

SVQ Food & Drink Unit Handbook (4768)

Units 001-050

September 2013 Version 1.0



Contents

1 Units		4
Unit 001	Assemble fish/shellfish products by hand	5
Unit 002	Carry out product changeovers in food manufacture	9
Unit 003	Assemble and process products for food service	13
Unit 004	Carry out task hand-over procedures in food manufacture	16
Unit 006	Contribute to continuous improvement of food safety in manufacture	22
Unit 007	Contribute to environmental safety in food manufacture	25
Unit 008	Contribute to problem diagnosis in a food environment	27
Unit 009	Contribute to problem resolution in a food environment	30
Unit 010	Bake-off food products for sale	33
Unit 011	Contribute to the maintenance of plant and equipment in food manufacture	36
Unit 012	Control defrosting in food manufacture	39
Unit 013	Control depositing in food manufacture	42
Unit 014	Control enrobing in food manufacture	46
Unit 015	Control fish gutting operations	49
Unit 016	Control fish skinning operations	53
Unit 017	Control fish/shellfish defrosting	57
Unit 018	Control forming in food manufacture	61
Unit 019	Control heat treatment in food manufacture	65
Unit 020	Carry out hygiene cleaning in food and drink operations	69
Unit 021	Control mixing in food manufacture	73
Unit 022	Control separation in food manufacture	77
Unit 023	Control shellfish depuration production	81
Unit 024	Control shellfish meat extraction operations	84
Unit 025	Control size reduction in food manufacture	88
Unit 026	Control temperature reduction in food manufacture	92
Unit 027	Control the dry curing of fish	96
Unit 028	Control the fish/shellfish brining process	100
Unit 029	Control the fish/shellfish marinating process	104
Unit 030	Control the fish/shellfish smoking process	108
Unit 031	Control washing and drying machinery in food and drink operations	112

Unit 032	Control weighing in food manufacture	115
Unit 033	Control wrapping and labelling in food manufacture	118
Unit 034	Carry out sampling in food and drink operations	122
Unit 035	Display fish/shellfish for retail sale	125
Unit 036	Extract shellfish meat by hand	130
Unit 037	Conduct shellfish depuration operations	134
Unit 038	Fillet fish by hand	137
Unit 039	Grade fish/shellfish by hand	141
Unit 040	Grade fish/shellfish by machine	144
Unit 041	Gut and clean fish by hand	148
Unit 042	Harvest fish for food supply	152
Unit 043	Intake fish/shellfish	155
Unit 044	Lift and handle materials safely in food manufacture	159
Unit 045	Maintain workplace food safety standards in manufacture	162
Unit 046	Maintain the workplace and health and safety in food manufacture	165
Unit 047	Contribute to the application of improvement techniques for achieving excellence in a food environment	168
Unit 048	Contribute to sustainable practice in a food environment	172
Unit 049	Communicate in a business environment	175
Unit 050	Deal with waste in food and drink operations	178



1 Units

Availability of units

Example 1

The following units can also be obtained from the centre resources section of the City & Guilds website, or are available on a CD-ROM (stock order code CD-0000-11).

They are also on The Register of Regulated Qualifications:

<http://register.ofqual.gov.uk/Unit>

Example 2

Below is a list of the learning outcomes for all the units. If you want to download a complete set of units, go to [**website address**]

Structure of units

These units each have the following:

- City & Guilds reference number
- unit accreditation number (UAN)
- title
- level
- credit value
- guided learning hours
- unit aim
- relationship to NOS, other qualifications and frameworks
- endorsement by a sector or other appropriate body
- information on assessment
- learning outcomes which are comprised of a number of assessment criteria
- notes for guidance.

Unit 001

Assemble fish/shellfish products by hand

SCQF Level:	5
Credit value:	4
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about assembling fish or shellfish products by hand: for example, forming food products using fish or shellfish in combination with other animal or plant based foodstuffs to assemble products such as fish kebabs and sushi products. It is also about working to organisational product specifications and production schedules.

You must be able to prepare to and assemble fish/shellfish products. You must also be able to complete the assembly of products.

This unit is for you if you work in fish or shellfish processing and are involved in the assembling of fish or shellfish products by hand.

Performance objectives
The learner must be able to: 1. prepare to assemble fish/shellfish products.
This means you: 1.1 prepare according to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions 1.2 confirm product specification 1.3 prepare work station to ensure conditions are suitable for product assembly 1.4 obtain tools and equipment required to support product assembly 1.5 obtain fish/shellfish and other raw materials to meet the required product specification 1.6 take effective action in response to operating problems 1.7 maintain effective communication.

Performance objectives

The learner must be able to:

2. assemble fish/shellfish products by hand.

This means you:

- 2.1 operate to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
- 2.2 assemble fish/shellfish products according to product specification
- 2.3 use tools and equipment effectively to support production process
- 2.4 achieve required rate of production
- 2.5 handle and store fish/shellfish and other food materials in a manner which maintains quality and condition
- 2.6 dispose of waste material to maintain condition of work station
- 2.7 make sure the product is correctly transferred to the next stage in the processing operation
- 2.8 take effective action in response to operating problems
- 2.9 maintain effective communication.

Performance objectives

The learner must be able to:

3. finish assembly operations.

This means you:

- 3.1 finish according to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
- 3.2 deal correctly with materials that can be recycled or reworked
- 3.3 dispose of waste material according to organisational procedures
- 3.4 make equipment and work station ready for future use, after the completion of the process
- 3.5 maintain effective communication
- 3.6 accurately complete all records.

Essential knowledge

The learner will need to know and understand:

1. what the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions are and what may happen if they are not followed
2. the tools and equipment required to support product assembly
3. how to obtain and interpret the relevant process specification
4. how to identify common fish/shellfish products and other raw materials
5. how to prepare and maintain work stations in a condition suitable for product assembly
6. how to assess the quality of fish/shellfish products and other raw materials
7. how to assemble products to achieve the required product specification
8. the importance of accuracy during product assembly
9. how to deal with fish/shellfish and food materials that are not fit for use

10. common quality problems associated with the production of fish/shellfish products
11. the risks associated with the handling of high and low care products
12. what action to take when the process specification is not met
13. when fish/shellfish and food materials can be reworked and recycled
14. product control and traceability during product assembly
15. how to maintain the condition of tools and equipment
16. how to dispose of waste correctly and why it is important to do so
17. the limits of your own responsibility and competence and why it is important to work within those limits
18. what recording, reporting and communication is needed, how to carry this out correctly and the reasons why it is important to do so.

Unit 001 Assemble fish/shellfish products by hand

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **preparing to assemble fish/shellfish products** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **assembling fish/shellfish products by hand** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **finishing the assembly operations** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Unit 002

Carry out product changeovers in food manufacture

SCQF Level:	6
Credit value:	8
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about the changing of machines or equipment and/or the introduction of different products or materials. It covers preparing for changeovers, carrying out changeovers and completing the process according to legal or regulatory requirements.

Performance objectives
The learner must be able to: 1. prepare for changeovers.
This means you: 1.1 prepare according to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions 1.2 prepare in a way that minimises operational down time and waste of products and materials 1.3 remove resources from the previous run which are not needed to an appropriate place 1.4 ensure plant surfaces that are in contact with ingredients and product are clean 1.5 assemble required resources in the correct place before changeover begins and make sure they meet specification before the changeover begins 1.6 obtain the necessary information about the changeover at the appropriate time and alert those who need to be involved 1.7 obtain the required authorisation, if appropriate, before changeover begins 1.8 maintain effective communication where required.

Performance objectives
The learner must be able to: 2. carry out changeovers.
This means you: 2.1 carry out changeovers according to the legal or regulatory

- requirements and the organisational health and safety, hygiene and environmental standards and instructions
- 2.2 adjust plant and equipment to conform to specification and without affecting any other part of the plant
- 2.3 maintain effective communication where required.

Performance objectives

The learner must be able to:

- 3. complete changeovers.

This means you:

- 3.1 complete changeovers according to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
- 3.2 inform those who need to know that changeover is complete
- 3.3 take appropriate action when change parts are removed
- 3.4 report the condition of worn or damaged parts to the relevant person
- 3.5 complete the changeover within the specified time
- 3.6 ensure that, following changeover, output matches specification and is produced at the required rate
- 3.7 complete all records promptly and accurately.

Essential knowledge

The learner will need to know and understand:

- 1. the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions that apply, and what may happen if they are not followed
- 2. the need for authorisation to work and isolation of equipment and services, and what may happen if this is not done correctly
- 3. what recording and communication is needed, how to carry this out correctly and the reasons why it is important to do so
- 4. what the limits of your own authority and competence are and why it is important to work within them
- 5. why the changeover is taking place
- 6. where to obtain and how to interpret specifications and what may happen if this is not done correctly
- 7. what the purpose and use is of machine isolation guards, interlocks and safety locks
- 8. functions and use of machine parts, tools and equipment needed for changeovers
- 9. what materials and resources are required and how to check their suitability
- 10. time allowed for changeovers
- 11. difficulties which might arise during changeovers and action to be taken in each case
- 12. the need for cleaning and what may happen if this is not done when required
- 13. critical control settings and their effect on production volumes and quality
- 14. what action to take when problems arise
- 15. how to recognise wear and tear on change parts

16. why it is important to notify the relevant person that a changeover has been completed and what may happen if this is not done
17. the appropriate action to take when change parts are removed and what may happen if this is not done
18. the need for accurate and prompt records.

Unit 002 Carry out product changeovers in food manufacture

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **preparing for changeovers** in accordance with workplace procedures.

Evidence of **carrying out changeovers** in accordance with workplace procedures.

Evidence of **completing changeovers** in accordance with workplace procedures. This must include taking two types of appropriate action e.g. cleaning, checking for wear and damage and storing.

Unit 003

Assemble and process products for food service

SCQF Level:	5
Credit value:	7
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	<p>This unit is about making up a range of service products such as sandwiches, rolls and other fast foods in a food retail and food service environment.</p> <p>You need to show that you can assemble service products, making use of spreads and fillings, using different bases. You will also need to show that you can maintain the condition of service products and process them if they require heating, toasting or chilling.</p>

Performance objectives
The learner must be able to: 1. assemble service products.
This means you: 1.1 ensure your working area is clean and in the correct condition for use 1.2 identify and select the correct fillings according to your instructions and specifications 1.3 correctly assemble service products to specification to meet customers' needs 1.4 ensure your working practices minimise waste and you correctly deal with scrap material 1.5 position assembled products correctly for further processing 1.6 take prompt action on discovering any problems or variances 1.7 comply with health, safety and hygiene requirements and wear the correct personal protective clothing and equipment throughout assembly operations.

Performance objectives
The learner must be able to: 2. process service products.
This means you: 2.1 check the condition of assembled products according to your instructions and specifications

- 2.2 check the operating condition of processing equipment
- 2.3 process assembled products to specification to meet customers' needs
- 2.4 maintain the condition of processed products according to specification
- 2.5 position processed products correctly for further processing
- 2.6 take prompt action on discovering any problems or variances
- 2.7 comply with health, safety and hygiene requirements and wear the correct personal protective clothing and equipment throughout process activity.

Essential knowledge

The learner will need to know and understand:

1. health, safety and hygiene requirements related to assembling and processing food service products and what might happen if they are not met
2. how to source and read product specifications and recipe information
3. common factors affecting the quality of service products
4. common sources of service product contamination during assembly and processing
5. how to avoid contamination during assembly and processing, and what might happen if this is not done
6. how to recognise and report service products that do not meet specification
7. the procedure for rejecting and isolating substandard service products
8. the importance of consistent assembly for portion control
9. the correct use of processing techniques for service products.

Unit 003 **Assemble and process products for food service**

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **assembling service products** in accordance with workplace procedures. This must include two types of products e.g. sandwiches, rolls / baguettes, snack meals, liquids.

Evidence of **processing service products** in accordance with workplace procedures. This must include two types of process e.g. freezing, chilling, microwaving, heating, toasting.

Unit 004

Carry out task hand-over procedures in food manufacture

SCQF Level:	6
Credit value:	6
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about the exchange of all relevant information during the hand-over process regarding both what has occurred and what may have to happen in order to maintain continuity of output. This can include shift hand-over and cover for absence and breaks.

Performance objectives

The learner must be able to:

1. hand over responsibility to another person.

This means you:

- 1.1 hand over according to the required legal or regulatory requirements and organisational health, safety, environmental and hygiene standards or instructions
- 1.2 take precautions to ensure that production is not interrupted during hand-over
- 1.3 maintain quality standards during task hand-over
- 1.4 provide information accurately and promptly to those who need to know
- 1.5 exchange information in an appropriate place.

Performance objectives

The learner must be able to:

2. take over responsibility from another person.

This means you:

- 2.1 take over according to the required legal or regulatory requirements and organisational health, safety, environmental and hygiene standards or instructions
- 2.2 take precautions to ensure that production is not interrupted during hand-over
- 2.3 maintain quality standards during hand-over
- 2.4 obtain required information from the other person and clarify where necessary
- 2.5 exchange information in an appropriate place.

Essential knowledge

The learner will need to know and understand:

1. the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions that apply, and what may happen if they are not followed
2. the operation of the quality systems relevant to the work area
3. the production schedules appropriate to the work area
4. the specified machine settings to meet quality standards and what may happen if they are not met
5. the origins and destinations of materials and products
6. why it is important to provide accurate information and what may happen if the information you give is inaccurate
7. why it is important to obtain accurate information and what may happen if this is not done
8. the reasons why it is important to interpret information accurately and what may happen if this is not done.

Unit 004 Carry out task hand-over procedures in food manufacture

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **handing over responsibility to another person** in accordance with workplace procedures. This must include maintaining quality in one of the following types of hand-over:

- where there are ongoing problems
- where there are impending problems.

