2024 Wisconsin State 4-H Meats Judging Contest

Preparation Packet

Coordinated by:
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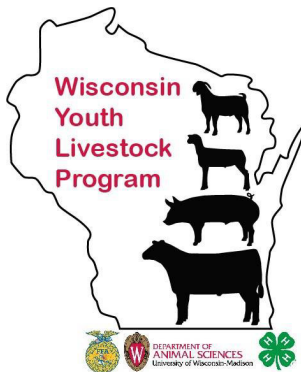Heather Hunt, MSABD Outreach Specialist
&
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https://4h.extension.wisc.edu/opportunities/statewide-events-and-opportunities/meats-judging-contest/

2024 WISCONSIN 4-H MEAT EVALUATION CONTEST

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Date: **Feb. 3, 2024 (Saturday)**
Check in – 8:30 - 9:00 a.m. – MSABD Lobby, 1933 Observatory Dr, Madison, WI 53706
Contest Orientation – 9:05 a.m.

Location: Meat Science & Animal Biologics Discovery Building (MSABD)
1933 Observatory Dr.
Madison, WI 53706

Cost: $14.00 per Contestant (Checks payable to: UW-Extension). Payment can be made by credit card during the registration process. Alternatively, payment may be made by check the day of the contest or sent prior to: WI 4-H, Attn: Meats Judging Contest, 432 N. Lake St., Rm 103, Madison, WI 53706. Credit card payments will not be available the day of the contest.

Deadline: Registration must be completed through 4-H online by January 20th and payment can be made the day of the contest or sent prior to: WI 4-H, Attn Meats Judging Contest, 432 N. Lake St., Rm 103 Madison, WI 53706

Parking: Best options for parking on the day of the event are Lots 36 and 39. You could also park in lot 67 but there is a fee to park in that lot. Please see the attached documents for a map with more information

Registration Location: Registration will occur near MSABD room 1111 (immediately to the right when entering the MSABD building, 1933 Observatory Drive. Entrance is on the north side of the building).

Lunch and Snacks: Teams will need to bring their own lunch, beverages, and snack items with them. There will be an opportunity to eat something after you are done with reasons (or for juniors after they are done hearing placings). There will not be enough time for participants to leave the building and come back during this time.

Eligibility: You must be a currently enrolled WI 4-H member to participate in this contest.
- Junior – Age 8-13 as of January 1, 2024. Youth must be in or completed 3rd grade, 8-year-old Cloverbuds **cannot** participate.
- Senior – Age 14-18 as of January 1, 2024. (Sr. team members cannot exceed grade 12 regardless of age)
- Grade 13 Members - WI 4-H members that are in the 13th grade are eligible to compete at this state contest as individuals but not as a member of a team.

Team Member Designation: For this contest only, we have received feedback that teams would like to designate which members are on a particular team. We are going to try it for this contest as a pilot. When you register your team, please designate who you would like on a certain team. That will make up that team for the contest. If you are registering more than one team of four people, you will need to complete the registration form for each team.

Special Contest Notes:
- Junior contestants will be given a copy of the "Beef Carcass Evaluation Worksheet," which they can use in the contest. This will assist junior members in learning about and applying beef yield and quality grades. Senior contestants cannot use the "Beef Carcass Evaluation Worksheet" in the contest.
- Special note: Remember Country Style Ribs are considered a Various Primal, NOT a Loin Primal.

Contestant Instruction:
- Participants must bring pencils and a clipboard.
- The MSABD program will provide everyone with hard hats, frocks, face covering, hairnets, and boot coverings. You should not bring these items to the contest. The costs ($2/contestant) for these will be added to the registration fee.
- The contest exhibits will be in refrigerated rooms (40°F) so dress accordingly. Think layers – winter coats, gloves, stocking hat, wool socks, etc.
- No jewelry, gum, tobacco, etc. is allowed in the MSABD contest areas. Footwear should be clean and warm. Open toed footwear (sandals) is not allowed.

