

National Occupational Standards



Basics of Pickle processing & Packaging

Unit Code: FIC/N0214

Version: 1.0

NSQF Level: 3

Food Industry Capacity & Skill Initiative || Shriram Bharatiya Kala kendra, 3rd floor, 1, Copernicus Marg, Mandi House, New Delhi
Delhi 110001 || email:santosh@ficsi.in

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Description

This OS is about the preparation, processing, and packaging of mix and instant pickles in accordance with industry standards and regulations. This involves handling raw ingredients, operating processing equipment, maintaining hygiene standards, ensuring product quality and safety, and adhering to production schedules

Scope

The scope covers the following :

- Prepare the mix and instant pickles
- Post-production activities
- Food Safety Practices
- Entrepreneurial Skills

Elements and Performance Criteria

Prepare the mix and instant pickles

To be competent, the user/individual on the job must be able to:

- PC1.** ensure required quantity and quality of raw materials for production
- PC2.** inspect the tools, equipment, and machinery before the start of production
- PC3.** de-skin the vegetables/fruits using peeling machine, lye solution etc. as per the standard work practices
- PC4.** operate controls of the spraying system for washing the peeled fruits and vegetables
- PC5.** inspect the sliced vegetables for any spoilage thoroughly
- PC6.** assemble the ingredients required for preparing the solution such as vinegar, salt, sugar, etc.
- PC7.** prepare the brine solution
- PC8.** maintain appropriate storage conditions (temperature, humidity) to preserve the brine's quality.
- PC9.** Blanch vegetables to preserve color, flavor, and texture.
- PC10.** crush the cured vegetables with a mill/crusher and make a coarse paste with a pulper
- PC11.** transfer the fermented vegetables to the pickle mixing machine appropriately
- PC12.** mix all the ingredients, stir well and check for the consistency
- PC13.** inspect the finished product to confirm whether it meets the quality standards of the organization

Post-production activities

To be competent, the user/individual on the job must be able to:

- PC14.** Select appropriate packaging materials considering the type of product and packaging requirements
- PC15.** Ensure packaging materials meet regulatory standards and quality specifications
- PC16.** Verify the integrity of packaging materials to prevent contamination or damage to the product

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- PC17.** load appropriate labels in the packaging machine and accurate information for packing the finished product while following food laws and regulations
- PC18.** Operate packaging machinery effectively and safely, including bottle fillers, capping machines, sealing equipment, and pouch-filling machines
- PC19.** monitor the packaging process (such as pickle filling, sealing, labeling, etc.) and carry out adjustments as required
- PC20.** pack the finished product into cartons and move them to the storage area manually or mechanically, following standard work practices
- PC21.** store cured vegetables following SOP until further process
- PC22.** attend minor repairs/faults of all machines (if any)
- PC23.** clean work area, machinery, equipment, and tools using industry-approved cleaning procedures (such as Clean in Place, Cleaning out of Place), cleaning agents, and sanitizers

Food safety practices

To be competent, the user/individual on the job must be able to:

- PC24.** follow Good Manufacturing Practices (GMP) at the workplace
- PC25.** follow Good Hygiene Practices (GHP) at the workplace appropriately
- PC26.** ensure to properly tag and number all the equipment, machinery, tools, and other processing aids to keep proper traceability of the product being manufactured and handled at the site
- PC27.** ensure the record keeping and documentation such as Daily Monitoring Sheets, Batch Traceability Records, machine records, product parameters, process control parameter
- PC28.** follow FSSAI Schedule IV requirements related to pest Control, Cleaning, and Sanitation, Utilities, Waste Disposal, Prevention of Cross-Contamination, allergen management, corrective action, preventive actions, food operation control etc.
- PC29.** report any food safety and GMP issues to the supervisor, if any

Employability Skills

To be competent, the user/individual on the job must be able to:

