

Indiana 4-H/FFA Milk Quality and Products CDE

I. Objectives

Purpose: One of the universal measurements of milk quality is examining its unique flavor characteristic. Through tasting milk, one can determine whether it has been collected under acceptable conditions, has been mishandled, or if it has been improperly stored. Flavor, texture and appearance of dairy products, likewise, can tell one about the quality of their composition and processing conditions. The purpose of this program is to train the individual to judge those product appearances, textures and flavors that reflect some production, processing, or handling condition which has influenced the quality of the finished dairy product. On the other hand, these same characteristics can prove quite helpful in the identification of various cheeses and the evaluation of their respective quality. Thus, the learning objectives for this program are:

1. To learn about the marketing aspects of dairy products;
2. Product identification (cheese);
3. Evaluating and identifying dairy product defects based on flavor, texture and appearance attributes.
4. The familiarizing of the student with processing, handling and storage practices that affect dairy product quality; and
5. To acquaint the student with techniques in evaluating dairy food products.

II. Implementation and Program Schedule

A. State Contest

- a. This contest is open to any eligible 4-H or FFA individual or team. Pre-registration is required.
- b. A team will consist of 3 or 4 members with the highest 3 individual scores making up the team score.
- c. Allergy Information: Food products used in this event may contain or come in contact with potential allergens. Coaches must notify the contest coordinator when submitting registration forms of any participant with a lactose, dairy, or other allergy that could prevent a youth from participating in this CDE. The contest coordinator will make reasonable accommodations for students with food allergies.
- d. A single sheet scantron scoring system answer sheet will be used. Refer to [https://extension.purdue.edu/4h/Pages/Career%20Development%20Events/Milk Quality And Products CDE.aspx](https://extension.purdue.edu/4h/Pages/Career%20Development%20Events/Milk%20Quality%20And%20Products%20CDE.aspx) for a sample card and instructions.
- e. Plaques will be awarded to the top five teams and individuals in each division.

III. State Contest Classes (Junior and Senior Contest)

1. Contestants will have 10 minutes to complete each class in a timed group rotation schedule.
2. Contest classes will be:
 - a. Milk Flavor Identification and Intensity – ten milk samples, junior contestants will only identify flavors
 - b. Cheese Identification and Characteristics – ten cheese samples and six characteristics, junior contestants will only identify cheese
 - c. Product Identification – ten dairy and non-dairy samples, the natural/imitation answer sheet section will not need to be completed
 - d. Written Exam – 60 multiple choice questions (Part 1, 30 milk production and, Part 2, 30 milk marketing)
 - e. Problem Solving – 20 multiple choice questions
 - f. California Mastitis Test – five milk samples, contestants will perform each test with adult supervision
3. Ties will be broken in the following order:
 - Highest milk flavor identification score
 - Highest cheese identification score
 - Highest product identification score
 - Highest problem solving score
 - Highest CMT score
 - Highest written exam score

IV. Class Descriptions

Refer to National FFA Milk Quality and Product 2017-2021 for a description of classes and scoring.

V. Resources

Refer to National FFA Milk Quality and Product 2017-2021 and the Indiana 4-H/FFA CDE web site at <https://extension.purdue.edu/4h/Pages/CDE.aspx>.