

Tennessee FFA Association

**Meats Evaluation
and Technology
Handbook**

2017-2021

Objectives

Develop employment skills for students who are interested in exploring or pursuing career opportunities in the meat animal industry.

Assist the local agricultural education instructor in motivating students to become knowledgeable consumers of meat animal products and/or involved in the industry of meat animal marketing and merchandising.

Develop broader analytical skills, critical thinking strategies and an understanding of appropriate meat terminology for high school students.

Develop the ability to evaluate meat animal products in order to optimize economic returns to producers and industry as well as to meet the needs of the consumer.

Develop cooperation and communication skills.

Event Rules

Each team will be comprised of three or four members. Only the top three scores will be counted. The low score is a drop score.

Due to limited room in the coolers, no alternates are allowed.

CLOTHING

Participants must come to the event prepared to work in a cold storage facility (approximately 0o C) for approximately three hours. Participants are required to wear warm clothing and proper footwear (must be closed toed footwear). FFA Official Dress is not recommended for this event.

All participants are expected to be prompt at their stations throughout the event; no provision will be made for tardiness and will cause late participants to lose event points.

No conversation will be allowed between participants after the individual activities begin. Conversation among participants constitutes disqualification.

Participants and official judges are to make their placing and identifications without handling the exhibit.

Two minutes stand back time on placing classes will be utilized when applicable.

Event Format

The event is comprised of the following activities:

Individual activities consist of written exam, retail meat cuts identification, Beef Quality and Yield Grading, evaluation classes, ten questions (from two of the evaluation classes).

Team activities consists of meat formulation problem solving, value based pricing, anatomy, keep/cull, retail identification scenario and/or food safety/sanitation scenario.

EQUIPMENT

Each participant should bring two No. 2 pencils, a meats evaluation scantron (available through judgingcard.com) a clear, transparent clipboard with no notes and and a non-programmable electronic calculator.

Participants must not bring any blank paper, notes, USDA Beef Grading worksheet, any electronic communication items, purses or backpacks. Blank paper, USDA Beef Grading worksheet sheets.

INDIVIDUAL ACTIVITIES

BEEF QUALITY AND YIELD GRADING

Participants will quality grade and yield grade two to four beef carcasses (20 points per carcass).

40 POINTS (TWO CARCASSES)

60 POINTS (THREE CARCASSES)

80 POINTS (FOUR CARCASSES)

Quality Grading: Participants may use the worksheet provided for Beef Grading. The participant should complete the section of answers for quality grading on the computerized scorecard. Ten points are awarded for each correct grade. Each will be scored for the applicable adjacent grade as follows: 10, 8, 5, 0. However, in the case of “B” Maturity, Select High and Select Low will be awarded zero points.

Yield Grading: Participants may use the worksheet provided for Beef Grading. Participant is to calculate the final “Yield Grade” to the nearest one-tenth of a grade. Ten points are awarded for each correct grade. The participant should complete the section of answers for yield grading on the computerized scorecard.

Full points will be earned for 1/10th above or below official yield grade. A two point deduction will be made for 2/10th – 5/10th above or below official yield grade. A five point deduction for 6/10th – 9/10th above or below official yield grade. Zero points will be awarded for answers

one yield grade above or below the official yield grade.

Official United States Department of Agriculture Yield Grades are 1.0 – 5.9.

SCORING EXAMPLE

Official Yield Grade (FYG Official) = 2.2

FYG 2.1- 2.3 = full points (10)

FYG 1.7 – 2.0 or 2.4-2.7 = minus 2 points

FYG 1.3 – 1.6 or 2.8 – 3.1 = minus 5 points

Zero points for any FYG a full yield grade above or below official FYG

EVALUATION CLASSES (200–400 POINTS)

Four to six evaluation classes will be formatted for placing:

- Carcasses (beef or pork)
- Backfat Recommendations for Placing Unribbed Pork Carcasses
- Wholesale/subprimal cuts (beef, pork, lamb)
- Retail cuts (beef, pork, lamb)
- Processed meats (cured/smoked center ham slices, shank or rump portion of ham, boneless ham, sliced bacon, fresh pork sausage, smoked sausage)

Reference: Guidelines for placing processed meats

Placing class (50 points/class)

- There will be between four and six placing classes.
- A class will be made up of four exhibits that must be ranked first to last.