Evidence of **taking over responsibility from another person** in accordance with workplace procedures. This must include maintaining quality in one of the following types of hand-over:

- where there are ongoing problems
- where there are impending problems.

Unit 005

Clean in place (CIP) plant and equipment in food and drink operations

SCQF Level:	6
Credit value:	7
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about cleaning in place food and drink operations plant and equipment. It covers using automated and semi-automated cleaning procedures, ensuring hygienic conditions of the plant and returning plant to a safe and hygienic working condition.

This unit is for those involved in preparing for and cleaning in place plant and equipment.

Performance objectives

The learner must be able to:

1. clean in place (CIP) plant and equipment in food and drink operations.

This means you:

- 1.1 prepare plant, equipment and materials as scheduled
- 1.2 make sure that all actions you take are within the limits of your own authority
- 1.3 obtain and use the required personal protective equipment and make sure it is fit for use
- 1.4 obtain and prepare cleaning materials
- 1.5 maintain effective communication throughout the cleaning process
- 1.6 carry out cleaning in a way that does not damage or contaminate plant, materials, products and equipment and does not harm yourself or other people
- 1.7 complete the cleaning process in line with organisational specifications carrying out swabbing where required
- 1.8 make sure that plant, equipment and work areas are fit for future use after cleaning
- 1.9 identify and report any signs of contamination, damage or environmental concerns
- 1.10 dispose of any waste correctly
- 1.11 return cleaning materials, equipment and personal protective equipment to safe and secure storage
- 1.12 inform those who need to know that CIP has been completed safely
- 1.13 handle and store chemicals

- 1.14 complete all records accurately and promptly
- 1.15 follow legal and regulatory requirements and health and safety, hygiene and environmental standards or instructions.

Essential knowledge

The learner will need to know and understand:

1. the relevant legal and regulatory requirements and health, safety, hygiene and environmental standards and instructions and what might happen if they are not met
2. the purpose of personal protective equipment and the consequences if this is not used correctly
3. types and uses of cleaning materials
4. COSHH and risk assessment requirements, precautions to be taken when handling or storing cleaning materials and what might happen if this does not happen
5. how to use guards and warning notices and why this is important
6. where a permit to work is required, how it is used, and what might happen if it is not obtained before cleaning starts
7. what the CIP system procedures are, where to find them, and what might happen if they are not followed
8. why it is important to follow the cleaning specification and what might happen if it is not followed
9. the correct set-up of valves, pipes, pumps and CIP points and what might happen if they are not set up properly
10. why it is important to check for and detect leaks, blockages, pump failures and other problems, and report them promptly
11. the precautions to take to make sure that products are not contaminated by cleaning materials
12. how cleaning helps to prolong the life of equipment and machinery
13. evidence of contamination and the actions to take if this evidence is found
14. the need to identify and report any signs of contamination, damage or environmental concerns and what may happen if this is not done
15. what actions to take in the event of ineffective cleaning
16. emergency procedures for dealing with spillages and contact with skin
17. the procedures for checking that cleaning has been effective and why it is important to check
18. what might happen if the correct waste disposal procedures are not followed
19. why it is important to keep accurate records and what might happen if this is not done
20. how to re-assemble plant and equipment and the importance of leaving plant, equipment and work areas fit for use
21. why it is important to clean and store equipment correctly after use
22. the importance of effective communication.

Unit 005 Clean in place (CIP) plant and equipment in food and drink operations

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of cleaning in place (CIP) plant and equipment in food and drink operations as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Unit 006

Contribute to continuous improvement of food safety in manufacture

SCQF Level:	7
Credit value:	5
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about making a contribution to continuously improving food safety in processing operations.

This unit is for you if you work in food and drink operations or animal feed operations and your job requires you to enter the food manufacturing or processing area. You may have supervisory responsibilities as a line manager or team leader.

Performance objectives
The learner must be able to: 1. highlight areas for improvement.
This means you: 1.1 identify and report any factors or issues that arise in your work activities which may affect the safety of food 1.2 identify and report any factors or issues within the environment, supplies or product which may affect the safety of food.

Performance objectives
The learner must be able to: 2. contribute to improving food safety.
This means you: 2.1 contribute to team meetings with ideas and suggestions to improve procedures or processes 2.2 contribute to introducing new procedures and/or reviewing existing ones in order to improve food safety.

Performance objectives

The learner must be able to:

3. interpret and use food safety standards and procedures.

This means you:

- 3.1 check that you understand and can use any new standards and procedures that are introduced relating to food safety.

Essential knowledge

The learner will need to know and understand:

1. what food safety management procedures are and why it is important to have them in place
2. what critical control points, control points, critical limits and relevant variance are
3. why it is important to monitor critical control points and control points, and how to do so
4. your responsibilities under your food safety management procedures, including the critical control points relating to your work activity
5. the impact of variance at critical control points and control points on food safety, public health and your organisation
6. the type and frequency of checks that you should perform to control food safety within your work activities, and how to obtain verification of those checks
7. how to interpret and use specifications
8. the reporting procedures when control measures fail
9. the records required for controlling food safety and how to maintain them
10. how traceability works and why it is important to food safety
11. types and methods of corrective action to reduce, control or eliminate food safety hazards
12. why it is important to have food safety management procedures in place
13. what continuous improvement is and why it is important to contribute to the improvement process.

Unit 006 **Contribute to continuous improvement of food safety in manufacture**

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **highlighting areas for improvement** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **contributing to improving food safety** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **interpreting and using food safety standards and procedures** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Unit 007

Contribute to environmental safety in food manufacture

SCQF Level:	6
Credit value:	6
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about working in an environmentally safe way. You will need to follow safe working practices; identify, minimise and report environmental damage and incidents; and dispose of waste in an environmentally safe way.

Performance objectives

The learner must be able to:

1. contribute to environmental safety at work.

This means you:

- 1.1 follow environmentally safe working practices and take precautions to minimise environmental damage
- 1.2 identify accurately any incidental damage
- 1.3 take prompt action to minimise any incidental damage
- 1.4 report promptly and accurately environmental incidents and any actions you take in response to them
- 1.5 follow procedures to dispose of waste materials safely.

Essential knowledge

The learner will need to know and understand:

1. the different methods that can be used to minimise environmental damage
2. how to choose the most suitable materials and equipment, given the nature of the work activity, and their potential impact on the environment
3. the different types of environmental damage
4. the organisational and legislative requirements relating to environmental damage
5. types of damage that may occur, the impact these can have on the environment, and what corrective actions can be taken
6. how to dispose of waste in ways that minimise the risk to the environment
7. reporting procedures for environmental incidents.

Unit 007 Contribute to environmental safety in food manufacture

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **contributing to environmental safety** in accordance with workplace procedures.

Unit 008

Contribute to problem diagnosis in a food environment

SCQF Level:	6
Credit value:	6
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about the skills required to contribute to or assist in identifying problems quickly in order to prevent any loss in production or operational time within food and drink manufacturing or supply operations (including multi-stage operations). It covers contributing to identifying problems, finding out what they are and reporting them to the appropriate people. Contributing to making decisions and communicating effectively are essential features of this unit. Contribution is typically provided through working in a team, although this does not exclude individual contributions from outside of close working teams.

This unit is for you if you work in the manufacture or supply of food and drink.

Performance objectives
The learner must be able to: 1. contribute to identifying problems.
This means you: 1.1 help to recognise differences from normal operating conditions quickly 1.2 make a contribution to the accurate assessment of the impact of these problems 1.3 take the appropriate action to make sure you and your colleagues remain safe.

Performance objectives

The learner must be able to:

2. contribute to problem diagnosis.

This means you:

- 2.1 check and follow legal or regulatory requirements and hygiene, health and safety and environmental standards
- 2.2 help to find out the nature, cause and effect of the problems
- 2.3 make a contribution to the investigation of problems in a safe and cost-effective manner, with minimal delay or wastage.

Essential knowledge

The learner will need to know and understand:

1. to what standards of health and safety and hygiene you are required to work and why it is important that you do so
2. why contributing to problem solving is important in food operations
3. how to recognise differences from specification
4. what the relevant operating procedures are in your area of work
5. what typical operating problems occur in your area of work and their possible effect on other operations
6. how to use any relevant tools and test equipment in your area of work
7. how to help investigate problems in a safe and cost-effective manner and why it is important to do so
8. how to assist the team or individual define and verify the root cause of a problem
9. what different methods can be used to gather evidence about problems
10. how to help analyse problems to determine their nature, cause and effects
11. what the limits of your own authority and competence are and why it is important to work within them
12. what the lines and methods of effective communication are and why it is important to use them
13. what the documentation requirements are and why it is important to meet them.

Unit 008 **Contribute to problem diagnosis in a food environment**

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **contributing to identifying problems** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **contributing to problem diagnosis** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Unit 009

Contribute to problem resolution in a food environment

SCQF Level:	5
Credit value:	5
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about the skills required to contribute to or assist in fixing problems quickly and accurately in order to keep production running and minimise down time in the manufacture and supply of food and drink. This unit covers problems in multi-stage operations. It involves contributing to the review of available information and selecting and applying the most appropriate solution. Contribution to making decisions and communicating effectively are essential features of this unit. Contribution is typically provided through working in a team, although this does not exclude individual contributions from outside of close working teams.

This unit is for you if you work in the manufacture or supply of food and drink.

Performance objectives
The learner must be able to: 1. contribute to establishing what the problems are.
This means you: 1.1 check and follow legal or regulatory requirements and hygiene, health and safety and environmental standards 1.2 check the available information and clarify or seek further information.

Performance objectives
The learner must be able to: 2. contribute to the implementation of solutions.
This means you: 2.1 make a contribution to selecting solutions which are effective in relation to operational requirements 2.2 help to ensure that the corrective actions determined meet with

organisational requirements
2.3 contribute to putting into action the chosen solution to restore operating conditions safely and effectively
2.4 monitor operations to ensure that correct operating conditions are met and maintained
2.5 communicate the results of your actions to the appropriate person.

Performance objectives
The learner must be able to:
3. contribute to reporting on further action to be taken.
This means you:
3.1 contribute to the identification of needs for further work and report this to the relevant person in sufficient detail for action to be taken
3.2 make suggestions for avoiding the problem happening again and ways to improve operations to your managers and colleagues
3.3 complete all records accurately and clearly, and process them promptly.

Essential knowledge

The learner will need to know and understand:

<ol style="list-style-type: none"> 1. the standards of health and safety and hygiene to which you are required to work and why it is important that you do so 2. what typical operating problems occur in your area of work and their possible effect on other operations 3. what the operating procedures are in your area of work 4. what the limits of your own authority and competence are and why it is important to work within them 5. what recording and communication is needed, how to carry this out correctly and the reasons why it is important to do so 6. what the lines and methods of effective communication are and why it is important to use them 7. what factors to take into consideration when contributing to selecting solutions 8. how to help assess the impact of solutions on other operations 9. how to help analyse problems in a systematic way 10. how to help overcome problems and restore operations in an effective way 11. how to monitor product integrity both when you are overcoming problems and after you have overcome them 12. how to help recognise both temporary and permanent solutions and how to decide which should be used 13. how to help evaluate the effectiveness of the solution you have implemented.

Unit 009 **Contribute to problem resolution in a food environment**

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **contributing to establishing what the problems are** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **contributing to implementation of solutions** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **contributing to reporting on further action to be taken** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Unit 010

Bake-off food products for sale

SCQF Level:	5
Credit value:	6
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about how you prepare bake off products. You will need to be able to understand and work with specifications for baking and finishing a range of bake off products as well as using a variety of different items of equipment correctly and safely. Hygiene and safety are key factors in the performance of this unit in terms of the way you work and the way you look after the products with which you are working. You are expected to ensure that products are available for display as and when required and be able to make decisions about the quality of products and what to do with them if they do not meet the required quality standards.

Performance objectives

The learner must be able to:

1. bake-off products for sale (bake-off).

This means you:

- 1.1 bake products to specification using required operational procedures
- 1.2 make sure that baked products meet the requirements of the production schedule and the product specification
- 1.3 carry out a check of the product and confirm that products have been baked correctly
- 1.4 take action in line with operational requirements where products fail to meet the product specification
- 1.5 store products at the correct temperature for the next stage in the bakery process.

Performance objectives

The learner must be able to:

2. glaze and decorate bake off products.

This means you:

- 2.1 comply with health, safety and hygiene requirements
- 2.2 confirm that products are in the specified condition for glazing or decorating
- 2.3 make sure that finishing materials and methods conform to specification for texture, colour and temperature
- 2.4 confirm that glazed and decorated products conform to the product specification and are correctly positioned for the next stage in the bakery process
- 2.5 take action in line with operational requirements where finished products fail to meet the product specification
- 2.6 make sufficient glazed and decorated products available to meet production requirements
- 2.7 reclaim waste materials or dispose of them according to operational requirements.

Essential knowledge

The learner will need to know and understand:

1. the factors that affect baking including temperature, time, humidity, weight and shape
2. basic changes to products during baking
3. the importance of correct cooling conditions
4. types of finishing materials for bake off products and their uses
5. key factors that affect the handling and application of glazes and decorative materials
6. assessment procedures for confirming quality
7. how to recognise products that fail to meet the specification and the appropriate action that should be taken if products do not meet the required standards
8. key features of legal and standard operational requirements, and how they impact on each other and working practices
9. reporting procedures.

Unit 010 **Bake-off food products for sale**

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **baking-off products for sale** in accordance with workplace procedures. This must include two types of products.

Evidence of **glazing and decorating bake off products** in accordance with workplace procedures. This must include two methods e.g. glazing, piping, spreading, positioning.

Unit 011

Contribute to the maintenance of plant and equipment in food manufacture

SCQF Level:	5
Credit value:	5
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about contributing to the care and effective operation of plant and equipment in order to minimise machine down time and facilitate optimum production. It covers preparing for the maintenance of plant and equipment and undertaking maintenance of plant and equipment. Working safely, in the optimum time, using correct tools, equipment and materials, and carrying out maintenance in accordance with statutory and organisational procedures, are essential features of this unit.