- PC30.** identify constitutional values, civic rights, duties, personal values and ethics, and environmentally sustainable practices
- PC31.** understand the significance of employability skills in meeting job requirements
- PC32.** explain 21st Century Skills such as Self-awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset, etc.
- PC33.** speak with others using some basic English phrases or sentences
- PC34.** follow good manners while communicating with others
- PC35.** work with others in a team
- PC36.** communicate and behave appropriately with all genders and PwD
- PC37.** report any issues related to sexual harassment
- PC38.** use various financial products and services safely and securely
- PC39.** calculate income, expenses, savings etc.
- PC40.** approach the concerned authorities for any exploitation as per legal rights and laws
- PC41.** operate digital devices and use their features and applications securely and safely
- PC42.** Use the internet and social media platforms securely and safely
- PC43.** identify and assess opportunities for potential business

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- PC44.** identify sources for arranging money and associated financial and legal challenges
- PC45.** identify different types of customers
- PC46.** identify customer needs and address them appropriately
- PC47.** follow appropriate hygiene and grooming standards
- PC48.** create a basic biodata
- PC49.** search for suitable jobs and apply
- PC50.** identify and register apprenticeship opportunities as per the requirement

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** production planning process: the criteria for selecting a location for setting up a cloud kitchen
- KU2.** resource management process
- KU3.** procedure to estimate manpower and raw material
- KU4.** methods to inspect tools, equipment, and machinery
- KU5.** Knowledge about drinking water specifications and its relevant standards required for washing of fruits and vegetables
- KU6.** standard methods used for drying fruits and vegetables after washing
- KU7.** how to carry out processes such as peeling and slicing without damaging the fruits and vegetables
- KU8.** sorting and grading the fruits and vegetables based on their size, shape, colour, appearance, etc.
- KU9.** inspection techniques to detect spoilages, damaged fruits and vegetables, and the procedure followed to discard them appropriately
- KU10.** food laws and regulations applicable to product packaging and labelling, and the information to be printed on the packet labels
- KU11.** different types of packaging material to be used for the packaging of pickles
- KU12.** Understanding of Schedule IV of FSSAI, Good Manufacturing Practices (GMP), and Good Hygiene Practices successfully and effectively on-site
- KU13.** understand the manufacturing process, product parameters, and process control parameters such as CCPs
- KU14.** organizational procedure for the disposal of waste material from the processing area in an environmentally safe manner
- KU15.** awareness of layout, which would help to demarcate the defined movements of RM, PM, FG, and wastes generated during the processing of goods.

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** maintain work-related notes and records
- GS2.** read the relevant guides and literature to get the latest information about the field of work

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- GS3.** communicate clearly and politely
- GS4.** perform basic calculations
- GS5.** listen attentively to understand the instructions being given
- GS6.** identify solutions to work-related issues
- GS7.** plan and prioritize tasks to ensure timely completion
- GS8.** make quick decisions in case of an emergencies

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Prepare the mix and instant pickles</i>	10	20	-	5
PC1. ensure required quantity and quality of raw materials for production	-	-	-	-
PC2. inspect the tools, equipment, and machinery before the start of production	-	-	-	-
PC3. de-skin the vegetables/fruits using peeling machine, lye solution etc. as per the standard work practices	-	-	-	-
PC4. operate controls of the spraying system for washing the peeled fruits and vegetables	-	-	-	-
PC5. inspect the sliced vegetables for any spoilage thoroughly	-	-	-	-
PC6. assemble the ingredients required for preparing the solution such as vinegar, salt, sugar, etc.	-	-	-	-
PC7. prepare the brine solution	-	-	-	-
PC8. maintain appropriate storage conditions (temperature, humidity) to preserve the brine's quality.	-	-	-	-
PC9. Blanch vegetables to preserve color, flavor, and texture.	-	-	-	-
PC10. crush the cured vegetables with a mill/crusher and make a coarse paste with a pulper	-	-	-	-
PC11. transfer the fermented vegetables to the pickle mixing machine appropriately	-	-	-	-
PC12. mix all the ingredients, stir well and check for the consistency	-	-	-	-
PC13. inspect the finished product to confirm whether it meets the quality standards of the organization	-	-	-	-
<i>Post-production activities</i>	10	20	-	2

