The

Collegiate Dairy Products

Evaluation Contest

Student Judging for Three-Quarters of a Century



"Assisting Students To Become Industry Leaders"

Sponsored By:









"The industry benefits from the knowledge that the students gain on what makes good dairy products. This knowledge is something they will use throughout their career to maintain and improve all dairy and food products."

Introduction

"Students from nine agriculture colleges competed in the first butter judging contest held at the Nationals. The Massachusetts Society for the Promotion of Agriculture gave very liberal prizes for winning teams and individuals, and it was largely instrumental in making the contest possible."

- Hoards Dairyman, November 10, 1916, p. 554.

This is a report of the first Collegiate Dairy Products Evaluation Contest held in connection with the National Dairy Show sponsored by the National Dairy Association. Butter was the only product judged because of its commercial importance at that time.

From this modest beginning in 1916, the Students' Butter Judging Contest has grown to an internationally recognized competition with university teams from the United States, Canada and France. Not only has student participation increased, there are now 125-150 dairy industry company participants. They donate and store samples, provide employees as official judges, proctors and scorers, and donate other necessary supplies.

Over three-quarters of a century later, four generations of college students have been trained in sensory methods of evaluating the quality of six dairy products - butter, cheddar cheese, cottage cheese, strawberry yogurt and vanilla ice cream. The number of college teams rose from nine to a maximum of 33 in 1956 and now has stabilized to an average of 18 per year.

The Contest represents the culmination of an intense training of students by college professors who are experts in dairy product evaluation. Over the years there have been more than 3000 students who have participated in the Contest and several times as many who have received the training. The multiplier effect of this training and the Contest on the industry is not measurable. It is not surprising that the United States leads the world in overall sensory qualities of its major dairy products.

About IAFIS and Its Foundation

In 1911, a small group of men selling to the fledgling ice cream industry organized an association to share sales tips and promotion ideas. It is safe to say that none of them knew the association would grow into a dynamic organization that is now the international marketing forum for the food industries: the International Association of Food Industry Suppliers (IAFIS).

The growth of the association over the years has more than paralleled the growth of the industry it serves. The association is also credited with providing the catalyst for much of the modernization and technical innovation within the industry.

Although Worldwide Food EXPO is a centerpiece of IAFIS activity, it is not the only association activity of significance to members. IAFIS also serves as secretariat in the development of sanitary standards, publishes marketing directories, publishes the *Membership Directory of Products and Services*, creates marketing bulletins, holds international business seminars, provides an industry-wide public relations program, and has created the Food Industry Information Center to support WorldFoodNet.com, a virtual community for the food industry.

The major sponsor of the Contest is the International Association of Food Industry Suppliers (IAFIS) Foundation. In 1983, the IAFIS Foundation was created to support all of the association's philanthropic activities. Currently, its programs also include the following:

- Two Food Engineering Scholarships
- IAFIS/American Dairy Science Association (ADSA) biennial Graduate Fellowship
- Annual IAFIS/ASAE-Food Process and Engineering Institute Food Engineering Award

The Foundation also administers ten M.E. Franks Scholarships awarded to undergraduate and graduate students, and two Rath Foundation Graduate Fellowships.

In the recent past, the IAFIS Foundation supported two university faculty sabbatical programs, university pilot plant equipment purchases and university research.

Contest History

Following the success of the first "Student's Butter Judging Contest" in 1916, the second Contest was held in Columbus, Ohio in 1917. The second Contest was not as successful as the first with only three teams entered - Ohio State University, the University of Nebraska and South Dakota State University. Despite the low participation the Contest yielded positive values, two of which were products other than butter (milk and cheddar cheese) were judged and most importantly, that participating universities believed in the worthiness of the Contest.

Following World War I, the Contest continued at about the same participation level

as the original butter contest - five to nine teams. From 1916 to 1923, The Contests were held in connection with the National Dairy Association's dairy cattle show. This venue, in addition to the limited college funds available to defray cost, were the probable reasons for no-growth. From 1924 to 1929 there was growth with an average of 14 teams.

A new era for the Contest began in 1930 when IAFIS lent its support. IAFIS is now the only association directly supporting the universities and a major supporter of staging the Contest and the awards function. In the 1930s to the 1950s, the Contest grew from 17 to 33 teams. Since 1957 the number of teams ranged from 12 to 30 averaging about 18. TABLE 1 lists the universities that have participated through the 76th Contest of 1997.

