Developing Novel Fermented Dairy Products Training Course

Professional Development Training Course Outline

Category	Food processing and Technology	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Fermented dairy products have gained immense popularity worldwide due to their health benefits, unique flavors, and extended shelf life. The growing consumer awareness of probiotics, functional foods, and nutritionally enhanced dairy items has created a significant demand for innovative dairy product development. Developing Novel Fermented Dairy Products Training Course is designed to equip participants with cutting-edge knowledge and practical skills in creating novel fermented dairy products, integrating traditional techniques with modern biotechnological advances. Participants will explore the science of fermentation, microbial selection, product formulation, quality assurance, and sensory evaluation to drive innovation in the dairy industry.

The training emphasizes hands-on learning, case studies, and real-world applications, enabling participants to transform theoretical insights into commercially viable products. By the end of the course, participants will have a clear understanding of emerging trends in fermented dairy products, regulatory requirements, and market-driven innovation strategies. This course caters to professionals in dairy production, food technology, R&D, and quality assurance who aim to enhance their expertise and contribute to organizational growth through novel product development.

Programme Curriculum

Developing Novel Fermented Dairy Products Training Course

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Course Objectives

1. Understand the microbiology and biochemistry of fermented dairy products
2. Learn advanced fermentation techniques for novel dairy products
3. Develop skills in starter culture selection and optimization
4. Explore functional and probiotic dairy product development
5. Gain expertise in flavor enhancement and product formulation
6. Master texture modification and rheology for consumer acceptability
7. Implement quality assurance protocols and HACCP in dairy fermentation
8. Evaluate sensory characteristics for product success
9. Analyze market trends and consumer preferences in fermented dairy
10. Learn packaging innovations for shelf-life extension
11. Explore regulatory compliance and labeling requirements
12. Apply process optimization for scalable production
13. Integrate sustainability practices in dairy product development

Organizational Benefits

- Enhanced product innovation capabilities
- Improved competitiveness in the dairy market
- Increased revenue through novel product launches
- Strengthened brand value with functional dairy products
- Reduced production inefficiencies through process optimization
- Improved quality control and compliance adherence
- Better consumer satisfaction through sensory and functional improvements
- Skilled workforce with advanced fermentation knowledge
- Enhanced R&D effectiveness for new product development
- Adoption of sustainable and eco-friendly production practices

Target Audiences

1. Dairy technologists and food scientists
2. R&D professionals in dairy and food industries
3. Quality assurance and control managers
4. Production supervisors and plant managers
5. Nutritionists and dietitians interested in functional dairy
6. Entrepreneurs in the dairy business

7. Regulatory compliance officers
8. Academic researchers and postgraduate students in food technology

Course Duration: 5 days

Course Modules

Module 1: Introduction to Fermented Dairy Products

- History and evolution of fermented dairy
- Types and classifications of fermented dairy products
- Health benefits and functional properties
- Emerging global trends in fermented dairy
- Regulatory and labeling overview
- Case study: Market success of kefir and probiotic yogurts

Module 2: Microbiology of Fermentation

- Key microorganisms in dairy fermentation
- Starter cultures: types and selection criteria
- Microbial metabolism and product attributes
- Probiotic strain incorporation
- Microbial safety and contamination prevention
- Case study: Development of a novel probiotic drink

Module 3: Advanced Fermentation Techniques

- Batch, fed-batch, and continuous fermentation
- Optimizing fermentation parameters
- Co-cultures and mixed fermentation strategies
- Scaling up from lab to industrial production
- Fermentation monitoring and control
- Case study: Production optimization for artisanal yogurt

Module 4: Product Formulation and Flavor Development

- Ingredient functionality and interactions
- Natural and synthetic flavoring agents
- Texture modification and stabilizers
- Sweeteners, fat replacers, and sugar alternatives
- Flavor profiling and sensory evaluation
- Case study: Launching a flavored probiotic drink

Module 5: Quality Assurance and Safety

- HACCP and GMP in dairy production
- Microbial and chemical contamination monitoring
- Shelf-life testing and storage conditions
- Packaging and preservation strategies
- Regulatory compliance checks
- Case study: Implementing quality protocols in a dairy plant

Module 6: Functional and Probiotic Dairy Products

- Designing products for health benefits
- Incorporation of prebiotics and bioactive compounds
- Stability of functional ingredients during processing
- Claims substantiation and labeling requirements
- Consumer acceptance and marketing considerations
- Case study: Functional yogurt product development

Module 7: Sensory Evaluation and Consumer Insights

- Sensory testing methodologies
- Flavor, aroma, and texture analysis
- Consumer preference studies
- Product reformulation based on feedback
- Sensory benchmarking with competitors
- Case study: Consumer-driven product improvement

Module 8: Market Trends, Sustainability, and Innovation

- Global market analysis for fermented dairy
- Innovation in packaging and shelf-life extension
- Sustainable practices in production and sourcing
- Emerging functional dairy trends
- Business models for new product launches
- Case study: Eco-friendly dairy product launch strategy

Training Methodology

- Interactive lectures with multimedia support
- Hands-on laboratory sessions and practical exercises
- Group discussions and brainstorming sessions
- Real-world case studies and business simulations
- Sensory evaluation and product testing
- Field visits to industrial dairy production facilities

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com