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. Select appropriate packaging materials considering the type of product and packaging requirements	-	-	-	-
PC15. Ensure packaging materials meet regulatory standards and quality specifications	-	-	-	-
PC16. Verify the integrity of packaging materials to prevent contamination or damage to the product	-	-	-	-
PC17. load appropriate labels in the packaging machine and accurate information for packing the finished product while following food laws and regulations	-	-	-	-
PC18. Operate packaging machinery effectively and safely, including bottle fillers, capping machines, sealing equipment, and pouch-filling machines	-	-	-	-
PC19. monitor the packaging process (such as pickle filling, sealing, labeling, etc.) and carry out adjustments as required	-	-	-	-
PC20. pack the finished product into cartons and move them to the storage area manually or mechanically, following standard work practices	-	-	-	-
PC21. store cured vegetables following SOP until further process	-	-	-	-
PC22. attend minor repairs/faults of all machines (if any)	-	-	-	-
PC23. clean work area, machinery, equipment, and tools using industry-approved cleaning procedures (such as Clean in Place, Cleaning out of Place), cleaning agents, and sanitizers	-	-	-	-
<i>Food safety practices</i>	5	10	-	2
PC24. follow Good Manufacturing Practices (GMP) at the workplace	-	-	-	-
PC25. follow Good Hygiene Practices (GHP) at the workplace appropriately	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC26. ensure to properly tag and number all the equipment, machinery, tools, and other processing aids to keep proper traceability of the product being manufactured and handled at the site	-	-	-	-
PC27. ensure the record keeping and documentation such as Daily Monitoring Sheets, Batch Traceability Records, machine records, product parameters, process control parameter	-	-	-	-
PC28. follow FSSAI Schedule IV requirements related to pest Control, Cleaning, and Sanitation, Utilities, Waste Disposal, Prevention of Cross-Contamination, allergen management, corrective action, preventive actions, food operation control etc.	-	-	-	-
PC29. report any food safety and GMP issues to the supervisor, if any	-	-	-	-
<i>Employability Skills</i>	5	10	-	1
PC30. identify constitutional values, civic rights, duties, personal values and ethics, and environmentally sustainable practices	-	-	-	-
PC31. understand the significance of employability skills in meeting job requirements	-	-	-	-
PC32. explain 21st Century Skills such as Self-awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset, etc.	-	-	-	-
PC33. speak with others using some basic English phrases or sentences	-	-	-	-
PC34. follow good manners while communicating with others	-	-	-	-
PC35. work with others in a team	-	-	-	-
PC36. communicate and behave appropriately with all genders and PwD	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC37. report any issues related to sexual harassment	-	-	-	-
PC38. use various financial products and services safely and securely	-	-	-	-
PC39. calculate income, expenses, savings etc.	-	-	-	-
PC40. approach the concerned authorities for any exploitation as per legal rights and laws	-	-	-	-
PC41. operate digital devices and use their features and applications securely and safely	-	-	-	-
PC42. Use the internet and social media platforms securely and safely	-	-	-	-
PC43. identify and assess opportunities for potential business	-	-	-	-
PC44. identify sources for arranging money and associated financial and legal challenges	-	-	-	-
PC45. identify different types of customers	-	-	-	-
PC46. identify customer needs and address them appropriately	-	-	-	-
PC47. follow appropriate hygiene and grooming standards	-	-	-	-
PC48. create a basic biodata	-	-	-	-
PC49. search for suitable jobs and apply	-	-	-	-
PC50. identify and register apprenticeship opportunities as per the requirement	-	-	-	-
NOS Total	30	60	-	10

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National Occupational Standards (NOS) Parameters

NOS Code	FIC/N0214
NOS Name	Basics of Pickle processing & Packaging
Sector	Food Processing
Sub-Sector	
Occupation	Processing-Fruits and Vegetables
NSQF Level	3
Credits	3
Minimum Job Entry Age	16
Minimum Educational Qualification & Experience	10th grade pass (or Equivalent) OR 8th Class pass with 3 Years of experience in the Food Processing Industry OR Previous relevant Qualification of NSQF Level 2.5 with 1.5 years of experience in the Food Processing Industry OR Previous relevant Qualification of NSQF Level 2 with 3 Years of experience in the Food Processing Industry
Version	1.0
Last Reviewed Date	18/02/2025
Next Review Date	18/02/2028
NSQC Clearance Date	18/02/2025
Reference code on NQR	NG-03-FI-03749-2025-V1-FICSI
NQR Version	1.0
CCN Category	1