Performance objectives

The learner must be able to:

1. prepare for the maintenance of plant and equipment.

This means you:

- 1.1 monitor and adhere to hygiene, health and safety and environmental procedures
- 1.2 access relevant information and instructions, interpret them correctly and evaluate them for impact on operations
- 1.3 identify what resources will be required and ensure that they are available and fit for use
- 1.4 access and prepare the work area in a manner which promotes effective and safe work practices
- 1.5 prioritise your work activities to achieve optimum productivity within the limits of your own contribution
- 1.6 ensure that maintenance activities are correctly authorised
- 1.7 establish effective spoken and written communication with your managers and colleagues
- 1.8 complete the necessary documentation accurately and legibly and process it correctly.

Performance objectives

The learner must be able to:

2. undertake maintenance of plant and equipment.

This means you:

- 2.1 monitor and adhere to hygiene, health and safety and environmental procedures
- 2.2 ensure that maintenance activities are undertaken using correct tools, materials, equipment and techniques
- 2.3 accurately identify defects and discrepancies in components and take the necessary corrective action
- 2.4 minimise the wastage of consumable items and other materials and dispose of non-reusable materials correctly
- 2.5 evaluate maintenance activities for effectiveness, seek areas for improvement and make any recommendations for improvements to your immediate line manager
- 2.6 ensure that work which cannot be completed within the agreed schedule is recorded and reported to the relevant people
- 2.7 maintain effective spoken and written communication with your managers and colleagues
- 2.8 complete the necessary documentation accurately and legibly and process it correctly
- 2.9 leave plant and equipment safe, tidy and fit for future use.

Essential knowledge

The learner will need to know and understand:

1. the standards of health and safety and hygiene to which you are required to work and why it is important that you do so
2. what the limits of your own authority and competence are and why it is important to work within them
3. what the lines and methods of effective communication are and why it is important to use them
4. what the documentation requirements are and why it is important to meet them
5. what the relevant plant and equipment operating systems are and what the maintenance needs are
6. how to access information and resources
7. what to do in situations where the resources are not available or are not fit for use
8. the possible implications of not undertaking maintenance
9. what impact maintenance may have on operations

Unit 011 **Contribute to the maintenance of plant and equipment in food manufacture**

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **preparing for the maintenance of plant and equipment** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **undertaking maintenance of plant and equipment** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Unit 012

Control defrosting in food manufacture

SCQF Level:	5
Credit value:	5
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about the defrosting of food products as part of a food manufacture. It details the skills required to set up and maintain the defrosting process. It is also about working to organisational product specifications and production schedules.

Performance objectives

The learner must be able to:

1. prepare to defrost.

This means you:

- 1.1 prepare according to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
- 1.2 obtain and interpret defrosting specifications
- 1.3 prepare defrosting facilities into a condition suitable for receiving product
- 1.4 obtain frozen product according to requirements of the defrosting specification
- 1.5 take effective action in response to operating problems
- 1.6 maintain effective communication.

Performance objectives

The learner must be able to:

2. control defrosting.

This means you:

- 2.1 operate to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
- 2.2 establish product in defrosting facility
- 2.3 establish, monitor and maintain defrosting process according to defrosting specification
- 2.4 handle and store product in a manner which maintains quality and condition
- 2.5 maintain condition of work area throughout process
- 2.6 remove defrosted product from defrosting facility and transfer to

<p>the next stage in the process</p> <p>2.7 take effective action in response to operating problems</p> <p>2.8 maintain effective communication.</p>
--

<p>Performance objectives</p> <p>The learner must be able to:</p> <p>3. finish defrosting process.</p>
<p>This means you:</p> <p>3.1 finish according to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions</p> <p>3.2 dispose of waste material according to organisational procedures</p> <p>3.3 make equipment and work area ready for future use, after the completion of the process</p> <p>3.4 maintain effective communication</p> <p>3.5 accurately complete all records.</p>

Essential knowledge

The learner will need to know and understand:

<ol style="list-style-type: none"> 1. the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions that apply, and what may happen if they are not followed 2. the methods used to defrost 3. the facilities and services required to defrost 4. how to obtain and interpret the defrosting specifications 5. how to prepare defrosting facilities for operation 6. the process requirements of defrosting operations 7. how and why it is important to monitor the defrosting process 8. how defrosted products should be handled to maintain condition and quality 9. how to assess the quality of frozen and defrosted products 10. causes of poor quality frozen products 11. what action to take when the process specification is not met 12. how to dispose of waste correctly and why it is important to do so 13. common quality problems and their likely causes 14. labelling and traceability relevant to defrosting 15. the limits of your own authority and competence and why it is important to work within those limits 16. what recording, reporting and communication is needed, how to carry this out correctly and the reasons why it is important to do so.
--

Unit 012 Control defrosting in food manufacture

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **preparing to defrost** in accordance with workplace procedures.

Evidence of **controlling defrosting** in accordance with workplace procedures.

Evidence of **finish defrosting process** in accordance with workplace procedures.

Unit 013

Control depositing in food manufacture

SCQF Level:	6
Credit value:	8
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about controlling machinery which deposits filling or topping on products as part of a food and drink manufacturing process. It details the skills required to start up, run and shut down equipment, as well as to take the appropriate action should operating problems occur. It is also about working to product specifications and production schedules.

Performance objectives
The learner must be able to: 1. prepare for depositing.
This means you: 1.1 operate to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when preparing for depositing 1.2 check the availability of mixtures against specifications 1.3 set up machinery with the correct nozzles and attachments according to specifications 1.4 start up machinery to specifications and check that it is working correctly 1.5 check the condition of mixtures and load into hoppers correctly 1.6 take effective action in response to operating problems 1.7 maintain effective communication.

Performance objectives
The learner must be able to: 2. carry out depositing.
This means you: 2.1 meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when carrying out depositing 2.2 control the supply of clean trays or tins for depositing to specifications 2.3 control depositing machinery to produce individual portions to

specifications
2.4 control the storage or racking of trays of deposited products to specifications
2.5 correctly deal with waste mixtures for recycling or disposal
2.6 correctly control transfer of deposited products to the next processing stage.

Performance objectives
The learner must be able to: 3. finish depositing.
This means you: 3.1 meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when finishing depositing 3.2 check the specifications to time shut down accurately 3.3 follow procedures to shut down the machinery correctly 3.4 remove and dispose of unwanted mixtures correctly 3.5 check and ensure that depositing machinery is ready for further use 3.6 communicate with others effectively and complete all records and reports.

Essential knowledge

The learner will need to know and understand:

<ol style="list-style-type: none"> 1. the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions that apply, and what may happen if they are not followed 2. the purpose and importance of the process 3. what equipment and tools to use and their correct condition 4. what materials to use and in what quantity 5. how to obtain and interpret the relevant process or ingredient specification 6. what recording, reporting and communication is needed, how to carry this out correctly and the reasons why it is important to do so 7. what action to take when the process specification is not met 8. how to carry out the necessary pre-start checks and why it is important to do so 9. how to follow the start-up procedures for the process and why it is important to do so 10. how to obtain the necessary resources for the process 11. how to follow work instructions and why it is important to do so 12. common sources of contamination during processing, how to avoid these and what might happen if this is not done 13. how to operate, regulate and shut down the relevant equipment 14. when it is necessary to seek assistance and how to seek it 15. how to follow the relevant process control procedures and why it is important to do so 16. different ways to carry out the process 17. how to carry out the process in an efficient manner and why it is important to do so 18. what the limits of your own authority and competence are and why it is important to work within them

19. how to deal with items that can be recycled or reworked
20. how to dispose of waste correctly and why it is important to do so
21. how to make equipment ready for future use.

Unit 013 Control depositing in food manufacture

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **preparing for depositing** in accordance with workplace procedures.

Evidence of **carrying out depositing** in accordance with workplace procedures and taking effective action in response to two operating problems.

Evidence of **finishing depositing** in accordance with workplace procedures.

Unit 014

Control enrobing in food manufacture

SCQF Level:	B6
Credit value:	7
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about controlling enrobing machinery to cover products in food and drink manufacturing. It details the skills required to start up, run and shut down equipment, as well as to take the appropriate action should operating problems occur. It is also about working to product specifications and production schedules.

Performance objectives
The learner must be able to: 1. prepare for enrobing.
This means you: 1.1 operate to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when preparing for enrobing 1.2 check the availability of products for enrobing against specifications 1.3 set up enrobing machinery according to specifications 1.4 start up enrobers to specifications and check that they are working correctly 1.5 communicate with others effectively 1.6 deal with problems effectively to maintain schedules.

Performance objectives
The learner must be able to: 2. carry out enrobing.
This means you: 2.1 meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when carrying out enrobing 2.2 control the infeed of products for enrobing to specifications 2.3 control the progress of products during enrobing to specifications 2.4 control the output of enrobed products to specifications 2.5 correctly deal with substandard or contaminated products

- | |
|--|
| <p>2.6 take effective action in response to operating problems within limits of your own authority</p> <p>2.7 correctly control transfer of enrobed products to the next processing stage.</p> |
|--|

<p>Performance objectives</p>

<p>The learner must be able to:</p>

- | |
|----------------------------|
| <p>3. finish enrobing.</p> |
|----------------------------|

<p>This means you:</p>

- | |
|---|
| <p>3.1 meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when finishing depositing</p> <p>3.2 follow procedures to shut down enrobers correctly</p> <p>3.3 remove and dispose of coatings and product remains correctly</p> <p>3.4 check and ensure that enrobers are ready for further use</p> <p>3.5 communicate with others effectively and complete all records and reports.</p> |
|---|

Essential knowledge

The learner will need to know and understand:

- | |
|---|
| <ol style="list-style-type: none"> 1. the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions that apply, and what may happen if they are not followed 2. the purpose and importance of the process 3. what equipment and tools to use and their correct condition 4. what materials to use and in what quantity 5. how to obtain and interpret the relevant process or ingredient specification 6. what recording, reporting and communication is needed, how to carry this out correctly and the reasons why it is important to do so 7. what action to take when the process specification is not met 8. how to carry out the necessary pre-start checks and why it is important to do so 9. how to follow the start-up procedures for the process and why it is important to do so 10. how to obtain the necessary resources for the process 11. how to follow work instructions and why it is important to do so 12. common sources of contamination during processing, how to avoid these and what might happen if this is not done 13. how to operate, regulate and shut down the relevant equipment 14. when it is necessary to seek assistance and how to seek it 15. how to follow the relevant process control procedures and why it is important to do so 16. different ways to carry out the process 17. how to carry out the process in an efficient manner and why it is important to do so 18. what the limits of your own authority and competence are and why it is important to work within them 19. how to deal with items that can be recycled or reworked 20. how to dispose of waste correctly and why it is important to do so 21. how to make equipment ready for future use. |
|---|

Unit 014 Control enrobing in food manufacture

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **preparing for enrobing** in accordance with workplace procedures.

Evidence of **carrying out enrobing** in accordance with workplace procedures and taking effective action in response to two operating problems.

Evidence of **finishing enrobing** in accordance with workplace procedures.

Unit 015

Control fish gutting operations

SCQF Level:	5
Credit value:	6
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	<p>This unit is about gutting fish by machine. It details the skills required to start up, run and shut down gutting equipment, as well as to take the appropriate action should operating problems occur. It is also about working to organisational product specifications and production schedules.</p> <p>You will be able to prepare for, carry out and finish fish gutting.</p> <p>This unit is for you if you work in fish processing and are involved in the gutting of fish.</p>

Performance objectives

The learner must be able to:

1. prepare for fish gutting.

This means you:

- 1.1 operate to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
- 1.2 check product specifications at the right time
- 1.3 set up equipment according to specification
- 1.4 make sure that fish of required specifications is available and fit for use
- 1.5 make sure that services meet requirements
- 1.6 start up the equipment correctly and check that it is running to specification
- 1.7 take effective action in response to operating problems
- 1.8 maintain effective communication.

Performance objectives

The learner must be able to:

2. carry out fish gutting.

This means you:

- 2.1 meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
- 2.2 make sure that the plant is correctly supplied with fish and services
- 2.3 achieve the required output to the correct specification
- 2.4 make sure the product is correctly transferred to the next stage in the manufacturing operation
- 2.5 take effective action in response to operating problems within the limits of your responsibility
- 2.6 maintain effective communication.

Performance objectives

The learner must be able to:

3. finish fish gutting operations.

This means you:

- 3.1 meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
- 3.2 check the specifications to time shut down accurately
- 3.3 follow procedures to shut down equipment correctly
- 3.4 deal correctly with items that can be recycled or reworked
- 3.5 dispose of waste correctly
- 3.6 make equipment ready for future use after completion of the process
- 3.7 maintain effective communication
- 3.8 accurately complete all records.

Essential knowledge

The learner will need to know and understand:

1. the legal or regulatory requirements, the organisational health and safety, hygiene and environmental standards and instructions that apply, and what may happen if they are not followed
2. the purpose and importance of the process
3. what equipment and tools to use and their correct condition
4. what materials to use and in what quantity
5. how to obtain and interpret the relevant process or ingredient specification
6. what recording, reporting and communication is needed, how to carry this out correctly and the reasons why it is important to do so
7. what action to take when the process specification is not met
8. how to carry out the necessary pre-start checks and why it is important to do so
9. how to follow the start-up procedures for the process and why it is important to do so
10. how to obtain the necessary resources for the process
11. how to follow work instructions and why it is important to do so

12. common sources of contamination during processing, how to avoid these and what might happen if this is not done
13. how to operate, regulate and shut down the relevant equipment
14. when it is necessary to seek assistance and how to seek it
15. how to follow the relevant process control procedures and why it is important to do so
16. different ways to carry out the process
17. how to carry out the process in an efficient manner and why it is important to do so
18. what the limits of your own authority and competence are and why it is important to work within them
19. how to deal with items that can be recycled or reworked
20. how to dispose of waste correctly and why it is important to do so
21. how to make equipment ready for future use.