QUESTION CLASSES (50 POINTS)

Two of the evaluation classes will be selected for questions. A total of ten questions will be asked covering both classes; typically, five questions per class but it could vary if needed to make the best possible questions. Participants will be given a short time period to study their notes before answering questions after they have observed and placed the classes. Participants will not be able to use their notes when answering questions. Questions will be worth five points each.

Guidelines for Questions:

- All questions must be written in a manner that they can be answered by only one of the following responses: 1, 2, 3, 4
- Questions should pertain to the criteria and differences used in placing the class (Trimness, Muscling, Quality and/or Sex). Questions that do not relate to the placing of the class or are not significant to the overall evaluation are not desirable questions and should not be used if possible.
- When asking questions about the differences within a class, the differences must be visually distinguishable.
- A separate scan form will be used for questions during the event.

RETAIL MEAT CUTS IDENTIFICATION (210 POINTS)

Participants will identify 30 retail meats cuts found on the “Meats Identification Card.” The official key (Retail Cuts Coding) is located at the end of this chapter of the hand-book. Only the cuts listed are eligible to be used in this event. Participants will be given one point for correct species identification, two point for correct primal cut identification, one point for correct cookery method and three points for correct retail name. Answers will be recorded on the scantron available at judgingcard.com.

Clarification of Terms for Retail Identification

- **Chop:** Smaller, flat cuts of meat, usually from the pork, veal or lamb rib, loin or shoulder, generally ranging from ½” to 1½” in thickness. A chop usually is of a size to be a single meal portion.
- **Slice:** A section of meat, usually less than one inch thick, taken from the center or either side of center of the leg of pork, lamb or veal.
- **Steak:** A flat cut of meat, larger than a chop, ranging from ¾” to 1½” of thickness cut from various parts of a beef carcass, or the shoulder of pork and veal. The size of a steak often is sufficient to provide more than one portion.
- **Roast (Meat Cut):** Cuts of meat larger than steaks, chops or slices (usually two or more inches thick). This cut is intended to serve more than two people.

WRITTEN EXAM (100 POINTS)

Each participant will be given a 50 question written exam relating to meat storage and handling, cookery, nutrition, food safety (HACCP principles, bio-security and personal safety), processed meats, legislation and history, purchasing meat and animal care and handling. Questions could include multiple choice, true/false or situation based questions. Value per question will be based on question type. All test questions will come from the previous five years of National Meats Written Exam Questions located on FFA.ORG. A test bank using the previous five years national exams will be maintained on the Downloads page of tnffa.org and updated annually.

TEAM ACTIVITY

In 2017, each team will be required to complete one Meat Formulation problem (worth 50 points) for the team activity. Students will complete a meat formulation problem solving exercise. Nine questions are to be answered. The one solution to the meat formulation problem will be worth 10 points. The other 8 questions based on the correct formulation will be valued at 5 points each.

In 2017 a practice keep/cull class will be added (will not be scored in 2017). Beginning in 2018, keep/cull classes may be added to the group activity, at the discretion of the event superintendent. For the Keep/Cull Team Activity, participants will be provided with a scenario that is an industry standard or situation. Participants will be given time to evaluate the meat product and make a selection based on the provided information (total of 100 points). (NOTE – Keep/Cull Class example located in references in this document and under the Meats Evaluation CDE page on FFA.ORG).

In 2018 and beyond the event superintendent has the discretion to use either a meat formulation problem or a keep/cull class for the group activity.

The event will be divided in the following sections and scored as follows:

Individual Activities	Possible Maximum Points/Individual	Possible Maximum Team Points
Written exam	100	300
Retail meat cuts identification (30 cuts, 7 points each)	210	630
Evaluation of 4 -6 classes	200-300	600-900
Ten questions (from two of the evaluation classes) (5 points each)	50	150
Total possible points per individual	560 - 660	1,680 – 1,980
Team activity (Meat Formulation Problems)		50 - 100
Total maximum points		1,730 – 2,080

TIEBREAKERS

If ties occur, the following sections of the event will be used in order to determine award recipients:

INDIVIDUAL

1. Identification retail meat cuts
2. Retail Identification
3. Class questions

TEAM

1. Team activity score
2. Retail Identification total of the team
3. Grading total of the team
4. Class questions total of the team

References

This list of references is not intended to be all-inclusive.