During the 76 Contests there have been 63 schools entered with an average of 18 per contest. Universities with 70% and greater entries include Iowa State University, Kansas State University, University of Minnesota, University of Nebraska, Michigan State University, Ohio State University, Pennsylvania State University, South Dakota State University and University of Wisconsin. Most of these universities are still participating.

¹ The All Products Competition began in 1919. Vanilla ice cream, cottage cheese and strawberry yogurt were introduced in 1926, 1962 and 1977 respectively.

Table 1. Teams participating in the Intercollegiate Dairy Products Evaluation Contests, 1916-1997*

Alabama A & M Alberta (Canada) Alfred State College Arizona Arkansas Auburn	Moraine Park Technical Institute Nebraska New Hampshire New Mexico	
Brigham Young California (Davis) California (Fresno) California Polytechnic Canton, Agri. and Tech. College Clemson	North Carolina State North Carolina Agri. and Tech. Northwest Missouri State Ohio State Oklahoma State Oregon State	
College of the Sequois Colorado State Connecticut Cornell	Pennsylvania State University Purdue Quebec (Canada) Rhode Island Rutgers	
University of Delaware Florida State The French National Dairy College Georgia Guelph (Canada) Idaho	South Dakota State University Tennessee Tennessee State Texas A and M	
Illinois Iowa State Kansas State Kentucky Laval (Canada) Louisiana State	Texas Tech. Tuskegee Institute Utah State University of Manitoba Vermont Virginia Tech.	
Maryland Massachusetts Michigan State Minnesota Mississippi State Missouri	Washington State West Virginia Wisconsin Wyoming	

^{*}No contests were held in 1918 or from 1942 to 1946.

The Contest Sponsors

The Contest has also experienced changes in sponsorship. The first butter judging contest was sponsored by the National Dairy
Association later followed by the American Dairy Science Association (ADSA), IAFIS
(formerly DFISA) and the American Dairy
Association. There is also cooperation with the associations that comprise the International Dairy Foods Association. Today, the four sponsoring organizations are IAFIS, ADSA, the United States Department of Agriculture
(USDA), and the Dairy Recognition and Education Foundation (DREF).

The American Dairy Science Association through its Dairy Products Evaluation Committee, known as "The Coaches Committee," is responsible for the Contest rules and overall policy for conducting the Contest. The ADSA Coaches Committee develops and revises the Official Score Cards which are scored electronically. This committee is also responsible for any modifications to the scoring guides - suggested scoring values for the various attributes evaluated in the six products. This scoring procedure is used throughout the entire U.S. and Canadian dairy industry and has aided in the establishment of uniform guidelines for the evaluation of dairy products. These criteria are an important part of many industry quality control programs.

From the early days of the Contest, the USDA - Dairy Programs Standardization Branch has supplied the superintendent to the Contest. The Contest Superintendent is responsible for organizing the Official Judges, making arrangements for on site sample storage and distribution, maintaining current mailing lists

for officials and universities, and mailing the scoring guides and team forms to the schools. In accordance with the rules of the Contest, the Contest superintendent is responsible for the major responsibilities of the operation of the Contest. This includes determining that the Contest is conducted according to all rules and regulations governing the Contest. The superintendent also has the responsibility of tabulating all score cards, keeping records on all the results, and delivering the results to the awards program. In recent years the Contest has had an assistant superintendent which has been either a USDA employee or an industry representative.

Beginning in the 1980s, the International Association of Food Industry Suppliers
Foundation became the only association to financially sponsor the Contest. The IAFIS
Foundation currently provides \$2500 per team to offset travel and training expenses for the students. The team grants are in lieu of the original support during 1930 to 1967 by the IAFIS Foundation for Dairy Industrial
Fellowships. The association awarded these fellowships to the Contest winners for graduate study. Today the Foundation awards the Seas Memorial Scholarship of \$2000 to the university placing first in the All Products Competition.

Also, IAFIS staff plans and stages the Contest and the awards breakfast. The IAFIS Foundation supplies funds for individual and team trophies, monetary awards to the first place individuals in the Graduate Student Competition, and lifetime membership in the Dairy Shrine for the top five students in the All Products Competition. IAFIS member

companies furnish most of the needed equipment and supplies.

