



**ND FFA Association**

**MEATS EVALUATION &  
TECHNOLOGY**

**CDE Handbook**

## Purpose

In the Meats Evaluation & Technology CDE, students develop the skills needed for careers in the meat animal industry.

## Objectives

- a. Develop employment skills for students who are interested in a career in the meat industry.
- b. Become knowledgeable consumers of meat animal products.
- c. Develop analytical skills, critical thinking strategies, and an understanding of appropriate meat terminology.

## Rules

- a. Each chapter may enter up to five participants.
- b. Participants must come prepared to work in a cold storage room for approximately two hours.
- c. Individuals may be expected to wear protective clothing including hard hats and white frocks, which may or may not be furnished. Individuals will be provided with hairnets to be worn under the cap.
- d. Two number-two lead pencils are required to mark scan sheets.
- e. Clipboards are encouraged but must be clean and free of markings.
- f. Clean paper - free of notes - will be allowed for use during the event.
- g. Pocket calculators that are battery operated, non-programmable and silent may be used.
- h. Individuals and official judges are to make their placings and identifications without handling the meat.
- i. No conversation will be allowed between participants after the event begins.
- j. Participants shall not use any mechanical or instructional aide, such as a tape measure, ruler, light, grid, gauge, chart etc. in arriving at a decision.

## Awards

- a. Individual
  1. Individual scores will be tabulated (and do not include the team activity) and broken into gold, silver, and bronze award areas.

2. Individual ties will not be broken.
3. The high individual receives the “baby bison” trophy and a \$250 stipend.

**b. Team**

1. Team scores will be tabulated by adding the top three member scores and the team activity. They will be broken into gold, silver, and bronze.
2. The high team shall be eligible to represent North Dakota in the National FFA career development event. The high team receives the traveling trophy and travel stipends from ND FFA Foundation to participate in the National Event.
3. Team Tie Breakers: 1) Team Meat ID Score; 2) Team Quality & Yield Score; 3) Written Test Team Score.

## **Format**

**a. Six meat classes will be selected to be placed and may include:**

- Class of four beef carcasses;
  - Class of four wholesale cuts of beef;
  - Class of four pork carcasses;
  - Class of wholesale pork cuts;
  - One or two classes of four retail cuts. (beef, pork or lamb).
1. FFA Meat Evaluation Form #480-4 will be used.
  2. Ten minutes will be allowed to place each class.
  3. Fifty (50) points for each class

**b. Meat class questions**

1. The 6 meat placing classes selected in Section a. will be placed by the student and then 10 total questions will be asked covering two (2) of these classes.
2. Five (5) points is allowed for each question for a total of 50 points.
3. Sample question: Which beef carcass had the highest % of kidney, pelvic, and heart fat? The student will respond by writing a 1, 2, 3, or 4 on an answer card, which will be provided.

### **c. Retail Meat Cut ID**

1. Students will identify 40 retail cuts of meat.
2. They will be given 40 minutes to identify the cuts according to the Meat Identification Card.
3. The Species, Primal Cut, Retail Cuts, and Cookery Method for each sample must be identified using the numerical system on this Identification Card.
4. Students will be given 1 point for correct species identification, 1 point for correct primal cut identification, 3 points for correct retail cut identification, and 1 point for correct cookery- 240 points total.

### **d. Quality and Yield Grade**

1. Participants will quality and yield grade three to six beef carcasses.
2. Twenty (20) minutes will be allowed for this portion of the event.
3. Students will give each carcass a quality grade, based on marbling and maturity, using the letters as explained on the "Beef Carcass Grading Card".
4. Participants must also give each carcass a yield grade score, using the letters shown on the grading card and based on USDA grading standards as explained in the National Career Development Events Guide.
5. This portion is worth 60 to 120 points (depending on number of carcasses).

### **e. Written Test**

1. Each participant will be given a written test relating to meat storage and handling, cookery, nutrition, food safety (HACCP principles, bio-security and personal safety), animal welfare and animal identification systems.
2. Questions could include multiple choice, true/false or situation-based questions.
3. Maximum points possible on the exam is 75 points.
4. All questions will be based on materials taken from the "Meat Science and Food Safety" DVD available through CEV Multimedia as listed on the resource material list. See specific DVD chapters to be used each year below:

Even Years: Meat Storage and Handling, Meat Cookery, Processed Meats and Food Safety

Odd Years: Legislation and History, Animal Care and Handling, Meat Nutrition, Purchasing Meat

#### **f. Meat Formulation**

1. Each student will be given a situational problem involving the least cost formulation of a batch of particular meat products (hamburger, wiener, bologna, etc.).
2. Multiple-choice answers will be provided for each of the 8 questions and a solution will be determined.
3. This section is worth 50 points.

#### **g. Team Activity-Value Based Pricing**

1. Value based pricing class (beef, pork, or lamb)
2. As a team you will review a grid pricing sheet given by the officials. Team members are to evaluate, communicate and reach a conclusion on the correct placing of the class based on the value of the carcasses or wholesale/primal cuts.
3. Refer to the National FFA Meats Evaluation CDE handbook for further information. (Pages 16-Team Practicum Example #4, 5 (individual value-based pricing information), and 25-27.)

## **Timing**

1. Timing is at the discretion of the contest superintendent.
2. Time limits for rotations recommendation:
  - a. Placing Classes: 10 minutes
  - b. Quality & Yield Grading: 10 minutes
  - c. Retail Cut Identification: 10 minutes
    - i. 40 retail cuts, 10 cuts per rotation, 10 minutes per rotation
  - d. Written Test: 15 minutes
  - e. Meat Formulation: 15 minutes
  - f. Team Event: 15 minutes

## Resources

a. For information see the National Career Development Events Handbook.

## Scoring

<b>Activities</b>	<b>Individual points</b>	<b>Team Points</b>
Written Test	75	225
Meat Formulation	50	150
Meat ID	240	720
Quality & Yield Grading	60-120	180-360
Placing of classes	300	900
Questions on placing classes	50	150
Team Activity		50
<b>Total Points</b>	<b>775-835</b>	<b>2375-2555</b>