Other sources may be utilized and teachers are encouraged to make use of the very best instructional materials available. The following list contains references that may prove helpful during event preparation.

National FFA Core Catalog – www.shop.FFA.org

- Retail Meat Instructional Materials/Instructor Combo Pack
- Retail Meat Team Combo Pack
- Retail Meats Field Guide
- Retail Meats Flash Cards
- Meat Identification Tutorial CD-ROM
- Meat Buyer’s Guide
- NAMP Meat Posters
- Beef, Lamb, Pork and Veal Cut Charts
- Meats Evaluation Scan Forms
- FFA Learn-National FFA CDE Q&A’s www.FFA.org

CEV Multimedia, 1020 SE Loop 289, Lubbock, TX 79404, (800) 922-9965

- Retail Cuts Identification (DVD)
- Meat Science and Food Safety (DVD) - written exam resource

Beef Myology - <http://bovine.unl.edu>

National Cattlemen’s Beef Association, 9110 E. Nichols Ave. #300, Centennial, CO 80112, (303) 694-0305/1-800-368-3138

- USDA Marbling Photographs
- Guide to Identifying Meat Cuts
- <https://store.beef.org/>

American Meat Science Association (AMSA), 2441 Village Green Place, Champaign, Illinois 61874, (800) 517-2672

- <http://www.meatscience.org/students/meat-judging-program>
- Email: information@meatscience.org
- USDA Marbling Photographs

- Meat Evaluation Handbook

Art Services, Inc., 3015 Earl Place, N.E., Washington, D.C., 20018, (202) 526-5607

- Beef Ribeye Grids

NASCO, 901 Janesville Avenue, P.O. Box 901, Fort Atkinson, WI 53538-0901, 1-800-558-9595

- Preliminary Yield Grade Rulers (<http://www.enasco.com/product/C02615N>)
- Beef and Pork Ribeye Grids

Example Meats Evaluation Websites of Classes and Materials

- <http://aggiemeat.tamu.edu/meat-identification-pictures>
- <http://animalscience.unl.edu/ANSCExextensionMeatScienceLearningAids>

TEAM ACTIVITY EXAMPLES

TEAM ACTIVITY EXAMPLE #1 (50 POINTS)

Keep/Cull Problem Solving

Utilizing keep/cull class(es), the participants will work as a team to appraise a class of subprimal or retail cuts. A scenario will be provided which will allow participants to make conclusions. Team members will identify the four exhibits to keep and mark it appropriately on a computerized scorecard form to fit the scenario given to them by the officials.

Example Scenario:

As a consumer, you arrive at a supermarket meat counter with the objective of selecting ribeye steaks for a social gathering being hosted at your house. The guests include your immediate supervisor from work and her husband. Consequently, you wish to select the steaks that are most juicy, flavorful and tender. Refer to the Keep/Cull section from Individual Activities for further instructions.

Team Activity Example #2 (50 Points)

MEAT FORMULATION PROBLEM SOLVING

Participants will be given a situational problem involving the least cost formulation of a batch of particular meat products (hamburger, wiener, bologna, etc.). This problem will be worth 50 points and consist of procedural questions and the actual determination of the least cost price.

Freezing: Freezing of red meat is considered 28°F and below.

Freshness: Start counting from the date of processing (zero hour) back toward slaughter date. For example, processing on Oct. 26 with a 72-hour freshness specification means Oct. 25, 24 and 23 are good dates; Oct. 22 or earlier are unacceptable dates.

Meat Formulation Problem Solving

USDA Food Standards and Labeling Policy for Ground Beef:

May not contain added fat.

Maximum total fat 30 percent.

Cheek meat is permitted up to 25 percent and must be declared in the ingredients statement. For more than 25 percent, show as "Ground Beef and Cheek Meat," all the same size. Beef of

skeletal origin, or from the diaphragm or esophagus (weasand) may be used in the preparation of chopped beef, ground beef or hamburger. Heart meat and tongue meat as organ meats are not acceptable ingredients in chopped beef, ground beef or hamburger.

Specifications on ground beef for this activity:

No variety meats may be used.

No product more than five days old may be used.

All fresh products must be stored at a temperature not to exceed 34° F.

- Least cost determined should be performed on acceptable ingredients to select the lowest cost product that meets all ground beef guidelines.

You have received an order with the following specifications:

Desired fat content of finished product = 20%

Batch size = 5,000 lbs.