Contest Registration:

Each coach will register their team(s) at: https://244Hmeatsjudging.4honline.com

- **Please note,** to register a team, you must be a currently enrolled 4-H volunteer. If you are participating as an individual member and not as a team, you will be able to register at that link as well.
- Registration must be completed by January 20th
- **You will need to register each team separately.**

How to register your team *(See link below for helpful screen shoots and more detailed instructions)*
1. Click on this link (same as the one above): https://244Hmeatsjudging.4honline.com
2. Click on the blue button in the lower right corner that says "Register."
3. Enter your email address and click on the Send Email button to get a link to log in emailed to you. If you are an existing family, make sure you use the same email address as your family login in 4-H Online.
4. Click on your name in the existing names – you will be able to enter team member names in later questions.
5. It will ask you what type of registration you want to do, if you are registering a county team, click on county registration. If you are registering as an individual without a team, click on individual registration.
6. You will go through the questions to register the team.
7. On the Payment screen, if paying by Credit Card is enabled for the event, you will be able to enter credit card information or you can click on Pay by Check (checks are sent ahead of time or brought to the contest). You will only be able to pay with a credit card during this process and not the day of the event. If paying by check, click on that button. Then, click on the next button.
8. You will receive a confirmation email.
9. If you have a second team to register, you will complete this same process.

Registration help guide: https://4h.extension.wisc.edu/files/2023/10/4HOnline.v2.Participant.Event_.Registration.Guide-public.pdf

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PPE: The MSABD program will provide everyone with hard hats, frocks, face covering, hairnets, and boot coverings. You should not bring these items to the contest. The costs for these will be added to the registration fee.

PPE Registration Number Estimate: https://forms.gle/g1gjgpyvBYUmDd5W8
Please complete the pre-registration by January 20th. We need to order the PPE for the meats contest at the beginning of February to ensure that we have enough for everyone for the contest in April. Please fill out the estimated number of total youth and adults that will be coming from your county to the contest. Please estimate on the higher end - it is better to order too much than not enough. This is only an estimate, and we know that this number may change before the final registration. The cost per person for PPE is $2.00 but that has been included in the overall program cost.

Contact Jill Jorgensen in the State 4-H Office with any registration questions jill.jorgensen@wisc.edu or (920)391-4659.

Contest Classes (Tentative & Subject to Change):

Class 1: Beef Carcass Ranking
      -5 questions (1-5)
      -Written Exam section

Class 2: Pork Carcass Ranking
      -5 questions (6-10)
      -Written Exam section

Class 3: Beef Wholesale/Primal-Subprimal Ranking (Beef Ribs, Beef Rounds, Beef Short Loins, Beef Strip Loins,)
      -5 questions (11-15)
      -Written Exam section

Class 4: Pork Wholesale/Primal-Subprimal Ranking (Pork Fresh Hams, Pork Shoulder, Boston Butts, or Pork Loins)
      -5 questions (16-20)
      -Written Exam section

Class 5: Lamb Retail Cut Ranking*
      -5 questions (21-25)
      -Written Exam section

Class 6: Beef Retail Cut Ranking*
      -5 questions (26-30)
      -Written Exam section

Class 7: Pork Retail Cut Ranking*
      -Retail Cuts 1- 4

NEW Class 8: Processed Meat Retail Cut Ranking*
      -Retail Cuts 1- 4

*Classes 5-8 may have placing questions or be a placing class only

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Class 9: Beef Carcass Yield and Quality Grading
      -Carcasses 5
      -final yield grades entered to the nearest one-tenth of a grade

Class 10: Retail Cut ID-1 (Jr. & Sr.)
      -Retail Cuts 1-10
      -Seniors: identify species, primal, retail cut, and cooking method
      -Juniors: identify species and retail cut

Class 11: Retail Cut ID-2 (Jr. & Sr.)
      -Retail Cuts 11-20
      -Seniors: identify species, primal, retail cut, and cooking method
      -Juniors: identify species and retail cut

Class 12: Retail Cut ID-3 (Sr. only) or Processed Meat Retail ID (Jr. only)
      -Retail Cuts 21-30
      -Seniors: identify species, primal, retail cut, and cooking method
      -Juniors: identify processed meat cuts

Class 13: Reasons #1
      -Seniors only

Class 14: Reasons #2
      -Seniors only

Tentative Classes and Tentative Points:

Beef Carcass Grading -- Quality and Yield Grading (5 carcasses - 100 points)
Junior contestants may use the Beef Carcass Evaluation Worksheet in the contest
8 total placing classes will be offered from these options.

