

**IOWA FFA DAIRY FOODS
CAREER DEVELOPMENT EVENT**

PERSONNEL

Dr. William LaGrange, Prof. In Food Tech. & Ext. Food Scientist, ISU, AmesCDE Coordinator
Tammy Schneiders, Manchester..... CDE Chairperson

EVENT OBJECTIVES

1. To develop abilities to utilize knowledge of high quality milk, its production and marketing.
 - a. Milk Production – (1) Regulations; (2) Grades and classes of milk.
 - b. Cooling Milk
 - c. Developing Marketing and Marketing Concepts – (1) Trends, (2) Economics, (3) Supply and demand.
 - d. Federal Milk Marketing Orders, Economics, and Distribution – (1) Transportation; (2) Cooperatives; (3) Pricing.
 - e. Off Flavors of Milk
2. Develop abilities to utilize knowledge of the composition and quality characteristics of milk.
 - a. Nonfat Solid Portion
 - b. Milkfat
 - c. Adulterants, Including Water
3. Be able to utilize selected skills to identify cheese varieties.
4. Be able to utilize selected skills in evaluating the flavor quality of milk.
5. Be able to utilize selected skills to differentiate dairy products from non-dairy products (imitations and substitutes).

GENERAL RULES

1. Each chapter shall enter a team composed of three or four participants with the top three scores counting for the team score. Team members must all be members of the same FFA chapter.
2. Each participant will participate in all phases of the event.
3. Participants and FFA advisors shall report to the registration desk at the North Fayette High School by 7:30 a.m. or before on event day.
4. The scoring method has been changed to positive scoring. The team/individual with the highest total points will be the winner. Score cards reflect this change.
5. The event will consist of four parts:
 - Part I (30 minutes)
Thirty (30) objective-type questions on milk production and marketing.
 - Part II (20 minutes)
Analyze and interpret information from Milk Facts on two or more visuals (charts or graphs) to answer 10 multiple choice questions worth two points each.
 - Part III (25 minutes)
Ten (10) milk samples to be evaluated on flavor and flavor intensity.
 - Part IV (25 minutes)
 - a. Ten (10) identification samples of real and artificial dairy foods/products to be identified by appearance, taste and/or odor.

- b. Ten (10) cheese samples to be identified by appearance, taste and/or odor. (Small cubes and a slice will be displayed.)
6. There may be a repeat of samples within an event activity – milk samples, real and artificial dairy foods/products, and cheese identification.
 7. Answer sheets, worksheets, and other materials will be furnished for each event phase.
 8. Utensils for sampling will be provided—cups, spoons, etc. Participants may not provide their own utensils.
 9. Exhibits will be left in place following the event so that FFA chapter advisors and others can view exhibits and take pictures.

EVENT ACTIVITIES

1. Thirty (30) objective-type questions on milk processing and marketing. Questions are worth one point each.
2. Ten (10) milk samples will be scored.
 - a. Prior to the event, the event official will provide one no-defect sample of milk to each participant.
 - b. All samples of milk are prepared from pasteurized milk intended for table use.
 - c. Milk flavors for this event are:

Bitter	Garlic/Onion	Rancid
Feed	High Acid	Salty
Flat/Watery	Malty	No Defect
Foreign	Metallic/Oxidized	
 - d. After identifying the flavor/odor of the milk sample:
 - (1) Check (x) the one most serious defect in the sample even if more than one flavor or odor is detected. If no defect is noted, check “No Defect.”
 - (2) Check only one intensity level for each sample. The intensity level for “No Defect” shall be scored “Pronounced.” Check (x) Pronounced for samples with no defect.
3. Analyze and interpret information from Milk Facts:
 - a. Factors impacting the supply of and demand for milk and dairy foods/products.
 - b. Nutritional value of dairy foods/products and their role in the diet.
 - c. Information relative to the processing and marketing of milk and dairy foods/products.
- *4. Identification of dairy foods/products and substitutes listed on answer sheet. Participants will have an opportunity to see and taste samples.

a. Butter	h. Margarine	o. Chocolate milk
b. Whipped cream	i. Whipped non-dairy topping	p. Yogurt (plain)
c. Half and half	j. Coffee whitener	q. Cottage Cheese
d. Process American Cheese	k. Process imitation cheese	
e. Sour Cream	l. Low fat sour cream	
f. Frozen yogurt dessert (vanilla)	m. No fat ice cream (vanilla)	
g. Ice cream (vanilla)	n. Imitation Chocolate milk	
5. Ten (10) cheese samples for identification will be selected from those listed on the answer sheet. Participants will have an opportunity to see and taste samples.

a. Blue	f. Colby	k. Muenster
b. Brick	g. Cream	l. Processed American
c. Brie/Camembert	h. Edam/Gouda	m. Provolone
d. Cheddar (mild)	i. Monterey Jack	n. Swiss
e. Cheddar (sharp)	j. Mozzarella	

REFERENCES

1. “Milk Flavor Defects,” Iowa State University of Science and Technology, FT-1000, Ames, Iowa 50011.
2. “National Dairy Promotion and Research Board Annual Report” (updated annually – use the previous year’s issue), National Dairy Promotion and Research Board, 2111 Wilson Boulevard, Suite 600, Arlington, Virginia 22201.
3. “Newer Knowledge of Cheese and Other Cheese Products,” National Dairy Council, Rosemont, Illinois 60018, pages 1-23.
4. “Milk Facts,” (updated annually – use the previous year’s issue) International Dairy Foods Association, Milk Industry Foundation, 1250 H St., NW, Suite 900, Washington, D.C. 20005
5. “Questions and Answers on Federal Milk Marketing Orders,” United States Department of Agriculture, Agricultural Marketing Service, Bulletin AMS 559. Latest edition, Washington, D.C. 20050.