- Manufacture date = Wednesday, October 20, 2016

AVAILABLE INGREDIENTS

PRODUCT	Slaughter Date	Temp. °F	% Fat Content	\$ Price/lb.
Beef Heart	October 15	33°	4	.41
80% Trimmings	October 16	35°	20	1.40
75% Trimmings	October 17	34°	25	1.28
Beef Flank	October 14	33°	2	.91
Chuck Tender	October 17	33°	16	1.58
Pork Trimmings	October 18	34°	15	.86
Ribeye Roll	October 18	34°	12	2.12
Bull Product	October 16	34°	8	1.74

Instructions: Carefully read each item and possible answers. Mark the correct answer on the appropriate form. Completely fill the chosen oval to indicate your answer.

Solution: Which of the following was the correct formulation for this problem?

1. 75% Trimmings and Beef Heart
2. **75% Trimming and Bull Product**
3. 75% Trimming and Chuck Tender
4. 75% Trimming and Ribeye Roll
5. 80% Trimmings and Beef Heart

6. 80% Trimmings and Bull Product
7. 80% Trimmings and Chuck Tender
8. Beef Heart and Beef Flank
9. Chuck Tender and Bull Product
10. The correct solution is not listed

1. What was the total cost of the correct final batch?
 - A. \$2,523
 - B. \$4,544
 - C. \$5,356
 - D. \$7,067**
 - E. \$7,240
2. What was the price per pound of the correct final batch?
 - A. \$1.28
 - B. \$1.41**
 - C. \$1.45
 - D. \$1.74
 - E. \$7.67
3. What was the percentage of lean in the correct final batch?
 - A. 17%
 - B. 20%
 - C. 29%
 - D. 71%
 - E. 80%**

4. What percentage of the correct final batch was Chuck Tender?
 - A. 0%
 - B. 16%
 - C. 29%
 - D. 56%
 - E. 71%
5. How much Bull Product was in the correct final batch?
 - A. 0 lbs.
 - B. 1,450 lbs.
 - C. 2,523 lbs.
 - D. 3,550 lbs.
 - E. 4,544 lbs.
6. Which ingredient was excluded on the basis of temperature?
 - A. 80% Trimmings
 - B. Beef Flank
 - C. Beef Hearts
 - D. Bull Product
 - E. Pork Trimmings
7. How much fat was in the correct final batch?
 - A. 0 lbs.
 - B. 1,000 lbs.
 - C. 2,000 lbs.
 - D. 4,000 lbs.
 - E. 5,000 lbs.
8. What percentage of the correct final batch was from 75% Trimmings?
 - A. 0%
 - B. 29%
 - C. 71%
 - D. 75%
 - E. 100%

Calculations for Formulation Problem

Batch size = 5,000 Lbs.										
	Ingredient Name	Price/Lb.	Fat content	Desired fat%	Multiples	Proportion of batch	Lbs. of batch		Cost	
Ingredient with most fat =	75% Trimmings	\$1.28	25%	20%	4	0.44	2,200	Lbs.	\$2,216	
Ingredient with least fat =	Chuck Tender	\$1.58	16%		5	0.56	2,800	Lbs.	\$4,424	
					Sum=	9	Total cost of batch =		\$7,240	
									Price per pound =	\$1.45
Possible questions:										
			Amount of fat=	1,000	Lbs.					
			Amount of lean=	4,000	Lbs.					
			Percentage of fat =	20	%					
			Percentage of lean =	80	%					

Batch size = 5,000 Lbs.										
	Ingredient Name	Price/Lb.	Fat content	Desired fat%	Multiples	Proportion of batch	Lbs. of batch		Cost	
Ingredient with most fat =	75% trimmings	\$1.28	25%	20%	8	0.62	3,100	Lbs.	\$3,968	
Ingredient with least fat =	Ribeye Roll	\$2.12	12%		5	0.38	1,900	Lbs.	\$4,028	
					Sum=	13	Total cost of batch =		\$7,996	
									Price per pound =	\$1.60
Possible questions:										
			Amount of fat=	1,000	Lbs.					
			Amount of lean=	4,000	Lbs.					
			Percentage of fat =	20	%					
			Percentage of lean =	80	%					