- **Beef Carcass Ranking**   (50 points/each)
- **Pork Carcass Ranking**   "
- **Wholesale/Primal-Subprimal Beef Ranking***   likely ribs or loins
- **Wholesale/Primal-Subprimal Pork Ranking****   likely hams or loins
- **Lamb Retail Cut Ranking**   "
- **Beef Retail Cut Ranking**   "
  - Yield and quality ranking based on graduated rank with correct answer
- **Pork Retail Cut Ranking**   "
- **Processed Meat Retail Ranking**   "
- **Retail Cut Identification (SR) - 30 cuts worth 7 points each**
  - (*1 pt species, 2 pts primal, 3 pts retail, 1 pt cookery*)
- **Retail Cut Identification (JR) - 20 cuts worth 4 points each**
  - (*1 pt species, 3 pts retail)*
- **Processed Meat Product Identification (JR)** - 10 products worth 5 points each
- **Reasons** – 2 classes for Seniors only (100 points)

*Beef Ribs, Beef Rounds, Beef Short Loins, Beef Strip Loins,
**Pork Fresh Hams, Pork Shoulder Boston Butts, or Pork Loins

Seniors will be required to answer 5 questions for each ranking class. The 5 questions will be worth a total of 25 points (5 points each). Seniors will be required to also identify the wholesale cuts from which the retail ID cuts were produced, as well as cookery.

Recognition: Individual and Team scores will be tabulated and announced. Ribbons will be provided for the top 10 individuals, and awards for the top two individuals, in both the junior and senior divisions.

The top team in the senior division will have the following opportunities for national contest competition.

1. National 4-H Meat Judging Contest at Kansas State University/American Royal (Nationally recognized 4-H contest - participation here ends the career of a meats judger in the youth division),

OR

2. National Western, Denver, CO.

The Wisconsin 4–H Foundation partially supports the top two teams with a monetary allocation. The top ranking team has the opportunity to first select the contest they want to attend, with next place teams following suit. Both state 4-H program and national contest rules eligibility rules apply. You must be a currently enrolled WI 4-H member at the time of the contest.

Additional Meats Resources

Flash Cards

Retail Meat Cut Identification-Flash Card Set (updated 2023)
As of December 2023, the only flashcards that are available are at https://intelliprep.com/ffa/ . It looks to be digital only.

Online Web Resources

QUIZZLET– online tool with a variety of resources: FLASH CARDS:
https://quizlet.com/ - use key words to search for sets. These are tools that people have uploaded to the site; they may or may not be accurate.

ICEV Media – Great listing of online tools/judging classes
https://www.icevonline.com

Texas A&M – Listing of relevant meats judging contacts
http://agrilife.org/4hmeat/academics/meat-science/4h/resources/

Texas A&M Meat Judging Online Judging Tools
http://agrilife.org/4hmeat/academics/meat-science/4h/meat-judging/

American Meat Science Association
https://meatscience.org/students/meat-judging-program/meat-judging-resources

Online Meats Identification and Placing Classes
Texas A&M University Aggie Meat Judging Resources
https://agrilife.org/4hmeat/

Texas Tech University Meat Judging Resources
http://www.depts.ttu.edu/meatscience/classes.php

University of Nebraska–Lincoln Meats Judging Resources
https://animalscience.unl.edu/meat-cut-identification
https://bovine.unl.edu/ - Beef Myology
https://porcine.unl.edu/ - Pork Myology

Reasons Resources

Bernie O'Rourke, Extension Youth Livestock Specialist

UW Madison, Animal & Dairy Sciences Department

Note taking:

A good judge can visualize a class in their mind. In contests, several classes are judged and there isn't a lot of time to memorize the class, that is why it is important to take notes. Notes are used to study before you give oral reasons to the judge and should not be read to the reasons taker. Notes should help you recall and then try to remake a mental picture of the class while giving reasons. Take short, simple notes and form a habit of using terms you can easily make comparisons. List the main points first for each pair, then add details. A 6X9 steno notebook is suggested for using in taking reasons notes. Divide the page into equal section as shown below.

NOTE: T = Trimness   M= Muscling   Q= Quality

1	2	3	4
Opening statement		First place Faults	
/		/	
T		T	
M		M	
Q		Q	
/		/	
T		T	
M		M	
Q		Q	
/		/	
T		T	
M		M	
Q		Q	
/	Why bottom?		