Other backers for monetary awards include the DREF and Avonmore Cheese, Inc..
These cash awards are given to the top three individuals in the All Products Competition and the first place individual in the Butter Competition. Often, the local dairy industry or their state association contributes funds to their in-state university team.

The dairy processing industry is an active participant in the Contest. Dairy processors from all over the United States and Canada donate contest samples. One or two dairies near the Contest site accept delivery of the samples prior to the Contest and deliver them to the Contest. The most important contribution by the industry is the services of their employees as contest officials. The wholehearted enthusiasm of the representatives of the

numerous universities, the
American Dairy Science
Association, the International
Association of Food Industry
Suppliers and its member
companies, the U.S.
Department of Agriculture,
and the processor industry in
staging the Contest indicates
the close relationship which
exists between the commercial
and educational elements of
this great industry.

The Contest Trophies & Prizes

Were it not for trophies and monetary awards, contests would not be complete. So it would have been with The Collegiate Dairy Products Evaluation Contest without individual and team trophies and monetary awards. Awards for the first butter contest at Springfield in 1916 were cash prizes for winning teams and individuals. They were provided by the Massachusetts Society for the Promotion of Agriculture. Still in the early years, but prior to IAFIS affiliation, trophies and awards came from various commercial dairies, organizations and individuals. Continuity came into the system of awards with the co-sponsorship by IAFIS and DREF. The modern era trophies and monetary awards are summarized by TABLES 2 and 3. The trophies and awards are presented during an awards breakfast, sponsored by the IAFIS Foundation, the morning following the competition.



Table 2. Team Awards 1,2,3

Award	Trophy	Donor
1st Place All Products	\$2000 Shirley Seas Memorial Scholarship	IAFIS Foundation
1st Place All Products	Cup and Plaque	IAFIS Foundation
2nd & 3rd Places All Products	Plaques	IAFIS Foundation
1st Place Butter	Cup and Plaque	IAFIS Foundation
2nd & 3rd Places Butter	Plaques	IAFIS Foundation
1st Place Cheddar Cheese 2nd & 3rd Places Cheddar Cheese	Cup and Plaque Plaques	IAFIS Foundation
1st Place Cottage Cheese 2nd & 3rd Places Cottage Cheese	Cup and Plaque Plaques	IAFIS Foundation
1st Place Ice Cream	Cup and Plaque	IAFIS Foundation
2nd & 3rd Places Ice Cream	Plaques	IAFIS Foundation
1st Place Milk	Cup and Plaque	IAFIS Foundation
2nd & 3rd Places Milk	Plaques	IAFIS Foundation
1st Place Yogurt	Cup and Plaque	IAFIS Foundation
2nd & 3rd Places Yogurt	Plaques	IAFIS Foundation

¹ A team winning 1st place three times retires the cup.

² All plaques are permanent awards.

³ Officials of the International Ice Cream Association, the Milk Industry Foundation, the American Butter Institute, and the National Cheese Institute present many of these awards at the Collegiate Contest Awards Breakfast.

⁴ The Foundation of the International Association of Food Industry Suppliers.

Table 3. Individual Awards¹

Undergraduate Award	Donor	
\$400 Rosenbaum Award & Pewter Bowl 1st Place All Products	DREF ² and IAFIS Foundation ³	
\$300 Byers Award & Pewter Bowl 2nd Place All Products	DREF and IAFIS Foundation	
\$200 Roberts Award & Pewter Bowl 3rd Place All Products	DREF and IAFIS Foundation	
\$500 Weigold Award & Plaque for Coach of the Year	DREF	
\$250 Aldrich Awards & Plaque 1st Place Butter	Avonmore Cheese, Inc.	
Induction into the Dairy Shrine for 1st to 5th place students All Products	IAFIS Foundation	
\$100 Awards to 1st Place in the six product categories	DREF	
Pewter Bowls for 1st, 2nd, and 3rd in six product categories	IAFIS Foundation	
Graduate Award	Donor	
\$400 Award and Plaque to 1st Place in All Products	IAFIS Foundation	
\$100 Awards and Plaques to 1st Place in the six product categories	IAFIS Foundation	

¹ The Foundation of the International Association of Food Industry Suppliers.

