Dairy Foods Technology 101

Thursday, May 30, 2024.

Key Room, 1385 N. Hamilton Parkway, Novato, CA 94949

Registration: **FREE** to California processors and entrepreneurs; California faculty and students in food science/dairy science, agribusiness, packaging and related fields; qualified suppliers to the industry. **To register**, send your name, title, company name, phone number and email to nvanbuskirk@cmab.net or vlagrange@cmab.net by **May 26, 2024.**

Who should attend: *This course is ideal for individuals who are early in their careers in dairy products processing, including employees in production, operations, marketing, sales and distribution, R&D/QA roles within the industry and entrepreneurs. No pre-requisites.*

Expected Learning Outcomes:

1. To know the terminology and basics of milk composition and proximate composition of dairy foods and ingredients
2. To be able to explain in simple terms how milk is processed to produce the main dairy products and ingredients.
3. To appreciate the importance of, and requisite steps, to ensure quality of dairy products.
4. To be aware of the contemporary issues related to the dairy processing industry.

Instructors: Dr. Phil Tong, CalPoly Professor Emeritus; Scott Thomason, California Department of Food and Agriculture, Andy Johnson, Dairy Connection Inc., CDIC staff.

Specific Learning Objectives:

- Appreciation for size and scope of dairy processing industry
- Knowledge base on composition, quality, and properties of milk
- Familiarity with specific composition of dairy foods and ingredients
- Appreciation for quality of dairy foods (microbiological chemical, physical and sensory)
- Familiarity with basic unit operations and their organization into production processes to convert raw milk into the main dairy foods and ingredients.
- Familiarity with government agencies, regulation and policies affecting dairy foods industry.
- Familiarity with dairy corporations and trade organizations important in dairy industry
- Insight into the future trends of the dairy industry & role of research and operations.

Course Description: Introduction to dairy products and technology. Composition and properties of fluid milk and manufactured milk products. Quality of dairy products. Key unit operations in processing of raw milk to finished dairy products including overview of process highlights for the manufacture of fluid milk products, butter, cheeses and other fermented dairy products, ice cream, concentrated and dried dairy ingredients. Dairy foods safety, and quality.

Course Schedule

8:00	Registration opens
8:30	Welcome Course introduction, size and scope of dairy industry
9:00	Milk quality, milk composition, dairy products standards
9:45	Milk microbiology, cleaning and sanitation, and shelf life
10:15	*Break – Products sampling*
10:30	Sensory, nutritional, and functional properties
11:00	Dairy foods safety and Inspection
12:00	*Networking lunch*
1:00	Unit operations in dairy processing – separation, standardization, thermal processing including pasteurization, homogenization, concentration and drying.
1:45	Fluid milk, cream and butter manufacturing technology
2:15	Cultured products manufacturing technology
3:00	*Break – Products sampling*
3:20	Cheese manufacturing technology
4:00	Concentrated and dry milk products manufacturing technology
4:30	Q&A, Continuous learning opportunities. Certificates
5:00	ADJOURN

Please contact Nancy nvanbuskirk@cmab.net for information on special rates at area hotels. Ample free parking.
For more program information, please contact V. Lagrange, California Dairy Innovation Center Director vlagrange@cmab.net Course organized and sponsored by the California Milk Advisory Board's CDIC. More at www.cdic.net

Program as of April 8, 2024. Subject to change.