

# **MILK QUALITY PRODUCTS**

## **3 or 4 Member Team**

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### **I. PURPOSE**

The focus of this career development event is enhancing instruction related to milk quality, federal milk marketing, attributes of milk products and substitutes for them. Students apply critical thinking and decision-making skills.

### **II. EVENT FORMAT**

#### **A. Team Make-up**

Three or four individuals per school form a team. All members will be scored and the top three scores will count towards the team total.

#### **B. Equipment**

Team members must provide their own compliant clipboard and/or clean folder with the following items: scan sheet, and/or copy of the scan sheet, optional Texas FFA CDE drop sheet, and/or 2 sheets of lined or unlined blank paper.

#### **C. Event Schedule**

Each contestant shall complete a specific portion of the event in the time allotted:

1. Milk flavor and evaluation must be completed in 40 minutes.
2. Identification of cheeses must be completed in 20 minutes.
3. Problem solving allotted must be completed in 20 minutes.
4. The examination must be completed in 20 minutes.
5. Identification of natural and imitation products must be completed in 20 minutes.

#### **D. Milk Flavor Identification and Evaluation (150 points)**

1. Contestants shall score 10 samples on taste and odor.
2. Contestants shall score each sample using whole numbers from one to 10 (See scoring guide in References).
3. 10 points will be awarded for each correctly scored sample (100 points total), one point will be deducted for each space the sample is placed away from the official flavor score.
4. Milk samples will be 60 degrees F.
5. All samples of milk will be prepared from pasteurized milk intended for table use.
6. Five points awarded for each defect correctly identified. (50 points).
7. Only the one most serious defect should be marked. If no defect is noted, mark "No Defect".
8. Water, Apples or apple juice will be allowed for taste-bud refreshing.

#### **E. Identification of Cheeses (50 points)**

1. Contestants shall identify 10 cheese samples from the reference list.
2. Five points awarded for each sample correctly identified.
3. Uncolored cheeses may be used.
4. Cubes of the cheeses will be available for tasting.
5. Apples or apple juice will be allowed for taste-bud refreshing.

#### **F. Identification of Natural Dairy & Imitation Dairy Food/Products (50 points)**

1. Contestants shall identify 10 samples.

- Standards for what constitutes natural & imitation dairy are similar to USDA and FDA Standards of Identity and Grading: If the first ingredient listed is not milk or a dairy cream product, it is considered an imitation dairy product.
- Four points awarded for each sample correctly identified. One point will be awarded for correctly identifying the fat content.
- Dairy and/or non-dairy food products will be selected from ID List.

#### **G. Written Exam (50 points)**

- Contestants shall complete a 25 question multiple choice exam.
- Exam questions are available for download via the Texas FFA Association website at [www.texasffa.org](http://www.texasffa.org). Question edits will be complete by October 1, and be posted by October 5.
- Two points awarded for each question answered correctly.

#### **H. Problem Solving (Math Calculations)- Addition & Revision**

- Include 5 questions that are worth 5 points each.
- Examples are to be uploaded to Judging Card and given at workshops.
- Non-programmable calculators may be used.

### **III. SCORING**

Milk Flavor Identification & Evaluation	150 points
Identification of Cheeses	50 points
Identification of Natural vs. Imitation	50 points
Problem Solving	25 points
Written Exam	50 points
<b>TOTAL INDIVIDUAL POINTS</b>	<b>325 points</b>
<b>TOTAL TEAM POINTS</b>	<b>975 points</b>

### **IV. TIEBREAKERS**

Ties for team awards:

- The team making the highest score on the milk flavor will win.
- If still tied, the team making the highest score on the identification of cheeses will win.
- If still tied, the team making the highest score on the identification of Dairy & Non Dairy will win.
- If still tied, the team with the highest alternate score will win.
- If still tied, the teams will be accompanied by their advisor and will meet with contest officials who will conduct a coin toss to determine the higher placing team.

Ties for individual awards:

- The individual making the highest score on the milk flavor will win.
- If still tied, the individual making the highest score on the identification of cheeses will win.
- If still tied, the individual making the highest score on the identification of Dairy & Non Dairy will win.

4. If still tied, the individuals will be accompanied by their advisor and will meet with contest officials who will conduct a coin toss to determine the higher placing individual.

## **V. REFERENCES**

### **Materials Available from IMS: Printed**

#### **Material:**

0409 Judging and Scoring Milk and Cheese, USDA

4035 Dairy Foods Evaluation Handbook, IMS

#### **Downloadable Resources**

Exam questions are available for download via the Texas FFA Association website at <http://www.texasffa.org>, posted on the page related to this event.

## **SCORING GUIDE**

Scores may range from 1 to 10. On a quality basis:

10 Excellent (*no defect*)

8 to 9 Good

5 to 7 Fair

2 to 4 Poor

1 Unacceptable/ Un-salable

## **MILK FLAVOR SCORES\***

*DEFECTS Slight Definite Pronounced*

Acid 3 2 1

Bitter 5 3 1

Feed 9 8 5

Flat/Watery 9 8 7

Garlic/Onion 5 3 1

Malty 5 3 1

Oxidized 6 4 1

Rancid 4 2 1

Salty 8 6 4

\*Suggested scores are given for three intensities of flavor. All numbers within the range may be used. Intermediate numbers may also be used; for example, a bitter sample of milk may score 4.

## **STATE CHEESE LIST**

Bleu

Brie

Cheddar (mild)

Cheddar (sharp)

Cream/Neufchatel

Edam/Gouda

Monterey Jack

Mozzarella

Processed American

Provolone

## Swiss

Dairy Products: nonfat (skim) milk (.05% - .5%), lowfat milk or reduced fat milk (1% - 2%), milk (3.25%), half and half (10.5%), butter (80%), sour cream (18%), flavored milk (.05% - 3.25%) light whipped cream (30%), heavy cream (36%)

Non-Dairy Products: Margarine, non-dairy creamer, non-dairy sour cream, non-dairy milk, non-dairy flavored beverage and non-dairy whipped topping all of these are to be categorized as non-dairy fat. Almond non-dairy drink may not be used.