Batch size =										
	Ingredient Name	Price/Lb.	Fat content	Desired fat%	Multiples	Proportion of batch	Lbs. of batch		Cost	
Ingredient with most fat =	75% Trimmings	\$1.28	25%	20%	12	0.17	3550	Lbs.	\$4,544	
Ingredient with least fat =	Bull product	\$1.74	8%		5	0.29	1,450	Lbs.	\$2,523	
					Sum=	17	Total cost of batch =		\$7,067	
									Price per pound =	\$1.41
Possible questions:										
			Amount of fat=	1,000	Lbs.					
			Amount of lean=	4,000	Lbs.					
			Percentage of fat =	20	%					
			Percentage of lean =	80	%					

National Pork Board Backfat Recommendation

NOTE: Policy Statement-Backfat Recommendations for Placing Unribbed Pork Carcass Classes — The National Pork Board has published live and carcass specifications for the “ideal” market hog, known as Symbol III (National Pork Board, 2005).

Pork carcasses with less than 0.60 inches backfat have a higher incidence of bellies which are too thin for high quality bacon production and also tend to have unacceptably low marbling levels and less palatable pork. If this situation is presented in competition, students would be expected to evaluate the given carcass or carcasses against contemporaries within the class and rank accordingly.

KEEP CULL EXAMPLE

Select the four ribeye steaks to be sold to a high value “white table cloth” restaurant that advertises superior quality.

Scoring: Four meat products to be kept will have an aggregate score of 50 points.

CORRECT SELECTION	*					*	*	*
Exhibit Item	a	b	c	d	e	f	g	h
Points Possible	12	8	5	5	4	18	11	9

*The four correct selections will add up to 50 points. The culled items will have a lesser value than the fourth place item kept.

Examples of Questions For Evaluation Classes

Sample Acceptable Questions:

- Which beef carcass had the largest ribeye?
- Which pork carcass had the least backfat opposite the last rib?
- Which ribeye steak exhibited the brightest colored lean?
- Which ham was trimmest beneath the butt face?
- Which beef rib exhibited the most marbling in the blade face?

Sample Unacceptable Questions:

- Which pork carcass had a missing foot?
- Which beef carcass displayed indications of a bruise?
- Which ribeye steak was bigger?

Retail Cuts Code Sheet with Cookery

Species	Primal	Retail Cut	Cooking Method	Species	Primal	Retail Cut	Cooking Method
B	B	89	M	Beef	Brisket	Corned	Moist
B	B	15	M	Beef	Brisket	Flat Half, Bnls	Moist
B	B	10	M	Beef	Brisket	Whole, Bnls	Moist
B	C	26	M	Beef	Chuck	7-bone Pot-roast	Moist
B	C	03	M	Beef	Chuck	Arm Pot-Roast	Moist
B	C	04	M	Beef	Chuck	Arm Pot-Roast, Bnls	Moist
B	C	06	M	Beef	Chuck	Blade Roast	Moist
B	C	13	D/M	Beef	Chuck	Eye Roast, Bnls	Dry/Moist
B	C	45	D	Beef	Chuck	Eye steak, Bnls	Dry
B	C	20	M	Beef	Chuck	Mock Tender Roast	Moist
B	C	48	M	Beef	Chuck	Mock Tender Steak	Moist
B	C	21	D	Beef	Chuck	Petite Tender	Dry
B	C	29	D/M	Beef	Chuck	Shoulder Pot Roast (Bnls)	Dry/Moist
B	C	58	D	Beef	Chuck	Top Blade Steak (Flat Iron)	Dry
B	D	47	D/M	Beef	Flank	Flank Steak	Dry/Moist
B	F	49	D	Beef	Loin	Porter House Steak	Dry
B	F	55	D	Beef	Loin	T-bone Steak	Dry
B	F	34	D	Beef	Loin	Tenderloin Roast	Dry