Unit 015 Control fish gutting operations

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **preparing to gut fish** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **carrying out fish gutting** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **finishing fish gutting operations** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Unit 016

Control fish skinning operations

SCQF Level:	5
Credit value:	6
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council

Aim: This unit is about controlling skinning fish by machine. It details the skills required to start up, run and shut down skinning equipment, as well as to take the appropriate action should operating problems occur. It is also about working to organisational product specifications and production schedules.

You will be able to prepare to skin fish, carry out and complete the fish skinning operations.

This unit is for you if you are involved in the production of fish and are involved in fish skinning operations.

Performance objectives
The learner must be able to: 1. prepare for fish skinning.
This means you: 1.1 operate to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions 1.2 check product specifications at the right time 1.3 set up equipment according to specification 1.4 make sure that fish is available and fit for use 1.5 make sure that services meet requirements 1.6 start up the equipment correctly and check that it is running to specification 1.7 take effective action in response to operating problems 1.8 maintain effective communication.

Performance objectives

The learner must be able to:

2. carry out fish skinning.

This means you:

- 2.1 meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
- 2.2 use equipment correctly and make sure that it is correctly supplied with materials and services
- 2.3 achieve the required yield and output according to specification
- 2.4 make sure the product is correctly transferred to the next stage in the manufacturing operation
- 2.5 take effective action in response to operating problems within the limits of your responsibility
- 2.6 maintain effective communication.

Performance objectives

The learner must be able to:

3. finish fish skinning operations.

This means you:

- 3.1 meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
- 3.2 check the specifications to time shut down accurately
- 3.3 follow procedures to shut down equipment correctly
- 3.4 deal correctly with items that can be recycled or reworked
- 3.5 dispose of waste correctly
- 3.6 make equipment ready for future use after completion of the process
- 3.7 maintain effective communication
- 3.8 accurately complete all records.

Essential knowledge

The learner will need to know and understand:

1. the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions that apply, and what may happen if they are not followed
2. the purpose and importance of the process
3. what equipment and tools to use and their correct condition
4. what materials to use and in what quantity
5. how to obtain and interpret the relevant process or ingredient specification
6. what recording, reporting and communication is needed, how to carry this out correctly and the reasons why it is important to do so
7. what action to take when the process specification is not met
8. how to carry out the necessary pre-start checks and why it is important to do so
9. how to follow the start-up procedures for the process and why it is important to do so
10. how to obtain the necessary resources for the process

11. how to follow work instructions and why it is important to do so
12. common sources of contamination during processing, how to avoid these and what might happen if this is not done
13. how to operate, regulate and shut down the relevant equipment
14. when it is necessary to seek assistance and how to seek it
15. how to follow the relevant process control procedures and why it is important to do so
16. different ways to carry out the process
17. how to carry out the process in an efficient manner and why it is important to do so
18. what the limits of your own authority and competence are and why it is important to work within them
19. how to deal with items that can be recycled or reworked
20. how to dispose of waste correctly and why it is important to do so
21. how to make equipment ready for future use.

Unit 016 Control fish skinning operations

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **preparing to skin fish** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **carrying out fish skinning** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **finishing fish skinning operations** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Unit 017

Control fish/shellfish defrosting

SCQF Level:	5
Credit value:	6
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about the defrosting of fish or shellfish as part of a processing operation. It details the skills required to set up and maintain the defrosting process. It is also about working to product specifications and production schedules.

You will be able to prepare to and defrost fish or shellfish including confirming specification. You will also be able to complete the defrosting process including the monitoring of the defrosting process.

This unit is for you if you work in fish or shellfish processing and are involved in the control of defrosting.

Performance objectives
The learner must be able to: 1. prepare to defrost fish/shellfish.
This means you: 1.1 prepare according to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions 1.2 obtain and confirm defrosting specification 1.3 prepare defrosting facilities and work area into a condition suitable for receiving fish/shellfish 1.4 take effective action in response to operating problems 1.5 maintain effective communication.

Performance objectives
The learner must be able to: 2. defrost fish/shellfish.
This means you: 2.1 operate to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions 2.2 obtain frozen fish/shellfish according to requirements of the defrosting specification 2.3 establish frozen fish/shellfish in defrosting facility 2.4 establish, monitor and maintain defrosting 2.5 process according to defrosting specification 2.6 handle and store fish/shellfish in a manner which maintains quality and condition 2.7 maintain condition of work area throughout process 2.8 remove defrosted fish/shellfish from defrosting facility, label and transfer to the next stage in the process 2.9 take effective action in response to operating problems 2.10 maintain effective communication.

Performance objectives
The learner must be able to: 3. finish defrosting process.
This means you: 3.1 finish according to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions 3.2 dispose of waste material according to organisational procedures 3.3 make defrosting facilities and work area ready for future use on completion of the process 3.4 maintain effective communication 3.5 accurately complete all records.

Essential knowledge

The learner will need to know and understand:

1. the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions that apply, and what may happen if they are not followed
2. the facilities required to defrost fish/shellfish
3. how to obtain and interpret the defrosting specifications
4. how to prepare defrosting facilities for operation
5. how to assess the quality of frozen fish/shellfish and fish products
6. common quality problems and their likely causes
7. the facilities and methods used to defrost fish/shellfish
8. the process requirements for the controlled defrosting of fish/shellfish
9. how and why it is important to monitor the defrosting process
10. how defrosted fish/shellfish should be handled to maintain condition and quality
11. the importance of following organisational procedures
12. handling methods that maintain the condition of fish/shellfish
13. labelling and traceability relevant to the defrosting of fish/shellfish
14. what action to take when the process specification is not met
15. how to dispose of waste correctly and why it is important to do so
16. the limits of your own authority and competence and why it is important to work within those limits
17. what recording, reporting and communication is needed, how to carry this out correctly and the reasons why it is important to do so.

Unit 017 Control fish/shellfish defrosting

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **preparing to defrost fish/shellfish** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **defrosting fish/shellfish** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **finishing the defrosting process** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Unit 018

Control forming in food manufacture

SCQF Level:	6
Credit value:	8
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about shaping the partly finished or final product in food and drink manufacturing. It details the skills required to start up, run and shut down equipment, as well as being able to take the appropriate action should operating problems occur. It is also about working to product specifications and production schedules.

Performance objectives

The learner must be able to:

1. prepare for forming.

This means you:

- 1.1 operate to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when preparing for forming
- 1.2 check product specifications at the right time
- 1.3 set up equipment according to specification
- 1.4 make sure that material for forming is available and fit for use
- 1.5 make sure that services meet requirements
- 1.6 start up the plant correctly and check that it is running to specification
- 1.7 take effective action in response to operating problems
- 1.8 maintain effective communication.

Performance objectives

The learner must be able to:

2. carry out forming.

This means you:

- 2.1 meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when carrying out forming
- 2.2 use equipment correctly and make sure that it is correctly supplied with materials and services
- 2.3 achieve the required output to the correct specification
- 2.4 make sure the product is correctly transferred to the next stage in

<p>the manufacturing operation</p> <p>2.5 take effective action in response to operating problems within the limits of your responsibility</p> <p>2.6 maintain effective communication.</p>

<p>Performance objectives</p> <p>The learner must be able to:</p> <p>3. finish forming.</p>
<p>This means you:</p> <p>3.1 meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when finishing forming</p> <p>3.2 check the specifications to time shut down accurately</p> <p>3.3 follow procedures to shut down equipment correctly</p> <p>3.4 deal correctly with items that can be recycled or reworked</p> <p>3.5 dispose of waste correctly</p> <p>3.6 make equipment ready for future use after completion of the process</p> <p>3.7 maintain effective communication</p> <p>3.8 accurately complete all records.</p>

Essential knowledge

The learner will need to know and understand:

<ol style="list-style-type: none"> 1. the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions that apply, and what may happen if they are not followed 2. the purpose and importance of the process 3. what equipment and tools to use and their correct condition 4. what materials to use and in what quantity 5. how to obtain and interpret the relevant process or ingredient specification 6. what recording, reporting and communication is needed, how to carry this out correctly and the reasons why it is important to do so 7. what action to take when the process specification is not met 8. how to carry out the necessary pre-start checks and why it is important to do so 9. how to follow the start-up procedures for the process and why it is important to do so 10. how to obtain the necessary resources for the process 11. how to follow work instructions and why it is important to do so 12. common sources of contamination during processing, how to avoid these and what might happen if this is not done 13. how to operate, regulate and shut down the relevant equipment 14. when it is necessary to seek assistance and how to seek it 15. how to follow the relevant process control procedures and why it is important to do so 16. different ways to carry out the process 17. how to carry out the process in an efficient manner and why it is important to do so 18. what the limits of your own authority and competence are and why it is important to work within them

19. how to deal with items that can be recycled or reworked
20. how to dispose of waste correctly and why it is important to do so
21. how to make equipment ready for future use.

Unit 019

Control heat treatment in food manufacture

SCQF Level:	6
Credit value:	8
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about applying heat to bring about a change in the condition of a product in food and drink manufacturing. It details the skills required to start up, run and shut down equipment, as well as being able to take the appropriate action should operating problems occur in food and drink manufacturing. It is also about working to product specifications and production schedules.

Performance objectives

The learner must be able to:

1. prepare for heat treatment.

This means you:

- 1.1 operate to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when preparing for heat treatment
- 1.2 check product specifications at the right time
- 1.3 set up equipment according to specification
- 1.4 make sure that material for heat treatment is available and fit for use
- 1.5 make sure that services meet requirements
- 1.6 start up the plant correctly and check that it is running to specification
- 1.7 take effective action in response to operating problems
- 1.8 maintain effective communication.

Performance objectives

The learner must be able to:

2. carry out heat treatment.

This means you:

- 2.1 meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when carrying out heat treatment
- 2.2 use equipment correctly and make sure that it is correctly supplied with materials and services
- 2.3 achieve the required output to the correct specification
- 2.4 make sure the product is correctly transferred to the next stage in the manufacturing operation
- 2.5 take effective action in response to operating problems within the limits of your responsibility
- 2.6 maintain effective communication.

Performance objectives

The learner must be able to:

3. finish heat treatment.

This means you:

- 3.1 meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when finishing heat treatment
- 3.2 check the specifications to time shut down accurately
- 3.3 follow procedures to shut down equipment correctly
- 3.4 deal correctly with items that can be recycled or reworked
- 3.5 dispose of waste correctly
- 3.6 make equipment ready for future use after completion of the process
- 3.7 maintain effective communication
- 3.8 accurately complete all records.

Essential knowledge

The learner will need to know and understand:

1. the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions that apply, and what may happen if they are not followed
2. the purpose and importance of the process
3. what equipment and tools to use and their correct condition
4. what materials to use and in what quantity
5. how to obtain and interpret the relevant process or ingredient specification
6. what recording, reporting and communication is needed, how to carry this out correctly and the reasons why it is important to do so
7. what action to take when the process specification is not met
8. how to carry out the necessary pre-start checks and why it is important to do so
9. how to follow the start-up procedures for the process and why it is important to do so
10. how to obtain the necessary resources for the process
11. how to follow work instructions and why it is important to do so
12. common sources of contamination during processing, how to avoid these and what might happen if this is not done
13. how to operate, regulate and shut down the relevant equipment
14. when it is necessary to seek assistance and how to seek it
15. how to follow the relevant process control procedures and why it is important to do so
16. different ways to carry out the process
17. how to carry out the process in an efficient manner and why it is important to do so
18. what the limits of your own authority and competence are and why it is important to work within them
19. how to deal with items that can be recycled or reworked
20. how to dispose of waste correctly and why it is important to do so
21. how to make equipment ready for future use.

Unit 020

Carry out hygiene cleaning in food and drink operations

SCQF Level:	5
Credit value:	5
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This standard is about how to carry out hygiene cleaning of plant and work areas safely and to make sure it fits the overall cleaning plan.

Hygiene and food safety are very important to the food and drink industry. Efficient and regular cleaning is essential to maintain hygiene standards. The cleaning done is part of an overall plan that provides evidence for auditors, regulators and/or customers.

This standard is relevant to everyone involved in cleaning plant and work areas to meet hygiene standards.

Performance objectives
The learner must be able to: 1. carry out hygiene cleaning in food and drink operations.
This means you: 1.1 confirm cleaning requirements against specification 1.2 protect or clear the area of any raw materials or product 1.3 use the correct personal protective equipment 1.4 select and use specified cleaning solutions and equipment following company procedures 1.5 check and prepare all equipment and machinery 1.6 make sure the working area is in a safe state before starting cleaning and isolate where required 1.7 carry out cleaning operations using cleaning solutions, materials and equipment in line with company procedures 1.8 carry out the cleaning taking the necessary precautions to prevent the spread of contamination to other areas 1.9 identify when faulty equipment, low stocks of cleaning agents or any other problems arise during cleaning and take appropriate action 1.10 leave plant, equipment and work areas fit for future use 1.11 handle and store chemicals according to COSHH and risk

assessment requirements

- 1.12 report any problems which arise during the cleaning and take the appropriate action
- 1.13 carry out swabbing where required
- 1.14 correctly reinstate plant, equipment and work areas following cleaning
- 1.15 return and store cleaning materials and equipment in the right place and in the correct condition
- 1.16 return or dispose of personal protective equipment correctly
- 1.17 identify and report any signs of contamination, damage or environmental concerns
- 1.18 take actions within the limits of your authority
- 1.19 maintain effective communication where required throughout
- 1.20 dispose of waste and/or debris correctly
- 1.21 complete all records accurately and promptly
- 1.22 follow legal and regulatory requirements and organisational health and safety, hygiene and environmental standards or instructions.

