Fundamentals of Allergen Control – Food Industry

QP Code:FIC/MCr0007

Version: 1.0

NSQF Level: 4

Food Industry Capacity and Skill Initiative (FICSI)
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Training Parameters

Sector	Food Processing
Sub-Sector	Multi-sectorial
Occupation	Quality Analysis/Assurance
Country	India
NSQF Level	4
Aligned to NCO/ISCO/ISIC Code	NCO-2015/NIL
Minimum Educational Qualification and Experience	1. 12th or Equivalent in Science Stream OR 2. 10th pass with 3 years of experience in food processing industry OR 3. Previous relevant Qualification of NSQF Level 3 with 3 years of experience in food processing Industry OR 4. Previous relevant qualification of NSQF Level 3.5 with 1.5 years of experience in food processing industry
Pre-Requisite License or Training	NA
Minimum Job Entry Age	NA
Last Reviewed On	7/10/2025
Next Review Date	6/10/2028
NSQC Approval Date	7/10/2025
QP Version	1.0
Model Curriculum Creation Date	7/10/2025
Model Curriculum Valid Up to Date	6/10/2028
Model Curriculum Version	1.0
Minimum Duration of the Course	7.5 Hours
Maximum Duration of the Course	7.5 Hours

Program Overview

This section summarizes the end objectives of the program along with its duration.

Training Outcomes

At the end of the program, the learner should have acquired the listed knowledge and skills to:

- Understand about food allergens, various laws and terms related to food allergies management.
- Familiarize with allergen risk analysis or cross-contamination analysis process.
- Develop and implement food allergen management plan
- Identify and effectively control the food allergies in a food processing site

Compulsory Modules

The table lists the modules and their duration corresponding to the Compulsory NOS of the QP.

NOS and Module Details	Theory Duration	Practical Duration	Total Duration
Module 1: Understanding Food Allergens & their Risks in Food Industry	02:30	02:00	04:30
Module 2: Food Allergen Control Practices in Food Industry	02:00	01:00	03:00
Total Duration	**04:30**	**03:00**	**07:30**

Module Details

Module 1: Understanding Food Allergens & their Risks in Food Industry

Terminal Outcomes:

- Understand food allergies & intolerances
- Understand about cross-contact and cross-contamination
- Practice identifying allergen sources
- Conduct an allergen risk assessment
- Practice developing an allergen management plan

Duration: 02:30	**Duration: 02:00**
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Discuss the objectives and structure of course • Recall background on food allergies, intolerances and coeliac disease • Describe food allergic reaction • Discuss food allergens as a major food safety hazard • Describe cross-contact and cross-contamination • Outline the impact of the food allergens on the food processing site • Describe various terms i.e. Allergen Impact Matrix, Risk Mitigation Protocols, Sensory Safety Assessment, Cross-Contact Control Systems (CCCS), Allergen Safety Culture (ASC), Regulatory Alignment Dashboard, Ingredient Integrity Matrix, Customer Sensitivity Segmentation etc. • Elaborate ways to identify risk from allergen • List steps to identify allergen hazards in a food manufacturing operation. • Describe stages of allergen HACCP risk analysis • Describe cross-contact assessment • Describe best practices and strategies for allergen management plan implementation • Discuss elements in allergen risk management i.e. human resources, supply chain, purchasing and product development, raw materials receiving and storage, process design, in-process and maintenance, labelling errors, management of communication	• Demonstrate allergen risk analysis or cross-contamination analysis process • Show how to diagnose food allergies: Diagnostic tests include skin prick tests, blood tests, and food challenges • Show how to identify risk from allergen • Demonstrate ways to prevent food allergies • Show how to conduct and interpret a qualitative risk assessment. • Conduct an allergen risk assessment for your site(s) • Develop or strengthen an allergen management plan • Show how to identify allergen hazards in a food manufacturing operation. • Show how to identify allergen control measures in a food manufacturing operation. • Show how to implement or improve allergen control measures for human resources, supply chain, purchasing and product development, raw materials receiving and storage, process design, in-process and maintenance, labelling errors, management of communication channels other than product labels, cleaning, deviation management and record keeping. • Demonstrate various risk prevention techniques

channels other than product labels, cleaning, deviation management and record keeping.	
Classroom Aids	
Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films	
Tools, Equipment and Other Requirements	
Videos related to food allergies and its symptoms; documents related to food risk analysis, Sample allergen management plan	