Species	Primal	Retail Cut	Cooking Method	Species	Primal	Retail Cut	Cooking Method
B	F	56	D	Beef	Loin	Tenderloin Steak	Dry
B	F	59	D	Beef	Loin	Top Loin Steak	Dry
B	F	60	D	Beef	Loin	Top Loin Steak, Bnls	Dry
B	F	64	D	Beef	Loin	Top Sirloin Cap Steak, Bnls	Dry
B	F	63	D	Beef	Loin	Top Sirloin Steak, Bnls Cap Off	Dry
B	F	62	D	Beef	Loin	Top Sirloin Steak, Bnls	Dry
B	F	40	D	Beef	Loin	Tri Tip Roast	Dry
B	G	28	M	Beef	Plate	Short Ribs	Moist
B	G	54	D/M	Beef	Plate	Skirt steak, Bnls	D/M
B	H	22	D	Beef	Rib	Rib Roast	Dry
B	H	13	D	Beef	Rib	Ribeye Roast, Bnls	Dry
B	H	45	D	Beef	Rib	Ribeye Steak, Bnls	Dry
B	H	50	D	Beef	Rib	Ribeye Steak, Lip-On	Dry
B	I	08	D/M	Beef	Round	Bottom Round Roast	Dry/Moist
B	I	09	D/M	Beef	Round	Bottom Round Rump Roast	Dry/Moist
B	I	43	M	Beef	Round	Bottom Round Steak	Moist
B	I	14	D/M	Beef	Round	Eye Round Roast	Dry/Moist
B	I	46	D/M	Beef	Round	Eye Round Steak	Dry/Moist
B	I	51	M	Beef	Round	Round Steak	Moist
B	I	52	M	Beef	Round	Round Steak, Bnls	Moist
B	I	36	D/M	Beef	Round	Tip Roast – Cap Off	Dry/Moist
B	I	57	D	Beef	Round	Tip Steak – Cap Off	Dry
B	I	39	D	Beef	Round	Top Round Roast	Dry
B	I	61	D	Beef	Round	Top Round Steak	Dry
B	N	82	M	Beef	Various	Beef for Stew	Moist
B	N	83	D/M	Beef	Various	Cubed Steak	Dry/Moist
B	N	84	D	Beef	Various	Ground Beef	Dry
P	E	44	D/M	Pork	Ham/Leg	Pork Fresh Ham Center Slice	Dry/Moist
P	E	25	D/M	Pork	Ham/Leg	Pork Fresh ham Rump Portion	Dry/Moist
P	E	27	D/M	Pork	Ham/Leg	Pork Fresh ham Shank Portion	Dry/Moist
P	E	91	D	Pork	Ham/Leg	Smoked Ham, Bnls	Dry
P	E	90	D	Pork	Ham/Leg	Smoked Ham, Center Slice	Dry
P	E	96	D	Pork	Ham/Leg	Smoked Ham, Rump Portion	Dry
P	E	97	D	Pork	Ham/Leg	Smoked Ham, Shank Portion	Dry
P	E	32	D	Pork	Ham/Leg	Tip Roast, Bnls	Dry
P	E	38	D	Pork	Ham/Leg	Top Roast, Bnls	Dry
P	F	05	D/M	Pork	Loin	Back Ribs	Dry/Moist
P	F	66	D/M	Pork	Loin	Blade Chops	Dry/Moist
P	F	67	D/M	Pork	Loin	Blade Chops, Bnls	Dry/Moist
P	F	06	D/M	Pork	Loin	Blade Roast	Dry/Moist
P	F	68	D	Pork	Loin	Butterflied Chops Bnls	Dry
P	F	11	D	Pork	Loin	Center Loin Roast	Dry
P	F	12	D	Pork	Loin	Center Rib Roast	Dry