 $^{^{\}mathbf{2}}\,$ DREF is the Dairy Recognition and Education Foundation.

³ IAFIS is the International Association of Food Industry Suppliers.

The \$400 Robert Rosenbaum cash award was funded in recognition of the person whose efforts were instrumental in forming DREF in 1953. The purpose of DREF is to recognize outstanding students majoring in food science and dairy manufacturing or agri-business. The \$300 Everett Byers Memorial Award was first made in 1978 in memory of Everett Byers who served as a Contest judge in Ice Cream and All Products. A third award was created in 1982 by Mr. and Mrs. George Weigold to recognize the devotion, hard work and interest by the college coaches. This \$500 award is the Coach of the Year Award given to the coach of the 1st place team in All Products. Mr. and Mrs. Weigold are long time supporters of the Contest and Mr. Weigold was a University of Connecticut team member in 1934. Mr. Weigold also served as the Contest Secretary from 1982 to 1994. The most recent All Products Award established was with funds donated to DREF by Harold Roberts, Professor Emeritus and Coach, Kansas State University. It provides \$200 to the third place winner. In 1993, DREF established \$100 awards given to the first place individuals for each of the six products judged.

In 1989 Avonmore Cheese, Inc. established a special award for the first place individual in the Butter competition. This continuing award is made in memory of Bert Aldrich who was the lead butter judge for many years and was dedicated to the education of future dairy leaders.

The Shirley Seas Memorial Scholarship was established by the IAFIS Foundation in 1988. This scholarship is given in memory of Shirley W. Seas who was Professor of Dairy Science at South Dakota State University. Professor Seas was an outstanding teacher with

legendary success as a coach.

In addition to these continuing awards there are special recognition awards given to contest officials and exceptional donations made by the industry for various purposes. For example, the 1989 Contest was hosted by the H.E. Butt Company in San Antonio and included a Texas style barbeque for the participants. And in 1997, Lyons-Magnus Company provided funds for the purchase of tee-shirts for students and lab coats for the coaches. Kelvinator and Sweetheart Packaging have continually supported the Contest by providing freezers, refrigeration and paper products

Contest Officials

The Contest Officials are the unheralded participants in the Contest. A group of industry experts select the products to be judged and evaluates them using the same attributes and scoring values taught by the coaches for use in the Contest. Since 1932 attempts have been made to retain the same Official Judges for many years. Their continuity of service has had a stabilizing influence in establishing quality standards.

The Official Judges are organized into the six products evaluated. Each has a Lead Judge (a.k.a. Chair). The Official Judges are selected from commercial ranks and each is an expert in their product area. There is also collaboration between the Official Judges and selected coaches.

Since 1986, the score cards have been electronically evaluated and tabulated. These services and the equipment are donated by the industry. Additionally, the USDA supplies the

Contest Superintendent and employees of IAFIS member companies are the proctors for the Contest. It should also be noted that the Contest Official's travel expenses are usually supported by their employers. However, there are some officials that support the Contest at their own expense.

Achievements

The uniqueness of the Contest is that all participants benefit. Even those team members not receiving awards or prizes benefit because they gain knowledge about the quality of dairy products and how to critically evaluate them. The team members enjoy a special experience in competition and associating with rival students from other colleges; experiencing the paramount international food exposition; fulfilling the ambition to achieve through an international competition; and meeting industry leaders who are dedicated to the art and science of producing the best dairy products in the world.

The successes of contest team members are the strongest evidence that those who put forth the extra effort required to train and compete are "the cream of the crop." Many have risen to top corporate positions or have become the leading academics in the world. Most are still using the skills learned on a daily basis and often attribute their success to knowing how to critically evaluate dairy products. Former U.S. Secretary of Agriculture John Block said during an address at the Contest Awards Ceremony - My three most valuable courses were mathematics, english and the dairy products evaluation course and Contest. He felt that the Contest was important

because it trained one to make decisions quickly. Richard McKee, the current Director of the USDA Dairy Programs and former winner of the All Products Competition, is quoted—

"The 1969 competition is a vivid and cherished memory from my college years. The fellowship and team spirit taught me valuable basics of management which have been a cornerstone of success. The skills learned so long ago have paid dividends for me in my professional life and I shall always remember the Contest fondly."