Essential knowledge

The learner will need to know and understand:

1. the relevant legal and regulatory requirements, health and safety, hygiene and environmental standards and instructions and what may happen if they are not followed
2. types and uses of cleaning materials
3. COSHH and risk assessment requirements and precautions to be taken when handling or storing cleaning materials
4. the cleaning materials used for particular surfaces and equipment, why it is important to ensure correct dilution of cleaning materials and the consequences of not handling hazardous materials properly
5. the effects different cleaning methods and materials may have on the health and welfare of people and livestock, and how to minimise any harmful effect
6. where to find cleaning instructions and schedules, how to use them and the risks of not following them
7. the purpose of personal protective equipment and clothing and the consequences if it is not used correctly
8. how to use guards and warning notices and the consequences of not doing so
9. why following company standards for the sequence of cleaning is important
10. the frequency with which different items of equipment should be cleaned and maintained
11. the precautions to take to ensure that the product is not contaminated by cleaning materials
12. what actions to take if you find problems with plant and equipment
13. what actions to take if the cleaning cannot be completed within specified times
14. the need to achieve the required standard of cleanliness and what may happen if this is not done
15. the need to ensure the complete removal of cleaning materials and what may happen if this is not done
16. the need to identify and report any signs of contamination, damage

- or environmental concerns and what may happen if this is not done
17. the reasons for swabbing and what may happen if it is not carried out correctly
 18. the correct waste disposal procedures and what may happen if they are not followed
 19. how effective cleaning helps keep machinery in good working order
 20. emergency procedures for dealing with chemical spillages or contact with skin
 21. why it is important to reinstate plant, equipment and work areas and what may happen if this is not done
 22. why it is important to store or dispose of personal protective equipment and what may happen if this is not done
 23. why it is important to keep accurate records and what might happen if this is not done
 24. the importance of effective communication.

Unit 020 **Carry out hygiene cleaning in food and drink operations**

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **carrying out hygiene cleaning in food and drink operations** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Unit 021

Control mixing in food manufacture

SCQF Level:	5
Credit value:	6
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about physically combining two or more constituents to produce a whole. It details the skills required to start up, run and shut down equipment, as well as to take the appropriate action should operating problems occur in food and drink manufacturing. It is also about working to product specifications and production schedules.

Performance objectives
The learner must be able to: 1. prepare for mixing.
This means you: 1.1 operate to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when preparing for mixing 1.2 check product specifications at the right time 1.3 set up equipment according to specification 1.4 make sure that material for mixing is available and fit for use 1.5 make sure that services meet requirements 1.6 start up the plant correctly and check that it is running to specification 1.7 take effective action in response to operating problems 1.8 maintain effective communication.

Performance objectives
The learner must be able to: 2. carry out mixing.
This means you: 2.1 meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when carrying out mixing 2.2 use equipment correctly and make sure that it is correctly supplied with materials and services 2.3 achieve the required output to the correct specification

- 2.4 make sure the product is correctly transferred to the next stage in the manufacturing operation
- 2.5 take effective action in response to operating problems within the limits of your responsibility
- 2.6 maintain effective communication.

Performance objectives

The learner must be able to:

- 3. finish mixing.

This means you:

- 3.1 meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when finishing mixing
- 3.2 check specifications to time shut down accurately
- 3.3 follow procedures to shut down equipment
- 3.4 deal correctly with items that can be recycled or reworked
- 3.5 dispose of waste correctly
- 3.6 make equipment ready for future use after completion of the process
- 3.7 maintain effective communication
- 3.8 accurately complete all records.

Essential knowledge

The learner will need to know and understand:

- 1. the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions that apply, and what may happen if they are not followed
- 2. the purpose and importance of the process
- 3. what equipment and tools to use and their correct condition
- 4. what materials to use and in what quantity
- 5. how to obtain and interpret the relevant process or ingredient specification
- 6. what recording, reporting and communication is needed, how to carry this out correctly and the reasons why it is important to do so
- 7. what action to take when the process specification is not met
- 8. how to carry out the necessary pre-start checks and why it is important to do so
- 9. how to follow the start-up procedures for the process and why it is important to do so
- 10. how to obtain the necessary resources for the process
- 11. how to follow work instructions and why it is important to do so
- 12. common sources of contamination during processing, how to avoid these and what might happen if this is not done
- 13. how to operate, regulate and shut down the relevant equipment
- 14. when it is necessary to seek assistance and how to seek it
- 15. how to follow the relevant process control procedures and why it is important to do so
- 16. different ways to carry out the process
- 17. how to carry out the process in an efficient manner and why it is important to do so
- 18. what the limits of your own authority and competence are and why it

is important to work within them

19. how to deal with items that can be recycled or reworked

20. how to dispose of waste correctly and why it is important to do so

21. how to make equipment ready for future use.

Unit 021 Control mixing in food manufacture

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **preparing for mixing** in accordance with workplace procedures.

Evidence of **carrying out mixing** in accordance with workplace procedures and taking effective action in response to two operating problems.

Evidence of **finishing mixing** in accordance with workplace procedures.

Unit 022

Control separation in food manufacture

SCQF Level:	6
Credit value:	9
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about partially or fully removing constituent parts from the whole. It details the skills required to start up, run and shut down equipment, as well as to take the appropriate action should operating problems occur in food and drink manufacturing. It is also about working to product specifications and production schedules.

Performance objectives
The learner must be able to: 1. prepare for separation.
This means you: 1.1 operate to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when preparing for separation 1.2 check product specifications at the right time 1.3 set up equipment according to specification 1.4 make sure that material for separation is available and fit for use 1.5 make sure that services meet requirements 1.6 start up the plant correctly and check that it is running to specification 1.7 take effective action in response to operating problems 1.8 maintain effective communication.

Performance objectives
The learner must be able to: 2. carry out separation.
This means you: 2.1 meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when carrying out separation 2.2 use equipment correctly and make sure that it is correctly supplied with materials and services 2.3 achieve the required output to the correct specification

- | |
|--|
| 2.4 make sure the product is correctly transferred to the next stage in the manufacturing operation |
| 2.5 take effective action in response to operating problems within the limits of your responsibility |
| 2.6 maintain effective communication. |

Performance objectives

The learner must be able to:

- | |
|-----------------------|
| 3. finish separation. |
|-----------------------|

This means you:

- | |
|--|
| 3.1 meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when finishing separation |
| 3.2 check the specifications to time shut down accurately |
| 3.3 follow procedures to shut down equipment correctly |
| 3.4 deal correctly with items that can be recycled or reworked |
| 3.5 dispose of waste correctly |
| 3.6 make equipment ready for future use after completion of the process |
| 3.7 maintain effective communication |
| 3.8 accurately complete all records. |

Essential knowledge

The learner will need to know and understand:

- | |
|---|
| 1. the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions that apply, and what may happen if they are not followed |
| 2. the purpose and importance of the process |
| 3. what equipment and tools to use and their correct condition |
| 4. what materials to use and in what quantity |
| 5. how to obtain and interpret the relevant process or ingredient specification |
| 6. what recording, reporting and communication is needed, how to carry this out correctly and the reasons why it is important to do so |
| 7. what action to take when the process specification is not met |
| 8. how to carry out the necessary pre-start checks and why it is important to do so |
| 9. how to follow the start-up procedures for the process and why it is important to do so |
| 10. how to obtain the necessary resources for the process |
| 11. how to follow work instructions and why it is important to do so |
| 12. common sources of contamination during processing, how to avoid these and what might happen if this is not done |
| 13. how to operate, regulate and shut down the relevant equipment |
| 14. when it is necessary to seek assistance and how to seek it |
| 15. how to follow the relevant process control procedures and why it is important to do so |
| 16. different ways to carry out the process |
| 17. how to carry out the process in an efficient manner and why it is important to do so |
| 18. what the limits of your own authority and competence are and why it |

is important to work within them

19. how to deal with items that can be recycled or reworked

20. how to dispose of waste correctly and why it is important to do so

21. how to make equipment ready for future use.

Unit 022 Control separation in food manufacture

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **preparing for separation** in accordance with workplace procedures.

Evidence of **carrying out separation** in accordance with workplace procedures and taking effective action in response to two operating problems.

Evidence of **finishing separation** in accordance with workplace procedures.

Unit 023

Control shellfish depuration production

SCQF Level:	6
Credit value:	2
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	<p>This unit is about controlling the purification of shellfish. It is aimed at those who are involved in supervising depuration activities on a regular basis. It can be applied to any shellfish farm operating a depuration unit.</p> <p>This unit will develop your skills in monitoring and maintaining the following depuration activities:</p> <ol style="list-style-type: none">1. loading of shellfish into depuration2. environmental monitoring3. depuration monitoring4. unloading of purified shellfish5. cleaning of depuration facilities6. labelling of shellfish for dispatch7. dispatch of purified shellfish

Performance objectives

The learner must be able to:

1. control shellfish depuration production.

This means you:

- 1.1 organise the resources required to complete planned depuration
- 1.2 monitor and maintain depuration activities to achieve the required environmental conditions and legal food safety requirements
- 1.3 collect management information to demonstrate performance of depuration facilities, and to effectively manage all critical control points
- 1.4 ensure the health status of purified shellfish is maintained during storage
- 1.5 ensure that potential or actual variations from planned purification are investigated and that action is taken to minimise disruption of the depuration process
- 1.6 organise the dispatch of shellfish in accordance with legal requirements
- 1.7 maintain accurate records of the depuration process.

Essential knowledge

The learner will need to know and understand:

1. the environmental conditions required to support purification
2. legal food safety requirements including personal hygiene, HACCP and the controls associated with dispatch centres for shellfish (HACCP – Hazard Analysis Critical Control Point)
3. own responsibilities under food safety legislation
4. the principles of depuration as a process for purifying shellfish
5. the production capabilities and characteristics of the depuration system in operation
6. HACCP and its application as a system for managing food safety
7. shellfish welfare requirements and how these are maintained during depuration
8. the storage and handling requirements of purified shellfish
9. the reasons for keeping records and the importance of their accuracy
10. shellfish and seawater classifications and their associated purification
11. the resources required to support the depuration process
12. how to monitor and maintain shellfish in depuration
13. labelling requirements associated with shellfish dispatch.

Unit 024

Control shellfish meat extraction operations

SCQF Level:	5
Credit value:	6
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	<p>This unit is about using machines to extract meat from shellfish. It includes the skills required to start up, run and shut down the equipment used to extract meat, as well as to take appropriate actions should operating problems occur. It is also about working to organisational product specifications and production schedules.</p> <p>You will be able to prepare for, carry out and finish shellfish meat extraction.</p> <p>This unit is for you if you work in shellfish processing and are involved in the control of shellfish meat extraction.</p>

Performance objectives

The learner must be able to:

1. prepare for shellfish meat extraction.

This means you:

- 1.1 operate to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
- 1.2 check process specifications
- 1.3 set up equipment according to specification
- 1.4 make sure that meat of required specification is available and fit for use
- 1.5 make sure that services meet requirements
- 1.6 start up plant correctly and check that it is running to specification
- 1.7 take effective action in response to operating problems
- 1.8 maintain effective communication.

Performance objectives

The learner must be able to:

2. carry out shellfish meat extraction.

This means you:

- 2.1 meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
- 2.2 supply machine with shellfish meat at specified rate and rotation
- 2.3 achieve the required output to the correct specification
- 2.4 effectively remove any unwanted shell and debris
- 2.5 grade extracted meat according to specification
- 2.6 handle shellfish meats in a manner which maintains quality and condition
- 2.7 make sure the product is correctly transferred to the next stage in the manufacturing operation
- 2.8 take effective action in response to operating problems within the limits of your responsibility
- 2.9 maintain effective communication.

Performance objectives

The learner must be able to:

3. finish extraction operations.

This means you:

- 3.1 meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
- 3.2 check the specifications to time shut down accurately
- 3.3 follow procedures to shut down equipment correctly
- 3.4 deal correctly with items that can be recycled or reworked
- 3.5 dispose of waste material according to organisational procedures
- 3.6 make equipment ready for future use after completion of the process
- 3.7 maintain effective communication
- 3.8 accurately complete all records.

Essential knowledge

The learner will need to know and understand:

1. the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions that apply, and what may happen if they are not followed
2. the equipment required to extract shellfish meat
3. the principles of the extraction process
4. how to prepare extraction equipment for operation
5. how shellfish is prepared for meat extraction and how failures in preparation can impact on the process of extraction
6. how to assess the quality of shellfish meat
7. how to present shellfish and how the quality of the meat will vary depending on presentation
8. how shell can contaminate shellfish meat and methods of control
9. how and why it is important to monitor the quality of extracted meat
10. how to identify extracted product which is appropriate for whole tail products
11. how to assess the quality of shellfish meat

12. how shellfish meat should be handled to maintain condition and quality
13. common quality problems and their likely causes
14. labelling and traceability relevant to the shellfish meat extraction
15. what action to take when the process specification is not met
16. how to dispose of waste correctly and why it is important to do so
17. the limits of your own authority and competence and why it is important to work within those limits
18. what recording, reporting and communication is needed, how to carry this out correctly and the reasons why it is important to do so.

Unit 024 Control shellfish meat extraction operations

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **preparing for shellfish meat extraction** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **carrying out shellfish meat extraction** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **finishing extraction operations** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Unit 025

Control size reduction in food manufacture

SCQF Level:	6
Credit value:	8
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about controlling size reduction in food and drink production. It details the skills required to start up, run and shut down equipment, as well as to take the appropriate action should operating problems occur. It is also about working to product specifications and production schedules.

Performance objectives

The learner must be able to:

1. prepare for size reduction

This means you:

- 1.1 operate to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when preparing for size reduction
- 1.2 check product specifications at the right time
- 1.3 set up equipment according to specification
- 1.4 make sure that material for size reduction is available and fit for use
- 1.5 make sure that services meet requirements
- 1.6 start up the plant correctly and check that it is running to specification
- 1.7 take effective action in response to operating problems
- 1.8 maintain effective communication.