Module 2: Food Allergen Control Practices in Food Industry

Terminal Outcomes:

- Understand about labeling laws and various terms related to food allergies management
- Practice ways to control allergen labelling errors
- Understand methods for allergen analysis and validation
- Practice designing an Allergen Management Framework
- Implement policies and practices to manage allergens within the food production environment

Duration: 02:00	**Duration: 01:00**
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Describe basics of allergen risk analysis and how this links to precautionary allergen labelling • Discuss the most effective ways to control allergen labelling errors (as per guidelines by FSSAI) • Describe various allergen labeling laws and legal requirements for providing allergen information • Describe Natasha's law for food labelling • Describe how reference doses such as VITAL can be used to support decisions about precautionary labelling • Describe allergen changeover and validation process • Describe key cleaning principles for allergen control • List guidelines for physical and analytical validation • Describe analytical methods and their applications for allergen analysis • Discuss about an integrated system for internal and external communication about allergens, including labeling, training, and customer interactions • Elaborate ways to evaluate effectiveness of control measures and communicate risk • Describe allergen substitution strategies for substituting allergens in recipes without compromising quality or taste	• Demonstrate ways to control allergen labelling errors • Demonstrate allergen changeover and validation process • Demonstrate methods for allergen analysis overview • Create detailed maps of allergen sensitivities and reactions to tailor safety measures • Design an Allergen Management Framework that adapts to changing regulations, market demands, and emerging allergens. • Show how to communicate with a consumer with an allergy and what your obligations are. • Show how to implement policies and practices to manage allergens within the food production environment • Conduct a group work to decide how to provide information and to spot menu mistakes
Classroom Aids	
Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films	
Tools, Equipment and Other Requirements	
Sample food allergen management plan	

Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	**Specialization**	**Relevant Industry Experience**		**Training Experience**		**Remarks**
		Years	***Specialization***	***Years***	***Specialization***	
Bachelor's Degree	Food Technology, Food Science, Food Processing, Dairy Technology, Microbiology, Biotechnology	3	Food processing	1	Food safety, quality assurance, food processing, FSSAI Schedule IV implementation, food hygiene, sanitation, FSMS, HACCP, Allergen Management.	
Master's Degree	Food Technology, Food Science, Food Processing, Dairy Technology, Microbiology, Biotechnology	2	Food processing	1	Food safety, quality assurance, food processing, FSSAI Schedule IV implementation, food hygiene, sanitation, FSMS, HACCP, Allergen Management.	

Trainer Certification	
Domain Certification	**Platform Certification**
Certified for Job Role: "Fundamentals of Allergen Control – Food Industry" mapped to MCr: "FIC/MCr0007, v1.0. Minimum accepted score as per SSC guideline is 80%	Recommended that the Trainer is certified for the Job Role: "Trainer" (VET & SKILLS), mapped to the Qualification Pack: "MEP/Q2601", V2. Minimum accepted SCORE IS 80 % as per SSC guidelines.

Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification	**Specialization**	**Relevant Industry Experience**		**Training/Assessment Experience**		**Remarks**
		Years	***Specialization***	***Years***	***Specialization***	
Bachelor's Degree	Food Technology, Food Science, Food Processing, Dairy Technology, Microbiology, Biotechnology	4	Food processing	1	Food safety, quality assurance, food processing, FSSAI Schedule IV implementation, food hygiene, sanitation, FSMS, HACCP, Allergen Management.	
Master's Degree	Food Technology, Food Science, Food Processing, Dairy Technology, Microbiology, Biotechnology	3	Food processing	1	Food safety, quality assurance, food processing, FSSAI Schedule IV implementation, food hygiene, sanitation, FSMS, HACCP, Allergen Management.	

