

# **Dairy Technology Training**

Join our Dairy Technology Training in Hyderabad, Telangana, and earn a valuable certificate. Master dairy processing, product development, and quality control with hands-on experience and modern techniques to excel in the dairy industry.

# **Dairy Technology Training Modules**

- 1. Milk collection and handling
- 2. Milk testing and quality control
- 3. Dairy microbiology techniques
- 4. Pasteurization and sterilization processes
- 5. Fermentation and dairy cultures
- 6. Dairy product processing
- 7. Packaging and storage of dairy products
- 8. Dairy equipment operation and maintenance
- 9. Hygiene and sanitation in dairy production
- 10. Waste management and by-product utilization in dairy technology

### Milk collection and handling

Fee: Rs 35000/- | Duration: 30 to 45 Days

- 1. Milk sampling procedures
- 2. Milk cooling and storage techniques
- 3. Milk transportation protocols
- 4. Sanitization of milk containers
- 5. Prevention of contamination during collection
- 6. Milk weighing and documentation
- 7. Raw milk filtration methods
- 8. Handling different types of milk (cow, buffalo, goat)
- 9. Managing milk flow in bulk tanks
- 10. Automated milking systems
- 11. Milking frequency optimization
- 12. Post-milking handling and cooling
- 13. Field testing for contamination
- 14. Protocols for hand milking
- 15. Safe milk collection in urban environments
- 16. Cleaning protocols for collection equipment
- 17. Milk traceability systems

#### Milk testing and quality control

Fee: Rs 55000/- | Duration: 45 to 60 Days

- 1. Fat content analysis
- 2. Protein content analysis
- 3. Somatic cell count (SCC) testing
- 4. Bacterial count testing
- 5. Antibiotic residue detection
- 6. Lactose content testing
- 7. Freezing point test for added water detection
- 8. pH measurement of milk
- 9. Adulteration detection methods
- 10. Milk enzyme activity tests
- 11. Clot-on-boiling test
- 12. Alcohol test for stability
- 13. Urea testing in milk
- 14. SNF (Solids-not-fat) calculation
- 15. Test for presence of pesticides
- 16. Brucella ring test
- 17. Calcium and phosphate content measurement
- 18. Standard plate count method

### Dairy microbiology techniques

Fee: Rs 65000/- | Duration: 45 to 60 Days

- 1. Isolation of lactic acid bacteria
- 2. Microbial quality testing of dairy products
- 3. Identification of spoilage organisms
- 4. Fermentation bacteria culture techniques
- 5. Pathogen testing (Salmonella, Listeria, etc.)
- 6. Coliform count in dairy products
- 7. Yeast and mold detection
- 8. Bacterial growth curve analysis
- 9. Starter culture characterization
- 10. Probiotic bacteria isolation and analysis
- 11. Detection of heat-resistant bacteria
- 12. Antimicrobial sensitivity testing for dairy pathogens
- 13. Milk spoilage organism identification
- 14. Use of PCR for pathogen detection
- 15. Plate count method for bacteria in dairy
- 16. Biochemical identification of dairy microbes
- 17. Biofilm formation testing in dairy pipelines
- 18. Indicator organism testing in dairy
- 19. Quality control of probiotic cultures

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#### Pasteurization and sterilization processes

Fee: Rs 85000/- | Duration: 60 Days

- 1. Low-temperature long-time (LTLT) pasteurization
- 2. High-temperature short-time (HTST) pasteurization
- 3. Ultra-high-temperature (UHT) sterilization
- 4. Validation of pasteurization process
- 5. Heat resistance testing of microorganisms
- 6. Effect of pasteurization on milk components
- 7. Inactivation of enzymes during pasteurization
- 8. Batch pasteurization procedures
- 9. Continuous flow pasteurization
- 10. Fouling prevention in pasteurizers
- 11. Cleaning and sanitization of pasteurizers
- 12. Sterilization of dairy equipment
- 13. Microbial spore inactivation during sterilization
- 14. Steam sterilization methods
- 15. Dry heat sterilization
- 16. Filter sterilization for liquids
- 17. Autoclave usage in dairy plants
- 18. Temperature control in pasteurization