Performance objectives

The learner must be able to:

2. carry out size reduction

This means you:

- 2.1 meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when carrying out size reduction
- 2.2 use equipment correctly and make sure that it is correctly supplied with materials and services
- 2.3 achieve the required output to the correct specification
- 2.4 make sure the product is correctly transferred to the next stage in

<p>the manufacturing operation</p> <p>2.5 take effective action in response to operating problems within the limits of your responsibility</p> <p>2.6 maintain effective communication.</p>

<p>Performance objectives</p> <p>The learner must be able to:</p> <p>3. finish size reduction</p>
<p>This means you:</p> <p>3.1 meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when finishing size reduction</p> <p>3.2 check the specifications to time shut down accurately</p> <p>3.3 follow procedures to shut down equipment correctly</p> <p>3.4 deal correctly with items that can be recycled or reworked</p> <p>3.5 dispose of waste correctly</p> <p>3.6 make equipment ready for future use after completion of the process</p> <p>3.7 maintain effective communication</p> <p>3.8 accurately complete all records.</p>

Essential knowledge

The learner will need to know and understand:

<ol style="list-style-type: none"> 1. the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions that apply, and what may happen if they are not followed 2. the purpose and importance of the process 3. what equipment and tools to use and their correct condition 4. what materials to use and in what quantity 5. how to obtain and interpret the relevant process or ingredient specification 6. what recording, reporting and communication is needed, how to carry this out correctly and the reasons why it is important to do so 7. what action to take when the process specification is not met 8. how to carry out the necessary pre-start checks and why it is important to do so 9. how to follow the start-up procedures for the process and why it is important to do so 10. how to obtain the necessary resources for the process 11. how to follow work instructions and why it is important to do so 12. common sources of contamination during processing, how to avoid these and what might happen if this is not done 13. how to operate, regulate and shut down the relevant equipment 14. when it is necessary to seek assistance and how to seek it 15. how to follow the relevant process control procedures and why it is important to do so 16. different ways to carry out the process 17. how to carry out the process in an efficient manner and why it is important to do so 18. what the limits of your own authority and competence are and why it is important to work within them

19. how to deal with items that can be recycled or reworked
20. how to dispose of waste correctly and why it is important to do so
21. how to make equipment ready for future use.

Unit 026

Control temperature reduction in food manufacture

SCQF Level:	5
Credit value:	6
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about removing heat to achieve the required change in the condition of the product or to preserve the product state and/or quality in food and drink manufacturing. It details the skills required to start up, run and shut down equipment, as well as to take the appropriate action should operating problems occur. It is also about working to product specifications and production schedules.

Performance objectives
The learner must be able to: 1. prepare for temperature reduction
This means you: 1.1 operate to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when preparing for temperature reduction 1.2 check product specifications at the right time 1.3 set up equipment according to specification 1.4 make sure that material for temperature reduction is available and fit for use 1.5 make sure that services meet requirements 1.6 start up the plant correctly and check that it is running to specification 1.7 take effective action in response to operating problems 1.8 maintain effective communication.

Performance objectives
The learner must be able to: 2. carry out temperature reduction
This means you: 2.1 meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when carrying out temperature reduction

- | | |
|-----|--|
| 2.2 | use equipment correctly and make sure that it is correctly supplied with materials and services |
| 2.3 | achieve the required output to the correct specification |
| 2.4 | make sure the product is correctly transferred to the next stage in the manufacturing operation |
| 2.5 | take effective action in response to operating problems within the limits of your responsibility |
| 2.6 | maintain effective communication. |

Performance objectives

The learner must be able to:

- | |
|---------------------------------|
| 3. finish temperature reduction |
|---------------------------------|

This means you:

- | | |
|-----|---|
| 3.1 | meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when finishing temperature reduction |
| 3.2 | check the specifications to time shut down accurately |
| 3.3 | follow procedures to shut down equipment correctly |
| 3.4 | deal correctly with items that can be recycled or reworked |
| 3.5 | dispose of waste correctly |
| 3.6 | make equipment ready for future use after completion of the process |
| 3.7 | maintain effective communication |
| 3.8 | accurately complete all records. |

Essential knowledge

The learner will need to know and understand:

- | | |
|-----|--|
| 1. | the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions that apply, and what may happen if they are not followed |
| 2. | the purpose and importance of the process |
| 3. | what equipment and tools to use and their correct condition |
| 4. | what materials to use and in what quantity |
| 5. | how to obtain and interpret the relevant process or ingredient specification |
| 6. | what recording, reporting and communication is needed, how to carry this out correctly and the reasons why it is important to do so |
| 7. | what action to take when the process specification is not met |
| 8. | how to carry out the necessary pre-start checks and why it is important to do so |
| 9. | how to follow the start-up procedures for the process and why it is important to do so |
| 10. | how to obtain the necessary resources for the process |
| 11. | how to follow work instructions and why it is important to do so |
| 12. | common sources of contamination during processing, how to avoid these and what might happen if this is not done |
| 13. | how to operate, regulate and shut down the relevant equipment |
| 14. | when it is necessary to seek assistance and how to seek it |
| 15. | how to follow the relevant process control procedures and why it is |

important to do so

16. different ways to carry out the process

17. how to carry out the process in an efficient manner and why it is important to do so

18. what the limits of your own authority and competence are and why it is important to work within them

19. how to deal with items that can be recycled or reworked

20. how to dispose of waste correctly and why it is important to do so

21. how to make equipment ready for future use.

Unit 026 Control temperature reduction in food manufacture

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **preparing for temperature reduction** in accordance with workplace procedures.

Evidence of **carrying out temperature reduction** in accordance with workplace procedures and taking effective action in response to two operating problems.

Evidence of **finishing temperature reduction** in accordance with workplace procedures.

SCQF Level:	5
Credit value:	4
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council

Aim: This unit is about the dry curing of fish as part of a fish processing operation. It details the skills required to set up and maintain the curing process. It is also about working to organisational product specifications and production schedules.

You will be able to prepare to dry cure fish and carry out and finish the fish curing process.

This unit is for you if you work in fish processing and dry cure fish.

Performance objectives
The learner must be able to:
1. prepare to dry cure fish
This means you:
1.1 prepare according to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
1.2 obtain and interpret curing specifications
1.3 prepare the curing facilities and associated work areas into a condition suitable for receiving fish
1.4 obtain and prepare cure of required quality according to specification
1.5 obtain fish of specified quality
1.6 take effective action in response to operating problems
1.7 maintain effective communication.

Performance objectives
The learner must be able to:
2. dry cure fish
This means you:
2.1 operate to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions

- 2.2 lay out and apply cure to fish according to specification
- 2.3 maintain fish in cure for given time period according to specification
- 2.4 remove fish from cure according to specification
- 2.5 handle fish in a manner which maintains quality and condition
- 2.6 make sure cured fish are transferred to the next production stage
- 2.7 maintain condition of work area throughout process
- 2.8 take effective action in response to operating problems
- 2.9 maintain effective communication.

Performance objectives

The learner must be able to:

- 3. finish the curing process

This means you:

- 3.1 finish according to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
- 3.2 dispose of waste material according to organisational procedures
- 3.3 make curing facilities and work areas ready for future use after the completion of the process
- 3.4 maintain effective communication
- 3.5 accurately complete all records.

Essential knowledge

The learner will need to know and understand:

- 1. the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions that apply, and what may happen if they are not followed
- 2. the dry curing process including different methods that are used to process fish
- 3. the facilities required to dry cure fish
- 4. how to prepare curing facilities for operation
- 5. curing materials including their preparation and correct application
- 6. how fish quality and temperature can impact on the curing process
- 7. how to assess the quality of cures
- 8. the effects of the cure on fish flesh during the curing process
- 9. how cure quality can impact on the quality of the product
- 10. how flesh oil content and fillet size impacts on curing times
- 11. how and why it is important to monitor the curing process
- 12. how to assess the quality of cured fish
- 13. how dry curing can impact on product yields
- 14. how and why excess cure should be removed before fish is forwarded to the next stage in production
- 15. the uses of cured fish in further process operations
- 16. how cured fish should be handled to maintain condition and quality
- 17. labelling and traceability relevant to the curing of fish
- 18. what action to take when the process specification is not met
- 19. how to dispose of waste correctly and why it is important to do so
- 20. the limits of your own authority and competence and why it is important to work within those limits

21. what recording, reporting and communication is needed, how to carry this out correctly and the reasons why it is important to do so.

Unit 027 Control the dry curing of fish

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **preparing to dry cure fish** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **dry curing fish** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **finishing the curing process** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Unit 028

Control the fish/shellfish brining process

SCQF Level:	5
Credit value:	5
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council

Aim: This unit is about the brining of fish or shellfish as part of a processing operation. It details the skills required to set up and maintain the brining process. It is also about working to organisational product specifications and production schedules.

You will be able to prepare for and brine fish or shellfish. You will must also be able to complete the brining process.

This unit is for you if you work in fish or shellfish processing and are involved in the brining process.

Performance objectives
The learner must be able to: 1. prepare to brine fish/shellfish
This means you: 1.1 prepare according to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions 1.2 obtain and interpret brining specification 1.3 prepare the brine facilities and associated work areas into a condition suitable for receiving fish/shellfish 1.4 obtain salt and water of required quality according to specification 1.5 accurately measure and mix required quantities of salt and water according to specification 1.6 obtain fish/shellfish of specified quality 1.7 take effective action in response to operating problems 1.8 maintain effective communications.

Performance objectives
The learner must be able to: 2. brine fish/shellfish
This means you: 2.1 operate to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions 2.2 load fish/shellfish into brine according to operating instructions 2.3 maintain fish/shellfish in brine for specified time period 2.4 monitor and maintain brine quality throughout brining period 2.5 remove fish/shellfish from brine and allow to dry according to specification 2.6 handle fish/shellfish in a manner which maintains quality and condition 2.7 make sure brined fish/shellfish are transferred to the next production stage 2.8 maintain condition of work area throughout process 2.9 take effective action in response to operating problems 2.10 maintain effective communication.

Performance objectives
The learner must be able to: 3. finish the brining process
This means you: 3.1 finish according to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions 3.2 dispose of waste material according to organisational procedures 3.3 make brining facilities and work area ready for future use on completion of the process 3.4 maintain effective communication 3.5 accurately complete all records.

Essential knowledge

The learner will need to know and understand:

<ol style="list-style-type: none"> 1. how to obtain and apply the brining specification 2. how to obtain fish/shellfish of satisfactory quality for brining 3. what facilities and equipment are needed to brine fish/shellfish 4. the importance of monitoring the quality and temperature of fish/shellfish during brining 5. how to obtain salt, water or other ingredients of satisfactory quality for brine production 6. how to prepare brine of the concentration stated in the brining specification 7. how to monitor the key characteristics of the brine during brining 8. how to ensure brining times are kept within specified limits 9. how to maintain brining conditions during the brining operation 10. what the appropriate post brining storage conditions are before fish/shellfish is forwarded to the next stage in production 11. how to identify brined seafood that is of unsatisfactory quality

12. how brined products should be handled, moved and stored during production
13. what action to take when the process specification is not met
14. how to dispose of waste correctly and why it is important to do so
15. how to prepare the facilities, tools and equipment for future use upon completion of the brining process
16. the limits of your own authority and competence and why it is important to work within those limits
17. what recording, reporting and communication is needed, how to carry this out correctly and the reasons why it is important to do so
18. the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions that apply, and what may happen if they are not followed.

Unit 028 Control the fish/shellfish brining process

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **preparing to brine fish/shellfish** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **brining fish/shellfish** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **finishing the brining process** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Unit 029

Control the fish/shellfish marinating process

SCQF Level:	5
Credit value:	4
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	<p>This unit is about the marinating of fish or shellfish as part of a processing operation. It details the skills required to set up and maintain the marinating process. It is also about working to organisational product specifications and production schedules.</p> <p>You will be able to prepare to and marinate fish or shellfish and complete the marinating process.</p> <p>This unit is for you if you work in fish or shellfish processing and are involved in the production of marinated fish or shellfish.</p>

Performance objectives

The learner must be able to:

1. prepare to marinate fish/shellfish

This means you:

- 1.1 prepare according to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
- 1.2 obtain and interpret marinating specification
- 1.3 prepare the marinating facilities and associated work areas into a condition suitable for receiving fish/shellfish
- 1.4 obtain raw materials of required quality, according to specification
- 1.5 mix raw materials to form marinade according to specification
- 1.6 obtain fish/shellfish of specified quality
- 1.7 take effective action in response to operating problems
- 1.8 maintain effective communications.

Performance objectives

The learner must be able to:

2. marinate fish/shellfish

This means you:

- 2.1 operate to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
- 2.2 establish fish/shellfish in marinade according to operating instructions
- 2.3 maintain fish/shellfish in marinade for given period according to specification
- 2.4 handle fish/shellfish in a manner which maintains quality and condition
- 2.5 make sure marinated fish/shellfish are transferred to the next production stage
- 2.6 take effective action in response to operating problems
- 2.7 maintain condition of work area throughout process
- 2.8 maintain effective communication.

Performance objectives

The learner must be able to:

3. finish the marinating process

This means you:

- 3.1 finish according to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
- 3.2 dispose of waste material according to organisational procedures
- 3.3 make marinating facilities and work area ready for future use after the completion of the process
- 3.4 maintain effective communication
- 3.5 accurately complete all records.