Species	Primal	Retail Cut	Cooking Method	Species	Primal	Retail Cut	Cooking Method
P	F	70	D	Pork	Loin	Loin Chops	Dry
P	F	71	D	Pork	Loin	Rib Chops	Dry
P	F	73	D	Pork	Loin	Sirloin Chops	Dry
P	F	53	D	Pork	Loin	Sirloin Cutlets	Dry
P	F	30	D	Pork	Loin	Sirloin Roast	Dry
P	F	93	D	Pork	Loin	Smoked Pork Loin Chop	Dry
P	F	95	D	Pork	Loin	Smoked Pork Loin Rib Chop	Dry
P	F	34	D	Pork	Loin	Tenderloin, Whole	Dry
P	F	74	D	Pork	Loin	Top Loin Chops	Dry
P	F	75	D	Pork	Loin	Top Loin Chops, Bnls	Dry
P	F	37	D	Pork	Loin	Top Loin Roast, Bnls	Dry
P	J	02	D/M	Pork	Shoulder	Arm Picnic, Whole	Dry/Moist
P	J	03	D/M	Pork	Shoulder	Arm Roast	Dry/Moist
P	J	41	D/M	Pork	Shoulder	Arm Steak	Dry/Moist
P	J	07	D/M	Pork	Shoulder	Blade Boston Roast	Dry/Moist
P	J	42	D/M	Pork	Shoulder	Blade Steak	Dry/Moist
P	J	94	D/M	Pork	Shoulder	Smoked Picnic, Whole	Dry/Moist
P	K	98	D	Pork	Side	Slab Bacon	Dry
P	K	99	D	Pork	Side	Sliced Bacon	Dry
P	K	17	M	Pork	Side/Belly	Fresh Side	Moist
P	L	32	D/M	Pork	Spareribs	Pork Spareribs	Dry/Moist
P	N	85	D	Pork	Various	Ground Pork	Dry
P	N	86	M	Pork	Various	Hock	Moist
P	N	83	D/M	Pork	Various	Pork Cubed steak	Dry/Moist
P	N	87	D	Pork	Various	Pork Sausage Links	Dry
P	N	87	D	Pork	Various	Sausage	Dry
P	N	92	M	Pork	Various	Smoked Pork Hock	Moist
P	N	69	D/M	Pork	Various	Country Style Ribs	Dry/Moist
L	A	24	D/M	Lamb	Breast	Ribs (Denver Style)	Dry/Moist
L	E	01	D	Lamb	Leg	American Style Roast	Dry
L	E	44	D	Lamb	Leg	Center Slice	Dry
L	E	16	D	Lamb	Leg	Frenched Style Roast	Dry
L	E	18	D	Lamb	Leg	Leg Roast, Bnls	Dry
L	E	73	D	Lamb	Leg	Sirloin Chops	Dry
L	E	31	D	Lamb	Leg	Sirloin Half	Dry
L	E	70	D	Lamb	Loin	Loin Chops	Dry
L	E	19	D	Lamb	Loin	Loin Roast	Dry
L	H	71	D	Lamb	Rib	Rib Chops	Dry
L	H	72	D	Lamb	Rib	Rib Chops Frenched	Dry
L	H	22	D	Lamb	Rib	Rib Roast	Dry
L	H	23	D	Lamb	Rib	Rib Roast, Frenched	Dry
L	J	65	D/M	Lamb	Shoulder	Arm Chops	Dry/Moist
L	J	66	D/M	Lamb	Shoulder	Blade Chops	Dry/Moist

Species	Primal	Retail Cut	Cooking Method	Species	Primal	Retail Cut	Cooking Method
L	J	33	D/M	Lamb	Shoulder	Square Cut	Dry/Moist
L	N	88	M	Lamb	Various	Shank	Moist
B	M	76	D/M	Beef	Variety	Heart	Dry/Moist
L	M	76	D/M	Lamb	Variety	Heart	Dry/Moist
P	M	76	D/M	Pork	Variety	Heart	Dry/Moist
B	M	77	D/M	Beef	Variety	Kidney	Dry/Moist
L	M	77	D/M	Lamb	Variety	Kidney	Dry/Moist
P	M	77	D/M	Pork	Variety	Kidney	Dry/Moist
B	M	78	D/M	Beef	Variety	Liver	Dry/Moist
L	M	78	D/M	Lamb	Variety	Liver	Dry/Moist
P	M	78	D/M	Pork	Variety	Liver	Dry/Moist
B	M	79	M	Beef	Variety	Oxtail	Moist
B	M	80	D/M	Beef	Variety	Tongue	Dry/Moist
L	M	80	D/M	Lamb	Variety	Tongue	Dry/Moist
P	M	80	D/M	Pork	Variety	Tongue	Dry/Moist
B	M	81	M	Beef	Variety	Tripe	Moist

Processed Meat Class Guidelines: Specifications for Evaluating Slice Bacon

DESCRIPTION:

The term “bacon” is used to describe the cured belly of a swine carcass. Sliced bacon describes slices of cured pork belly that are normally found in 12 oz. or larger vacuum packages in retail stores. The product entry should be judged as an entire package and the bacon slices should be uniform in length and shape. Firm, dry (but not overly dry) slices are desirable, while wet, oily slices are not desirable. The presence of purge or exudate (water in the package or excess on the product’s surface) suggests that the bacon slices were generated from a lower quality belly.