SCORING AND RANKING OF TEAMS AND PARTICIPANTS

1. To determine the individual and team winners of the Dairy Foods Career Development Event, the participants will be ranked on the total score of Parts I, II, III and IV. Teams and individuals will be ranked into groups designated “Gold,” “Silver,” and “Bronze.” Only the top three team members’ scores will count for team score. The top three scores will count in each division or category regardless of overall individual ranking used in computing the overall team score. All team members are eligible for individual awards. Teams which do not have three members will be listed as “Participants.” Teams which violate any rule will also receive a “Participation” rating.

Phases

Scoring

Test	30 points
Milk Facts	20 points
Milk Samples	40 points
Dairy Foods	20 points
Cheese	20 points

Total Individual Score..... **130 points**

Total Team Score Possible (3 participants)..... **390 points**

2. In the event of a tie in the total point score of an individual or team, the tie shall be broken by awarding the highest placing to that individual or team having the highest ranking in the milk flavor section of the event. If a tie still exists, the real and artificial dairy foods/products identification score will be used to break it followed by the cheese identification score, and finally by the written test. Ties in divisions or categories will be broken by overall team/individual scores.
3. The high FFA team in the Dairy Foods Career Development Event will be named the “Iowa Champion FFA Dairy Foods Judging Team” and will be eligible to enter the National FFA Dairy Foods Career Development Event in Louisville the following October.

AWARDS

Awards listed below are at the discretion of the sponsor and pending availability of sponsorship. It is vitally important that participants write thank you letter to sponsors in order to retain their support. A thank you list naming current sponsors will be provided to each participating chapter at the event site.

Award sponsors through the National FFA Foundation:

Champion Team.....	Plaque
--------------------	--------

Awards sponsored through the Iowa FFA Foundation:

Champion Team.....	Cash award for travel to the National FFA Dairy Foods CDE
Reserve Champion Team.....	Plaque
Top 10 Teams	Rosettes
Member of Top 10 Teams	Rosettes
Top 10 Individuals.....	Rosettes
1 st and 2 nd Place Individuals.....	Trophies
Top Team and Top Individual	Trophies
a. Written Test	
b. Analyze and Interpret Information (Milk Facts)	
c. Milk Sample Evaluation	
d. Foods/Products, Imitations, Substitutes	
e. Cheese Identification	

The Iowa FFA Association will award certificates to all Dairy Foods teams and participants.

DAIRY FOODS CAREER DEVELOPMENT EVENT

Participant Name: _____ Participant No.: _____

FFA Chapter: _____ School P.O. (Town): _____

Mark (x) in space opposite the flavor noted and in proper sample column. Mark (x) for flavor intensity of each sample. Do NOT write in space indicated Flavor Score and Intensity Score.

DEFECTS		SAMPLE NUMBER										
		1	2	3	4	5	6	7	8	9	10	
A. MILK FLAVOR (Each correct flavor/odor equals 2 points)	Bitter											
	Feed											
	Flat-watery											
	Foreign											
	Garlic or Onion											
	High Acid											
	Malty											
	Metallic/Oxidized											
	Rancid											
	Salty											
No Defect												
B. FLAVOR INTENSITY LEVEL No defect is marked as pronounced. (Two points for each right answer. One point if off one space. Zero points if off two spaces.)	Slight											
	Definite											
	Pronounced											
Do not write below this line. (Official Use Only)	Flavor Score											
	Intensity Score											
TOTAL SCORE												

DAIRY FOODS CAREER DEVELOPMENT EVENT

Participant No.: _____

Name: _____

School (Town): _____

ANSWER SHEET: ANALYZE AND INTERPRET INFORMATION

**(Mark the box opposite the question number
to specify your answer – 2 points each.)**

	A	B	C	D	
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
TOTAL SCORE					

***DAIRY FOODS CAREER DEVELOPMENT EVENT**

Participant Name: _____ Participant No.: _____

FFA Chapter: _____ School P.O. (Town) _____

Mark (X) in space opposite the answer in the proper sample/variety number column. **DO NOT** write in the space indicating grade on identification.

		SAMPLE NUMBER											
		1	2	3	4	5	6	7	8	9	10		
Identification of Real and Artificial (Correct identification equals 2 points per sample.)	Butter												
	Margarine												
	Whipped Cream												
	Non-dairy Topping												
	Half and Half												
	Coffee Whitener												
	Process American Cheese												
	Process Imitation Cheese												
	Sour Cream												
	Low Fat Sour Cream												
	Frozen Yogurt Dessert(vanilla)												
	Ice Cream (vanilla)												
	No Fat Ice Cream (vanilla)												
	Cottage Cheese												
	Yogurt (plain)												
Chocolate Milk													
Imitation Chocolate Milk													
Do not write below this line. (Official Use Only)	Grade on Identification												
TOTAL SCORE													
		SAMPLE NUMBER											
		1	2	3	4	5	6	7	8	9	10		
Identification of Cheeses (Correct identification equals 2 points per sample.)	Blue												
	Brick												
	Brie/Camenbert												
	Cheddar (Mild)												
	Cheddar (Sharp)												
	Colby												
	Cream												
	Edam/Gouda												
	Monterey (Jack)												
	Mozzarella												
	Muenster												
	Processed American												
	Provolone												
Swiss													
Do not write below this line. (Official Use Only)	Grade on Identification												
TOTAL SCORE													