Essential knowledge

The learner will need to know and understand:

1. the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions that apply, and what may happen if they are not followed
2. the facilities required to marinate fish/shellfish
3. how to prepare marinades
4. how to assess the quality of materials used in marinade production
5. how to check the quality of marinades
6. how fish/shellfish quality can impact on the marinating process
7. how to prepare the facilities used for marinating
8. the methods used to hold fish/shellfish in the marinade
9. the effects that marinades have on fish/shellfish flesh
10. the impact of flesh oil content and fillet size on the marinating process
11. how to assess the quality of marinated fish/shellfish
12. how marinated fish/shellfish should be handled to maintain condition and quality

13. common quality problems and their likely causes
14. labelling and traceability relevant to the marinating of fish/shellfish
15. what action to take when the process specification is not met
16. how to dispose of waste correctly and why it is important to do so
17. the limits of your own responsibility and competence and why it is important to work within those limits
18. what recording, reporting and communication is needed, how to carry this out correctly and the reasons why it is important to do so

Unit 030

Control the fish/shellfish smoking process

SCQF Level:	5
Credit value:	5
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council

Aim: This unit is about the smoking of fish or shellfish as part of a processing operation. It details the skills required to set up and maintain the smoking process. It is also about working to organisational product specifications and production schedules.

You will be able to prepare to and smoke fish or shellfish. You must also be able to complete the smoking process.

This unit is for you if you work in fish or shellfish processing and are involved in the smoking of fish or shellfish.

Performance objectives
The learner must be able to: 1. prepare to smoke fish/shellfish
This means you: 1.1 prepare according to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions 1.2 obtain and interpret smoking specification 1.3 prepare the smoking kiln and associated work area into a condition suitable for receiving fish 1.4 obtain sawdust and wood chippings and prepare method of smoke generation 1.5 obtain brined/salted fish/shellfish of specified quality 1.6 take effective action in response to operating problems 1.7 maintain effective communication.

Performance objectives
The learner must be able to: 2. smoke fish/shellfish
This means you: 2.1 operate to the legal or regulatory requirements and the

- organisational health and safety, hygiene and environmental standards and instructions when smoking fish/shellfish
- 2.2 load kiln according to operating instructions
- 2.3 establish smoke generation according to kiln operating instructions
- 2.4 establish required smoke and temperature conditions within the kiln to achieve required smoking specification
- 2.5 monitor and maintain smoking process for smoking period, according to operating instructions
- 2.6 remove fish/shellfish from kiln following conclusion of smoking process and transfer to the next production stage
- 2.7 handle fish/shellfish in a manner which maintains quality and condition
- 2.8 maintain condition of work area throughout the process
- 2.9 take effective action in response to operating problems
- 2.10 maintain effective communication.

Performance objectives
The learner must be able to:
3. finish the smoking process
This means you:
3.1 finish according to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
3.2 dispose of waste material according to organisational procedures
3.3 make smoking equipment, smoking kiln and work area ready for future use after the completion of the process
3.4 maintain effective communication
3.5 accurately complete all records.

Essential knowledge

The learner will need to know and understand:

- 4. how to obtain and apply the smoking specification
- 5. what facilities, tools and equipment are required to smoke fish/shellfish
- 6. how to obtain sawdust and wood chippings and prepare the smoke generator
- 7. how to obtain brined or salted raw material that is ready for smoking
- 8. the importance of monitoring process conditions during smoking
- 9. the correct operating characteristics of the smoking kiln used to smoke fish/shellfish
- 10. how to load fish/shellfish into the kiln for smoking
- 11. how smoked fish/shellfish should be handled, moved and stored during production
- 12. how to control the smoking process to ensure required quality and yield
- 13. the operational requirements of the smoking process and how they are to be met
- 14. what the expected appearance and other characteristics of the smoked product are
- 15. what action to take when the process specification is not met
- 16. how to dispose of waste correctly and why it is important to do so

17. how to prepare the facilities, tools and equipment for future use upon completion of the smoking process
18. what recording, reporting and communication is needed, how to carry this out correctly and the reasons why it is important to do so
19. the limits of your own authority and competence and why it is important to work within those limits
20. the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions that apply, and what may happen they are not followed
21. the fire risks associated with smoke generation and appropriate responses to fire.

Unit 030 Control the fish/shellfish smoking process

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **preparing to smoke fish/shellfish** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **smoking fish/shellfish** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **finishing the smoking process** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Unit 031

Control washing and drying machinery in food and drink operations

SCQF Level:	5
Credit value:	4
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	<p>This unit is about controlling washing and drying machinery to wash and dry tools, utensils, trays and sundries in semi-automated or fully automated food and drink operations.</p> <p>You will be able to start up, shut down and control washing and drying machinery to meet production requirements and effectively deal with problems as they arise.</p> <p>This unit is for those working in food and drink operations required to operate and control washing and drying machinery in food and drink operations.</p>

Performance objectives

The learner must be able to:

1. control washing and drying machinery in food and drink operations.

This means you:

- 1.1 confirm the availability of items for washing and drying against specifications
- 1.2 set up and start washing and drying machinery to specifications and check that it is working correctly
- 1.3 use the correct personal protective equipment and clothing
- 1.4 control the infeed of items for washing to specifications
- 1.5 control the progress of items during washing and drying against specifications
- 1.6 control the output of washed and dried products to specifications
- 1.7 deal with sub-standard or damaged items appropriately
- 1.8 deal with problems effectively to maintain schedules
- 1.9 transfer washed and dried items for further use
- 1.10 check specifications to time shut down accurately
- 1.11 follow procedures to shut down the washers and dryers correctly
- 1.12 remove and dispose of debris correctly
- 1.13 check and ensure that washers and dryers are ready for further use
- 1.14 maintain effective communication as required throughout

- 1.15 complete all records promptly and accurately
- 1.16 follow legal and regulatory requirements and health and safety, hygiene and environmental standards and instructions.

Essential knowledge

The learner will need to know and understand:

1. the relevant legal and regulatory requirements and health and safety, hygiene and environmental standards, and what might happen if they are not met
2. common reasons for item damage during washing and drying
3. how to minimise damage during washing and drying and what might happen if this is not done
4. the procedures for setting up, starting up, controlling and shutting down washing and drying machinery and why it is important to follow these procedures
5. how to recognise and deal with items that do not meet specification
6. why it is important to recognise and set the correct washing and drying parameters to the specification for the types of items to be washed and dried
7. why it is important to check that items have been correctly washed and dried
8. how to isolate equipment and report for maintenance or replacement, and why it is important to work within procedures
9. the limits of your own authority and why it is important to work within
10. them lines and methods of communication within your organisation
11. reporting and recording requirements and why it is important to carry these out correctly.

Unit 031 Control washing and drying machinery in food and drink operations

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **controlling washing and drying machinery in food and drink operations** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Unit 032

Control weighing in food manufacture

SCQF Level:	5
Credit value:	6
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about weighing food products (eg meat products or cheese) for sale. Weighing is generally automated so you need the skills to mind a weighing machine and to make sure that weighing is accurate and efficient in food and drink manufacturing. If weighing is not efficient and accurate, there may be losses because food is sold cheaply or because customers feel dissatisfied.

Performance objectives

The learner must be able to:

1. prepare to weigh food products.

This means you:

- 1.1 assemble equipment and materials for weighing, following company procedures
- 1.2 make sure there is a free flow of product for weighing and follow company procedures to deal with any problems
- 1.3 set up weighing equipment, following company procedures
- 1.4 check that space is available to receive weighed products and follow company procedures to deal with any problems.

Performance objectives

The learner must be able to:

2. carry out weighing operations.

This means you:

- 2.1 monitor the flow of product for weighing and follow company procedures to deal with any problems
- 2.2 mind weighing machinery or carry out the weighing operation
- 2.3 follow company procedures to deal with any variations to company specifications during weighing
- 2.4 monitor the output of product to the correct place and follow company procedures to deal with any build-up
- 2.5 identify and dispose of waste and product not meeting customer specifications to the correct place, following company procedures.

Essential knowledge

The learner will need to know and understand:

1. the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions are that apply, and what may happen if they are not followed
2. the purpose and importance of the process
3. what equipment and tools to use and their correct condition
4. what materials to use and in what quantity
5. how to obtain and interpret the relevant process or ingredient specification
6. what recording, reporting and communication is needed, how to carry this out correctly and the reasons why it is important to do so
7. what action to take when the process specification is not met
8. how to carry out the necessary pre-start checks and why it is important to do so
9. how to follow the start-up procedures for the process and why it is important to do so
10. how to obtain the necessary resources for the process
11. how to follow work instructions and why it is important to do so
12. common sources of contamination during processing, how to avoid these and what might happen if this is not done
13. how to operate, regulate and shut down the relevant equipment
14. when it is necessary to seek assistance and how to seek it
15. how to follow the relevant process control procedures and why it is important to do so
16. different ways to carry out the process
17. how to carry out the process in an efficient manner and why it is important to do so
18. what the limits of your own authority and competence are and why it is important to work within them
19. how to deal with items that can be recycled or reworked
20. how to dispose of waste correctly and why it is important to do so
21. how to make equipment ready for future use.

Unit 032 Control weighing in food manufacture

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **preparing to weigh food products** in accordance with workplace procedures.

Evidence of **carrying out weighing operations** in accordance with workplace procedures.

Unit 033

Control wrapping and labelling in food manufacture

SCQF Level:	6
Credit value:	8
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about controlling wrapping and labelling machinery to wrap a variety of food and drink products. It details the skills required to start up, run and shut down equipment, as well as being able to take the appropriate action should operating problems occur. It is also about working to product specifications and production schedules.

Performance objectives
The learner must be able to: 1. prepare for wrapping and labelling.
This means you: 1.1 operate to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when preparing for wrapping and labelling 1.2 check the availability of products for wrapping and labelling 1.3 set up machinery according to specifications 1.4 start up machinery to specifications and check that it is working correctly 1.5 communicate with others effectively 1.6 deal with problems effectively to maintain schedules.

Performance objectives
The learner must be able to: 2. carry out wrapping and labelling.
This means you: 2.1 meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when carrying out wrapping and labelling 2.2 control the infeed of products for flow wrapping to specifications 2.3 control the progress of products during wrapping and labelling to specifications 2.4 control the output of wrapped and labelled products to specifications

- 2.5 correctly deal with substandard or contaminated products
- 2.6 take effective action in response to operating problems within the limits of your authority
- 2.7 correctly control transfer of wrapped products to the next processing stage.

Performance objectives

The learner must be able to:

- 3. finish wrapping and labelling.

This means you:

- 3.1 meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when finishing wrapping and labelling
- 3.2 follow procedures to shut down the machinery correctly
- 3.3 remove and dispose of waste and by-products correctly
- 3.4 check and ensure that machinery is ready for further use
- 3.5 communicate with others effectively and complete all records and reports.

Essential knowledge

The learner will need to know and understand:

- 1. the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions that apply, and what may happen if they are not followed
- 2. the purpose and importance of the process
- 3. what equipment and tools to use and their correct condition
- 4. what materials to use and in what quantity
- 5. how to obtain and interpret the relevant process or ingredient specification
- 6. what recording, reporting and communication is needed, how to carry this out correctly and the reasons why it is important to do so
- 7. what action to take when the process specification is not met
- 8. how to carry out the necessary pre-start checks and why it is important to do so
- 9. how to follow the start-up procedures for the process and why it is important to do so
- 10. how to obtain the necessary resources for the process
- 11. how to follow work instructions and why it is important to do so
- 12. common sources of contamination during processing, how to avoid these and what might happen if this is not done
- 13. how to operate, regulate and shut down the relevant equipment
- 14. when it is necessary to seek assistance and how to seek it
- 15. how to follow the relevant process control procedures and why it is important to do so
- 16. different ways to carry out the process
- 17. how to carry out the process in an efficient manner and why it is important to do so
- 18. what the limits of your own authority and competence are and why it is important to work within them
- 19. how to deal with items that can be recycled or reworked
- 20. how to dispose of waste correctly and why it is important to do so

21. how to make equipment ready for future use.

Unit 033 Control wrapping and labelling in food manufacture

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **preparing for wrapping and labelling** in accordance with workplace procedures.

Evidence of **carrying out wrapping and labelling** in accordance with workplace procedures and taking effective action in response to two operating problems.

Evidence of **finishing wrapping and labelling** in accordance with workplace procedures.

Unit 034

Carry out sampling in food and drink operations

SCQF Level:	6
Credit value:	6
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about carrying out sampling for quality in food and drink operations.

This unit is relevant to you if your role requires you to follow organisational procedures in preparing products for sampling and obtaining a representative sample. You will also be able to maintain the integrity of the sample to allow for traceability and to avoid product contamination.

Performance objectives
The learner must be able to: 1. carry out sampling in food and drink operations.
This means you: 1.1 check that the conditions for sampling are suitable and in line with organisational procedures 1.2 select correct equipment and materials according to instructions and ensure that they are calibrated correctly, fit for purpose and available for use 1.3 use the correct personal protective equipment and clothing 1.4 prepare equipment and materials in line with organisational procedures 1.5 prepare sample plan in conjunction with specification 1.6 identify and obtain samples in line with organisational procedures 1.7 follow the procedures for obtaining, labelling and recording sampling consistently 1.8 prepare samples of product for assessment against product specification 1.9 record sampling accurately clearly and according to operational procedures, and report to the relevant person 1.10 clean sampling equipment and materials to be re-used and correctly dispose of other equipment and materials 1.11 follow instructions to maintain the condition of the sample 1.12 record information accurately about the sample 1.13 maintain the condition of the sample according to operational

procedures

- 1.14 take appropriate action within limits of own authority if abnormal occurrences affect the sample condition or sampling activity
- 1.15 communicate appropriate information if sampling cannot take place
- 1.16 follow legal and regulatory requirements and organisational health and safety, hygiene and environmental standards or instructions.