Others who were contestants and noted experts say

"Students willing to devote the time and effort needed to become competitive in dairy products evaluation are the ones likely to succeed in careers because they are energetic, inquisitive and goal driven."

- Dr. Robert Marshall - University of Missouri

"The Collegiate Dairy Products Evaluation Contest is like the tip of an iceberg that generates admiration and respect in those who view it. However, its prominence should not obscure the importance of the less visible but even more imposing mass below the surface. More important than the Contest itself are the knowledge and sensory evaluation skills regarding dairy product quality instilled in those who either compete in the Contest or train to do so. The Contest is a visible symbol of the ongoing renewal of resources that are essential to maintaining the quality standards of the dairy industry. It is no wonder that those who prepare for and compete in it are highly sought after by the industry and often achieve high positions in its executive ranks."

-Dr. Bruce Tharp - Tharp's Food Technology

Benefits

"The Collegiate Dairy Products Evaluation Contest is a contest that evaluates six dairy products. Students learn to evaluate these six products over a period of time by taking courses in product evaluation and by working with their college professors. The methods used to evaluate these products are used by the dairy and food industry to evaluate their products on a daily basis. All products manufactured are evaluated for quality each day using the same evaluation methods that are learned when preparing for the Contest. Students preparing for the Contest are also preparing for future quality control type positions with the dairy and food industries."

"It has been said that the sensory methods learned for the Contest are restricted to dairy products. This is not true. The methods learned in evaluating dairy products can be used to evaluate other food products. If a student learns to taste or smell a flavor in a dairy product, that same taste or smell can be detected when evaluating other foods. Therefore, students are being educated for quality control type positions throughout the dairy and food industries."

- Roland Golden - USDA Dairy Programs

In summary, the participants in dairy products evaluation contests gain much from their experiences.

- Appreciation for the variety of sensory attributes that characterize dairy foods.
- Knowledge of the sensory properties that can be modified within dairy foods.
- Abilities to identify specific defects and to relate them to causative factors.
- Improved ability to make decisions quickly and to know why the decisions were made.
- Insights into who and what constitute the dairy and food industry.
- An ever-expanding circle of friends who are likely to become co-workers in the future.
- Great fun, inspiring presentations by industry leaders, and chances to win fine prizes.
- Keeps the principles of dairy product quality alive at a high scientific level.
- Provides employees skilled in sensory evaluation, knowledgeable in interpreting its results, and instilled with a desirable sense of professional discipline.
- Creates a recognition of the dairy industry as a career opportunity in students who might otherwise not be aware of it.
- The knowledge gained is transferable to other foods.

In Conclusion

The ultimate influence of the training in the specialized skills for judging dairy products quality afforded by the Contest, plus the encouraging stimuli of expanded career horizons to these students toward greater endeavors is unmeasurable. During the 76 Contests held from Atlantic City to San Francisco and from New Orleans to Montreal, over 3000 contestants have competed and nearly 2000 alternates have had the opportunity to evaluate and compare cross-continent samples of the major selling U.S. dairy products. They have been able to attend the premier North American food exposition or attend other dairy association's conventions and meet the leaders of the industry. In addition to these team members and alternates, there have been thousands of other students who received the training necessary to evaluate dairy products. The Contest has served

educational institutions by providing an incentive for students to learn about quality in dairy products. Perhaps the success of the Contest is best demonstrated by the attendance of nearly 600 former contestants, some dating to Contests in the 1930s, at the first Collegiate Contest Reunion in 1993. The Reunion was a gala event in which young and old shared their experiences. All agreed that the training and the Contest experience were important to their careers and were of great value in their college education.

Acknowledgments

Thanks to R. L. Bradley (U. Wisconsin), R. Golden (USDA), R. T. Marshall (U. Missouri), and B. Tharp (Tharp's Food Technology) for their review and contributions.

10/6/97



Notes





For More Information Contact:

Contest Secretary The Foundation of the International Association of Food Industry Suppliers

1451 Dolley Madison Boulevard McLean, Virginia USA 22101-3850 (703) 761-2600 Fax: (703) 761-4334 E-mail info@iafis.org • www.iafis.org

Contest Superintendent United States Department of Agriculture

AMS, Dairy Division 14th and Independence Avenue Washington, DC USA 20250 (202) 720-9383 Fax: (202) 720-2643 E-mail roland_s_golden@usda.gov