Assessor Certification	
Domain Certification	**Platform Certification**
Certified for Job Role: "Fundamentals of Allergen Control – Food Industry" mapped to MCr: "FIC/MCr-0007", v1.0. Minimum accepted score as per SSC guideline is 80%	Recommended that the Assessor is certified for the Job Role: "Assessor" (VET & SKILLS), mapped to the Qualification Pack: "MEP/Q2701", V2. Minimum accepted SCORE IS 80 % as per SSC guidelines.

Assessment Strategy

1. Assessment System Overview:

- Batches assigned to the assessment agencies for conducting the assessment on SDSM/SIP or email.
- Assessment agencies send the assessment confirmation to VTP/TC looping SSC.
- The assessment agency deploys the ToA certified Assessor for executing the assessment.
- SSC monitors the assessment process & records.

2. Testing Environment:

- Confirm that the centre is available at the same address as mentioned on SDMS or SIP.
- Check the duration of the training.
- Check the Assessment Start and End time to be as 10 a.m. and 5 p.m.
- If the batch size is more than 30, then there should be 2 Assessors.
- Check that the allotted time to the candidates to complete Theory & Practical Assessment is correct.
- Check the mode of assessment—Online (TAB/Computer) or Offline (OMR/PP).
- Confirm the number of TABs on the ground are correct to execute the Assessment smoothly.
- Check the availability of the Lab Equipment for the particular Job Role.

3. Assessment Quality Assurance levels / Framework:

- Question papers created by the Subject Matter Experts (SME).
- Question papers created by the SME verified by the other subject Matter Experts.
- Questions are mapped with NOS and PC.
- Question papers are prepared considering that level 1 to 3 are for the unskilled & semi-skilled individuals, and level 4 and above are for the skilled, supervisor & higher management.
- An assessor must be ToA certified & the trainer must be ToT Certified.
- The assessment agency must follow the assessment guidelines to conduct the assessment.

4. Types of evidence or evidence-gathering protocol:

- Time-stamped & geotagged reporting of the assessor from assessment location.
- Center photographs with signboards and scheme-specific branding.
- Biometric or manual attendance sheet (stamped by TP) of the trainees during the trainingperiod.
- Time-stamped & geotagged assessment (Theory + Viva + Practical) photographs & videos.

5. Method of verification or validation:

- A surprise visit to the assessment location.
- A random audit of the batch.
- Random audit of any candidate.

6. Method for assessment documentation, archiving, and access:

- Hard copies of the documents are stored.

- Soft copies of the documents & photographs of the assessment are uploaded / accessedfrom Cloud Storage.
- Soft copies of the documents & photographs of the assessment are stored in the HardDrives.

References

Glossary

Term	Description
Declarative Knowledge	Declarative knowledge refers to facts, concepts and principles that need tobe known and/or understood in order to accomplish a task or to solve a problem.
Key Learning Outcome	A key learning outcome is a statement of what a learner needs to know, understand and be able to do in order to achieve the terminal outcomes. Aset of key learning outcomes will make up the training outcomes. Training outcome is specified in terms of knowledge, understanding (theory) and skills (practical application).
OJT (M)	On-the-job training (Mandatory); trainees are mandated to completespecified hours of training on-site
OJT (R)	On-the-job training (Recommended); trainees are recommended thespecified hours of training on-site
Procedural Knowledge	Procedural knowledge addresses how to do something, or how to perform atask. It is the ability to work or produce a tangible work output by applying cognitive, affective or psychomotor skills.
Training Outcome	Training outcome is a statement of what a learner will know, understandand be able to do upon the completion of the training.
Terminal Outcome	The terminal outcome is a statement of what a learner will know, understand and be able to do upon the completion of a module. A set ofterminal outcomes help to achieve the training outcome.

Acronyms and Abbreviations

Term	Description
NOS	National Occupational Standard (s)
NSQF	National Skills Qualifications Framework
OJT	On-the-job Training
QP	Qualifications Pack
PwD	People with Disability
PPE	Personal Protective Equipment