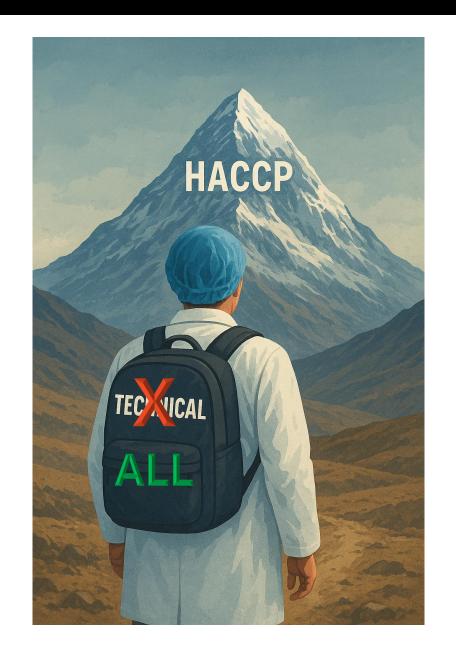




## SENIOR MANAGEMENT COMMITMENT



# Major challenges and and non-conformities



# What is the source of the challenge?

- **1. Detection** someone looks at it (observation, routine checks)
- **2. Verification** someone audits it (internal or external)
- **3. Nonconformity** a formally raised (documented)
- Impact of Change product, process, premises or personnel
- **5. Product outcomes** withdrawal or recall (market action, consumer protection)



# What is being challenged?

- Development and Implementation
- Review and Continuous Improvement
- People

#### **DEVELOPMENT AND IMPLEMENTATION**

- 1. Incomplete Hazard Analysis
  - Hazards overlooked
  - Underestimation of the severity or likelihood, leading to inadequate control measures
- 2. Unclear or unrealistic Critical Limits
  - Vague limits
  - Too strict or too lenient
  - Poor Validation
- Insufficient Monitoring and recording
  - Failure to monitor, at all or at the right frequency
  - Use of inaccurate data, outdated
  - Fail to record corrective actions
- 4. Lack of verification
  - No verification methods/inadequate
  - Infrequent verification

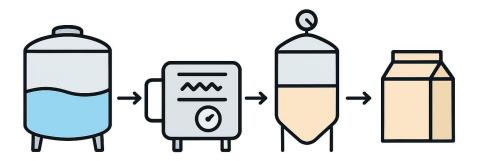
#### **REVIEW AND CONTINUOUS IMPROVEMENT**

- 1. No HACCP Review or update
  - Ignore, postpone or not documented
  - Lack of senior management commitment
  - No record of changes, the reasons or supporting information
- 2. New Products and Processes
  - Introduction of new ingredients, including allergens, new packaging formats
  - Require integration with PRP's

#### **PEOPLE**

- 1. People Changes
  - HACCP Knowledge
  - Process Knowledge

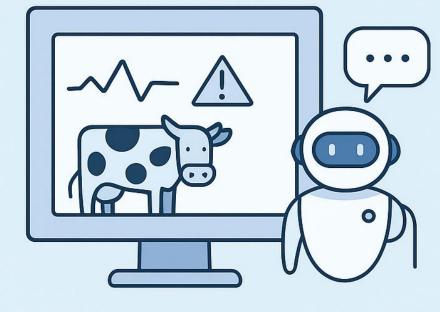
# The dairy dimension: hazards, CCPs, controls



- Raw Material Controls
- Heat Treatment
- Cooling
- Fermentation / pH / acidity development
- Packaging Controls
- Foreign Body Controls
- Storage Controls
- Allergen Controls

# Dairy

## AI-POWERED MONITORING



**DEVICE INTEGRATION** 

## CLOUD-BASED PLATFORMS



### Conclusion and discussion

- HACCP Challenges in Dairy
- Senior Management Commitment
- Future Technology
- And further discussions
  - Food Safety Culture
  - Audits and Auditors
  - Operational and Supply Chain Challenges







Challenges in Food Safety and Quality in Dairy Product Manufacture

## **Thank You**