EVALUATION:

Sliced bacon should be evaluated by the following criteria:

***Fat-to-lean ratio:** The ideal fat-to-lean ratio of sliced bacon is approximately 50-55% lean and 45-50% fat. This is determined by averaging the fat vs. lean of several slices.*

***Lean and fat color:** The color of the lean portion of the bacon slices should be a desirable reddish-pink, cured color. The color should also be uniform among all muscles within each bacon slice, as well as among all of the bacon slices. A bright white fat is also desirable.*

***Physical defects:** Any signs of visual oiliness/greasiness should downgrade the bacon slices exhibit. Also, lean/fat separation, tiger-stripping (light colored vertical stripes observed perpendicular to the direction of the lean and fat), and shattering/cracking of fat is also considered a defect. Finally, bacon slices should be uniform in conformation. Rectangular shaped slices devoid of “v” or valley shaped regions are non-desirable.*

Processed Meat Class Guidelines: Specifications for Evaluating Frankfurters/Smoked Sausage

DESCRIPTION:

Frankfurters (Coarse Ground & Emulsified) and Small Diameter Smoked and Cooked Sausages are generally smoked, and the external appearance should be a golden, mahogany color.

The product entry should be judged as a whole, and links should be consistent in length and diameter. For natural and collagen casing products, the ends should not be excessively trimmed and/or there should not be excessive casing twists at the ends of the sausage. Smoke streaks and spots should be downgraded. The internal appearance is evaluated by cutting a link in half lengthwise to expose the interior of the sausage. Internal attributes should include a deep, reddish-pink, cured color with uniform particle size and ingredient distribution.

EVALUATION:

Frankfurters and Small Diameter Smoked and Cooked Sausages should be evaluated by the following criteria:

***External appearance:** The external appearance should be desirable. A golden, mahogany color should exist. The color should be uniform throughout each and all of the links. The links should be very uniform in shape and size (including diameter). If spices (such as a black pepper) or non-meat ingredients (e.g., cheese) are present on the surface, they should be uniformly dispersed throughout. Any noticeable defects (e.g. greasiness, pin-holes, wrinkles, touch-marks, etc.) should downgrade the exhibit.*

***Internal appearance:** The internal appearance should be desirable. For beef and/or pork sausages, a deep, reddish-pink cured color should exist. For poultry sausages, a light reddish-pink color is desired. The texture of the sausage should not be too dry or too wet. Too much connective tissue should be downgrade the exhibit. The lean and fat particle size should be uniform throughout the sausage. If spices/non-meat ingredients are visually present, they should be uniform in size and uniformly distributed throughout the sausage. Any air pockets, voids, unidentified objects (such as hard cartilage or bone) should downgrade the exhibit.*

Processed Meat Class Guidelines: Specifications for Evaluating Center-cut Ham Slices

DESCRIPTION:

Bone-in, center-cut ham slices are removed from the center section of bone-in hams. The cured and smoked center ham slice should be free of skin, bruises, blood clots and lymph glands. Ham slices should be approximately round and exhibit a cured and smoked appearance. The lean meat should possess a fine, smooth texture with a uniform and bright, reddish-pink color (a slightly two-toned or iridescent color is permissible). Excessive under-trimming or over-trimming of the ham slice for any reason is not desirable.

EVALUATION:

Bone-in, center-cut ham slices should be evaluated by the following criteria:

Cutability: *Ham slices with a great area of exposed lean, little external/internal fat, and a small amount of bone are desirable. For a smoked, cured ham, the center slice should display acceptable muscling as evaluated by the depth and width of the cushion and forecushion areas. Subcutaneous fat and intermuscular fat (“fat pockets”) should not be excessive. No more than 1/8 in. of subcutaneous fat should be present. The size of the bone should be included in the evaluation, as a larger bone is less desirable.*

Color: *A uniform dark, reddish-pink cured color should be observed on all muscle surfaces. This cured color should be uniform throughout the entire ham slice with as little color variation between muscles as possible.*

Physical defects: *“Blood splashing” (specks or spots of blood), uncured spots, “two-toning,” or “greening” should not be present on the exposed cut surface. The texture of the exposed cut surface should be smooth and fine. Coarse texture may be the result of using meat of carcasses from mature animals or from inadequate cooking. The cut surface should be firm and non-exudative with no separation of muscle groups. The pickle pocket should be as small as possible with the least amount of sinewy appearance.*