Beef Carcasses

Trimness
- Less fat over the (rib eye, lower rib, round, sirloin, loin, loin edge, rib, chuck, round collar, flank, plate, or brisket) ·
- Less cod or udder fat
- Less internal fat (kidney, pelvic, and heart fat)

Muscling
- Larger, more symmetrical rib eye
- Longer, thicker, wider, plumper-cushioned round
- Longer, more bulging round
- More muscular round
- Thicker sirloin
- More prominent sirloin
- Fuller, thicker loin
- Plumper rib
- Thicker chuck
- More bulging chuck
- More muscular

Quality
- Higher degree of finer marbling
- Greater amount of marbling
- Finer, more evenly distributed marbling
- Brighter cherry red rib eye
- More youthful cherry red rib eye
- Finer textured rib eye
- Whiter external fat covering
- More youthful bone

Cutout Phrases
- Higher percent of boneless, closely trimmed retail cuts
- Higher percent of boneless, closely trimmed steak and roast meat

Criticisms
- Revealed a small, soft, dark-colored, coarse-textured rib eye
- A thinly muscled, tapering round
- Lower percent of boneless, closely trimmed retail cuts
- Lower percent of boneless, closely trimmed steak and roast meat

- The fattest, wastiest, lightest-muscled carcass in the class
- Combined trimness and muscling to the lowest degree
- Would yield the lowest percentage of boneless, closely trimmed retail cuts
- Lowest-yielding carcass
- Excess fat over the round, loin, rib, rib eye, and chuck
- Combined quality, trimness, and muscling to the lowest degree
- Would yield retail cuts with the lowest merchandising value

Beef Ribs

Trimness
- Less fat over the (rib eye, lower rib, back, lower blade, blade face, or rib ends)
- Less seam fat in the blade face
- Less lip region fat

Muscling
- Larger rib eye
- More symmetrical rib eye
- Fuller, wider back
- Deeper, wider blade face
- Meatier (greater area of exposed lean) blade face
- Greater area of exposed lean in the blade face
- Larger eye in the blade face

Quality
- Higher degree of finer marbling in the rib eye
- Greater amount of marbling in the rib eye
- Finer, more evenly dispersed marbling in the rib eye
- More evenly distributed marbling in the rib eye
- Greater amount of marbling in the blade face
- Brighter cherry red rib eye and blade face
- More youthful cherry red blade face
- Firmer, finer textured rib eye and blade face
- Less ossification in the thoracic buttons

Cutout Phrases
- A greater amount or a higher percentage of boneless, closely trimmed retail cuts
- A higher cutout value

- A higher percentage of steaks and roasts
- Higher percent of trimmed steak and roast meat
- A higher lean-to-fat ratio

Quality Phrases
- Would yield retail cuts with a higher merchandising value
- Would yield steaks and roasts with a higher merchandising value
- Would yield retail cuts with a higher consumer appeal
- Would yield steaks and roasts with a higher consumer appeal

Beef Loins

Trimness
- Less fat over the (loin eye, loin edge, flank edge, sirloin-shortloin region, sirloin, or sirloin face [top sirloin, bottom sirloin])
- Less tail region fat
- Less seam fat in the sirloin face
- Less kidney fat (if observable)
- Less pelvic fat

Muscling
- Larger loin eye
- More symmetrical loin eye
- Fuller, wider short loin (back)
- More prominent sirloin
- Deeper, wider sirloin face
- Meatier sirloin face
- Larger top sirloin
- Larger bottom sirloin
- Greater area of exposed lean in the sirloin face

Quality
- A firmer, finer-textured loin eye and sirloin face
- A brighter cherry red loin eye and sirloin face
- A higher degree of marbling in the loin eye
- A greater degree of marbling in the loin eye and sirloin face
- Finer, more evenly distributed marbling in the loin eye and sirloin face

Cutout Phrases
- Higher percentage of boneless, closely trimmed steaks
- Higher percent of boneless, closely trimmed retail cuts

Beef Shortloins

Trimness
- Less fat over the (loin eye, loin edge, flank edge, back [strip loin], sirloin face, or top loin)

- Less kidney fat
- Less seam fat in the sirloin face
- Less tail region fat

Muscling
- Larger loin eye
- More symmetrical loin eye
- Deeper, wider sirloin face
- Meatier sirloin face
- Greater area of exposed lean in the sirloin face
- Larger top loin
- Larger tenderloin
- Deeper lumbar vertebrae