### Fermentation and dairy cultures

Fee: Rs 85000/- | Duration: 60 to 90 Days

- 1. Fermented milk product protocols (e.g., yogurt, kefir)
- 2. Starter culture preparation and handling
- 3. Maintenance of dairy starter cultures
- 4. pH control during fermentation
- 5. Lactic acid fermentation in milk
- 6. Culture inoculation methods
- 7. Fermentation monitoring and control
- 8. Preparation of probiotic yogurt
- 9. Fermentation kinetics studies
- 10. Ripening of fermented dairy products
- 11. Acid and gas production in fermented milk
- 12. Microbial activity during dairy fermentation
- 13. Cheese fermentation protocols
- 14. Biochemical changes during fermentation
- 15. Control of undesirable fermentations

# Dairy product processing

Fee: Rs 150000/- | Duration: 60 to 90 Days

1. Cheese making protocols

- 2. Butter production techniques
- 3. Yogurt production process
- 4. Whey processing and utilization
- 5. Evaporated and condensed milk production
- 6. Ice cream manufacturing process
- 7. Ghee production
- 8. Cottage cheese production
- 9. Buttermilk production
- 10. Flavored milk production
- 11. Fat separation techniques
- 12. Methods for homogenization of milk
- 13. Protein recovery from whey
- 14. Powdered dairy product processing

### Packaging and storage of dairy products

Fee: Rs 150000/- | Duration: 60 to 90 Days

- 1. Shelf life extension techniques
- 2. Packaging materials for dairy products
- 3. Vacuum packaging protocols
- 4. Modified atmosphere packaging (MAP)
- 5. Storage temperature and humidity control
- 6. Handling and storage of perishable dairy products
- 7. Freezing methods for dairy products
- 8. Oxygen barrier packaging for milk
- 9. Active packaging solutions
- 10. Biodegradable packaging options
- 11. Packaging integrity testing
- 12. Cold chain management for dairy
- 13. Light-resistant packaging for dairy products
- 14. Labeling requirements for dairy products
- 15. Microbial spoilage prevention during storage
- 16. Storage protocols for different dairy products

# Dairy equipment operation and maintenance

Fee: Rs 250000/- | Duration: 90 to 120 Days

- 1. Milk separators and homogenizers operation
- 2. Cleaning-in-place (CIP) protocols for dairy equipment
- 3. Pasteurizer maintenance
- 4. Filling and packaging machine operation
- 5. Maintenance of chilling and freezing equipment
- 6. Inspection of heat exchangers
- 7. Sanitization of dairy tanks
- 8. Repairing dairy equipment components

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- 9. Milk pumps and piping system maintenance
- 10. Evaporator and dryer maintenance
- 11. Calibration of dairy processing instruments
- 12. Routine inspection and troubleshooting
- 13. Sterilization of equipment for yogurt production
- 14. Preventive maintenance schedules
- 15. Machinery lubrication practices
- 16. Automation in dairy equipment

#### Hygiene and sanitation in dairy production

Fee: Rs 150000/- | Duration: 90 to 120 Days

- 1. Personal hygiene standards for dairy workers
- 2. Sanitization of dairy processing areas
- 3. Cleaning procedures for dairy equipment
- 4. Control of cross-contamination
- 5. HACCP implementation in dairy plants
- 6. Use of sanitizers in dairy production
- 7. Wastewater management protocols
- 8. Cleaning protocols for raw milk tanks
- 9. Microbial control in production areas
- 10. Prevention of biofilm formation
- 11. Floor cleaning and drainage maintenance
- 12. Air quality control in dairy plants
- 13. Hand hygiene and glove use protocols
- 14. Storage of cleaning agents and chemicals
- 15. Regular monitoring and inspection
- 16. Documentation of cleaning schedules
- 17. Waste handling and disposal protocols

## Waste management and by-product utilization in dairy technology

Fee: Rs 350000/- | Duration: 120 to 150 Days

- 1. Effluent treatment plant (ETP) operations
- 2. Whey utilization for protein extraction
- 3. Biogas production from dairy waste
- 4. Water recycling protocols
- 5. Sludge management in dairy plants
- 6. Composting of dairy solid waste
- 7. Zero liquid discharge (ZLD) techniques
- 8. Recycling packaging waste
- 9. Energy recovery from waste streams
- 10. Animal feed production from dairy by-products
- 11. Organic fertilizer from dairy effluents
- 12. Milk waste valorization

- 13. Managing chemical waste from cleaning operations
- 14. Reduction of carbon footprint in dairy plants
- 15. Optimization of water usage

Note: Modules mentioned above are for professionals who want to invest on their skills, mostly sponsored by respective companies / industries, these are not for students who cannot afford them.

Contact via whatsapp on +91-7993084748 for more details or application / joining process