef, chuck, blade, roast	0"	13381 Lean and Fat, cooked, braised; 13384 Lean Only, cooked, braised	13380 Lean and Fat, cooked, braised; 13383 Lean Only, cooked, braised
	1/8"	13819 Lean and Fat, raw	13817 Lean and Fat, raw
Beef, brisket, flat half	0"	13950 Lean and Fat, cooked, braised; 13485 Lean Only, cooked, braised	13165 Lean and Fat, cooked, braised; 13343 Lean Only, cooked, braised
	1/8"	23659 Lean and Fat, raw	23658 Lean and Fat, raw
Beef, brisket, point half	0"	ALL GRADES only 13371 Lean and Fat, cooked, braised; 13372 Lean Only, cooked, braised	
	1/8"	13807 Lean and Fat, raw	
Beef, brisket, whole	0"	ALL GRADES only 13367 Lean and Fat, cooked, braised; 13368 Lean Only, cooked, braised	
	1/8"	13803 Lean and Fat, raw	