Quality
- Higher degree of finer marbling in the loin eye
- A greater amount of marbling in the sirloin face
- A firmer, finer-textured loin eye and sirloin face
- A brighter cherry red loin eye and sirloin face

Criticisms
- The lowest quality shortloin in the class with an insufficient amount of marbling to grade Choice
- The darkest, coarsest textured lean in both the loin eye and the sirloin face
- Combined quality and cutability to the lowest degree
- The fattest, wastiest shortloin in the class with the lowest cutout value
- Would yield the lowest merchandising value

Beef Rounds

Trimness
- Less fat over the (round face [rump and tip or knuckle], flank side, cushion, or heel)
- Less cod fat (never udder fat)
- Less seam fat in the round face
- Less pelvic fat

Muscling
- Deeper, wider round face
- Meatier round face
- More area of exposed lean in the round face
- Larger rump face
- Larger knuckle face
- Deeper, wider cushion
- Plumper cushion
- More bulging cushion
- Fuller heel

Quality
- Greater amount of marbling in the round face
- Greater amount of marbling in the rump or knuckle face
- Firmer, finer-textured round face
- Brighter cherry red round face

CutoutPhrase
- Higher percent of trimmed retail cuts
- Higher percent of trimmed steak and roast meat
- Higher muscle-to-bone ratio

Pork Carcasses

Trimness
- Less fat opposite the first rib, last rib, and last lumbar vertebra
- Less fat over the collar, in the belly pocket, along the navel edge, over the sternum, along the ventral side, in the clear plate, over the center loin
- Less fat opposite the loin eye and over the lower rib
- A trimmer carcass from end to end
- A higher lean-to-fat ratio

Muscling
- Heavier-muscled carcass
- Plumper-cushioned, heavier-muscled ham
- Heavier-muscled (or more muscular) ham, sirloin, loin, and shoulder
- More muscular ham with a meatier heel and shorter shank
- Fuller-fleshed, deeper-chined loin
- Fuller-fleshed, more-bulging sirloin
- Wider, more bulging shoulder
- Plumper-cushioned ham
- Larger loin eye

Quality
- Greater amount or higher degree of feathering between the ribs
- Greater amount or higher degree of fat streaking in the exposed lumbar lean
- More desirable reddish pink color of belly lean or lumbar lean
- Higher degree of marbling, coupled with a firmer, finer-textured, more reddish pink color of lean in the loin eye

Cutout Phrases
- Higher lean-to-fat ratio
- Higher percent on bone-in, closely trimmed four lean cuts
- Higher percentage of closely trimmed retail cuts from the ham, loin, Boston butt, and picnic

- Higher percentage of bone-in, closely trimmed edible portion
- Higher percentage of bone-in, closely trimmed four lean cuts

Criticisms
- Fattest, wastiest, lowest-yielding carcass
- Lowest lean to fat ratio
- Lower percent on bone-in, closely trimmed four lean cuts
- Lightest muscled
- Excess trimmable fat
- Combined muscling and trimness to the lowest degree
- Yield the lowest percentage of boneless, closely trimmed retail cuts from the ham, loin, Boston butt, and picnic

Fresh Hams

Trimness
- Less fat beneath the butt face, alongside the butt face, over the collar, over the forecushion, over the center section, over the cushion
- Less seam fat in the butt face
- Less fat extending from the butt face to the cushion, over the collar and forecushion
- A higher lean-to-fat ratio

Muscling
- Heavier-muscled ham
- Longer, wider, deeper center section
- More bulging cushion and meatier forecushion
- Larger area of exposed lean in the butt face
- Deeper, wider butt face

Quality
- Firmer, more uniformly colored lean
- More reddish pink color of lean in the cut surface
- Higher degree of marbling in the butt face
- Firmer lean with less muscle separation

Cutout Phrases
- Higher percent of trimmed retail cuts
- Higher percent of bone-in, closely trimmed center cut slices
- Higher percent of bone-in, closely trimmed edible portion
- Higher lean-to-fat ratio
- Higher lean-to-bone ratio

Criticisms
- Fattest
- Wastiest
- Lowest yielding

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-ounce or larger vacuum wrapped 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 to 55 percent lean and 45 to 50 percent 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 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-striping (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.