Essential knowledge

The learner will need to know and understand:

1. the relevant legal and regulatory requirements, health and safety, hygiene and environmental standards and instructions
2. the consequences of not meeting relevant legal and regulatory requirements
3. correct personal protective equipment and clothing that should be worn and how to take samples safely
4. the purpose and methods of sampling procedures for sampling
5. appropriate sampling equipment to use
6. what constitutes a suitable sample according to specification
7. relevant features of the sampling plan
8. operational and regulatory requirements for sampling product quality
9. why it is important to label and identify samples
10. why it is important to maintain the integrity of samples
11. procedures for maintaining sample condition
12. types of sampling containers
13. cleaning materials and method of use to prevent contamination
14. how to access and interpret product specifications
15. how to prepare samples of product for assessment against product specifications and tolerances
16. what tolerances are and why they are important
17. actions to be taken when results are out-of-specification or sampling cannot take place
18. reasons for controlled conditions
19. how to handle, store and dispose of sample materials
20. what sample information is required
21. what documentation and labelling systems are required to ensure traceability
22. types of abnormal conditions that may affect sampling/the sample
23. how to identify defective equipment and what action to take
24. controls in the sampling process.

Unit 034 **Carry out sampling in food and drink operations**

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **carrying out sampling in food and drink operations** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

SCQF Level:	5
Credit value:	5
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	<p>This unit is about displaying fish or shellfish for retail sale. The way fish or shellfish products are displayed directly affects how customers see the products and the buying decisions they make. Effective displays make the products more attractive to customers, enhance sales and help to minimise the loss of quality during display.</p> <p>Fish or shellfish products for display must be at their best and displayed in a way to maximise sales and quality. This unit is about preparing, arranging and maintaining a product display effectively to make it attractive and to conform to the requirements of quality maintenance, food safety and other legislation.</p> <p>You will be able to prepare to display fish or shellfish products. You will also show you can label displays of fish and shellfish products as well as showing you can arrange and maintain fish and shellfish products for display.</p> <p>This unit is for you if you work in fish or shellfish processing and are involved in the displaying of fish or shellfish in a retail environment.</p>

Performance objectives
The learner must be able to:
1. prepare to display fish/shellfish products.
This means you:
1.1 comply with health, safety and hygiene requirements and wear the correct personal protective clothing and equipment throughout the process
1.2 check the display area, equipment and accessories are clean and

	take prompt action on finding any problems
1.3	ensure sufficient clean ice is available for preparing and maintaining the display
1.4	review the fish/shellfish products available for display, estimate the quantities required and select those products which are most suitable with regard to shelf life, demand, appeal and promotional requirements
1.5	assemble and check products and additional materials and prepare them for use
1.6	prepare the display to ensure maximum appeal and to comply with both food quality and food safety requirements.

Performance objectives	
The learner must be able to:	
2.	label displays of fish/shellfish products.
This means you:	
2.1	confirm requirements for labelling of products as required
2.2	confirm label information is correct and conforms to legal and standard operational requirements as required
2.3	position labels for products correctly
2.4	ensure that labels are legible, visible to customers, and securely positioned in the correct place.

Performance objectives	
The learner must be able to:	
3.	arrange and maintain fish/shellfish products for display.
This means you:	
3.1	check and take steps to ensure that the display area always meets the requirements for food quality and food safety
3.2	transfer products safely to the display area according to instructions and specifications
3.3	arrange and promptly replace fish/shellfish products
3.4	clean, ice and display additional materials in a way that is attractive to customers and meets the requirements for food quality and food safety
3.5	where replacement product is not available, reposition and reorganise the remaining products, clean ice and accessories to maintain the presentation and to meet trading conditions
3.6	monitor displays according to instructions and specifications
3.7	carry out emergency cleaning procedures promptly when required
3.8	take prompt action to address any product or display related problem
3.9	monitor and record temperature and other parameters as appropriate.

Performance objectives	
The learner must be able to:	
4.	empty and clean fish/shellfish product display.
This means you:	
4.1	withdraw products from the display according to instructions and

- store correctly
- 4.2 remove and dispose of used ice appropriately
- 4.3 identify and select the appropriate cleaning materials for display equipment and accessories
- 4.4 correctly clean display surfaces, equipment and accessories
- 4.5 safely store cleaning materials for further use
- 4.6 take prompt action to address any display, cleaning or product related problems.

Essential knowledge

The learner will need to know and understand:

1. food safety and hygiene regulations that affect how fish or shellfish products may be displayed and what might happen if these are not adhered to
2. controls and procedures involved in the display of fish or shellfish products, including use of ice and separation between ready to eat products, non-RTE products and live bivalve molluscs
3. procedures and practices to follow to maximise product quality and shelf life
4. procedures for reviewing the display area before assembling materials for the display and why this is important
5. the process of estimating the quantities and size of products to be used for display and why this is important
6. any specific objectives that may impact on the selection of fish or shellfish products for display (eg promotional, appeal, seasonal)
7. what accessories are available and can be used for a safe, hygienic and effective display
8. how to access any specific required knowledge of the products available for display and sale
9. how to source information for labelling such as product specifications, source of supplies, approved names and other displayed information
10. information about potential allergens and other health issues associated with specific products
11. how to assess the content of raw materials labels and ensure display label contents are accurate and appropriate
12. key features of legal and operational requirements for labelling
13. how to position labels and use correct information and why this is important
14. how to check labelling information against product specification and sales details
15. how to apply any business-specific guidance on setting up the display
16. how to recognise, assess and report products that do not meet the specification
17. the procedure for rejecting and isolating failed products
18. how to change displays as part of the ongoing monitoring and maintenance process
19. procedures for stock rotation and the importance of following them
20. what the appropriate actions are for display equipment or accessory failure
21. how to collect and record any required monitoring data such as

temperature of product

22. the procedures for breaking down the display and moving products into storage or to waste to maintain quality and safety
23. how to access and interpret the cleaning schedule for display equipment and accessories
24. the safe handling and application of those cleaning materials and equipment specified to clean display equipment and accessories
25. your role in maintaining food safety and compliance with the HACCP plan.

Unit 035 Display fish/shellfish for retail sale

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **preparing to display fish/shellfish products** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **labelling displays of fish/shellfish products** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **arranging and maintaining fish/shellfish products for display** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **emptying and cleaning fish/shellfish product display** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

SCQF Level:	5
Credit value:	5
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about extracting shellfish meat by hand. It details the skills required to prepare to extract and extract cooked shellfish meat using hand tools and equipment. It is also about working to organisational product specifications and production schedules.

You will also be able to extract shellfish meat by hand, preparing to do so and completing the extraction of shellfish meat.

This unit is for you if you work in fish or shellfish processing and are involved in the extraction of shellfish meat by hand.

Performance objectives
The learner must be able to:
1. prepare to extract shellfish meat by hand.
This means you:
1.1 prepare according to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
1.2 confirm meat extraction specification
1.3 obtain tools and equipment required to support extraction operations
1.4 prepare work station to ensure conditions are suitable for extraction
1.5 confirm condition of tools and equipment is suitable for achieving required production specification
1.6 obtain shellfish to meet required specification
1.7 take effective action in response to operating problems
1.8 maintain effective communication.

Performance objectives
The learner must be able to:
2. extract shellfish meat by hand.
This means you:

- | |
|---|
| <ul style="list-style-type: none"> 2.1 operate to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions 2.2 extract meat from shell 2.3 remove and discard inedible shellfish organs 2.4 check yields and quality requirements against specification 2.5 check extracted meat for unwanted shell content 2.6 maintain specified rate of production 2.7 handle and store shellfish meat in a manner which maintains quality and condition 2.8 maintain condition of work area throughout process 2.9 maintain hygienic condition of tools and equipment 2.10 make sure the product is correctly transferred to the next stage in the manufacturing operation 2.11 take effective action in response to operating problems 2.12 maintain effective communication. |
|---|

<p>Performance objectives</p>

<p>The learner must be able to:</p>

- | |
|--|
| <ul style="list-style-type: none"> 3. finish shellfish meat extraction. |
|--|

<p>This means you:</p>

- | |
|---|
| <ul style="list-style-type: none"> 3.1 finish according to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions 3.2 deal correctly with materials that can be recycled or reworked 3.3 dispose of waste material according to organisational procedures 3.4 make equipment and work station ready for future use after the completion of the process 3.5 maintain effective communication 3.6 accurately complete all records. |
|---|

Essential knowledge

The learner will need to know and understand:

- | |
|---|
| <ul style="list-style-type: none"> 1. the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions that apply, and what may happen if they are not followed 2. how to obtain and interpret the relevant process and quality specifications 3. the tools and equipment required to support hand extraction of shellfish meat 4. how to prepare and maintain work stations in a condition suitable for shellfish meat extraction 5. how to maintain tools and equipment in a condition suitable for extracting shellfish meat 6. how to identify commonly used shellfish species 7. the anatomy of shellfish species including those parts of the shellfish that must be discarded 8. how to extract shellfish meat efficiently to maximise yield 9. batch control and traceability procedures 10. how to remove all shell parts from meat and why it is important 11. how to check for pieces of shell in extracted shellfish meat |
|---|

12. how to assess the quality of cooked shellfish meat
13. how to deal with shellfish which is not fit for use
14. common quality problems associated with cooked shellfish meat extraction and their causes
15. what action to take when the process specification is not met
16. the parts of the shellfish that can be reworked and recycled
17. how to dispose of waste correctly and why it is important to do so
18. the limits of your own authority and competence and why it is important to work within those limits
19. what recording, reporting and communication is needed, how to carry this out correctly and the reasons why it is important to do so.

Unit 036 Extract shellfish meat by hand

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **preparing to extract shellfish meat by hand** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **extracting shellfish meat by hand** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **finishing shellfish meat extraction** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Unit 037

Conduct shellfish depuration operations

SCQF Level:	4
Credit value:	3
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	<p>This unit is about the depuration of shellfish (mussels, clams and oysters). It relates to the work activities involved with loading shellfish into depuration, monitoring the depuration process, unloading shellfish and dispatching shellfish. For the purpose of this unit, depuration is the process used to internally purify shellfish into a condition suitable for human consumption.</p> <p>This unit requires that you prepare shellfish by:</p> <ol style="list-style-type: none">1. washing2. removing dead shellfish3. removing damaged shellfish.

Performance objectives

The learner must be able to:

1. conduct shellfish depuration operations.

This means you:

- 1.1 carry out work safely in line with health and safety requirements
- 1.2 prepare depuration system into a hygienic working condition suitable for receiving shellfish and sterilising water
- 1.3 prepare shellfish into a condition suitable for adding to the depuration system
- 1.4 load shellfish into depuration systems at specified density
- 1.5 establish system to provide the environmental parameters required by the purification process and minimise stress to shellfish
- 1.6 monitor environmental parameters (eg fasting, providing treatments, providing pigment) within depuration system to achieve required purification
- 1.7 report system non-conformance
- 1.8 establish access to shellfish within depuration unit causing minimum disturbance
- 1.9 unload shellfish from depuration, in a manner which minimises the stress caused to shellfish
- 1.10 prepare shellfish for dispatch
- 1.11 clean depuration facility into a hygienic condition ready for the next

shellfish batch

1.12 provide accurate information to maintain records of shellfish depuration and dispatch, to meet legal requirements.

Essential knowledge

The learner will need to know and understand:

1. the health and safety requirements associated with the depuration process
2. the hygiene/food safety requirements associated with depuration
3. your responsibilities under food safety legislation
4. the principles and legal requirements of the depuration process
5. why shellfish are washed before depuration
6. why it is important to remove dead or damaged shellfish before depuration begins
7. the environmental conditions required for effective depuration (eg fasting, providing treatments, providing pigment)
8. the classifications given to shellfish growing areas and how these impact on the depuration process
9. what HACCP is and the critical control points controlling the depuration process
10. how shellfish become stressed and why it is important to minimise the stress caused to shellfish
11. how to dispatch shellfish so their quality is maintained
12. the significance of shellfish contamination to public health
13. legal time requirements for depuration
14. the limitations of the depuration process.

Unit 037 Conduct shellfish depuration operations

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **conducting shellfish depuration operations**.

SCQF Level:	5
Credit value:	7
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about filleting fish by hand. It details the skills required to set up and fillet fish manually using a knife. It is also about working to achieve organisational product specifications and production schedules. It details the skills needed to maintain product quality.

You will be able to prepare for, carry out and finish hand filleting of fish.

This unit is for you if you work in fish processing and are involved in the production of filleted fish.

Performance objectives
The learner must be able to: 1. prepare to fillet by hand.
This means you: 1.1 prepare according to the legal or regulatory requirement and, the organisational health and safety, hygiene and environmental standards and instructions 1.2 confirm filleting specification 1.3 obtain tools and equipment required to support planned filleting operations 1.4 prepare work station to ensure conditions are suitable for hand filleting 1.5 sharpen knife into a condition suitable for achieving required filleting specification 1.6 obtain fish to meet required filleting specification 1.7 take effective action in response to operating problems 1.8 maintain effective communication.

Performance objectives
The learner must be able to: 2. fillet fish by hand.
This means you:

- | |
|---|
| <ul style="list-style-type: none"> 2.1 operate to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions 2.2 fillet fish to achieve required yield and quality requirements 2.3 trim fillets to achieve specified appearance requirements 2.4 achieve required rate of production 2.5 handle and store fish and fish products in a manner which maintains quality and condition 2.6 maintain condition of work station throughout the process 2.7 dispose of waste according to organisational procedures 2.8 sharpen knives as required to maintain their effectiveness as a cutting tool 2.9 safely store knives when not in use 2.10 make sure the product is correctly transferred to the next stage in the processing operation 2.11 take effective action in response to operating problems 2.12 maintain effective communication. |
|---|

<p>Performance objectives</p>

<p>The learner must be able to:</p>

- | |
|---|
| <ul style="list-style-type: none"> 3. finish hand filleting. |
|---|

<p>This means you:</p>

- | |
|--|
| <ul style="list-style-type: none"> 3.1 finish according to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions 3.2 deal correctly with materials that can be recycled or reworked 3.3 dispose of waste material according to organisational procedures 3.4 make equipment and work station ready for future use after the completion of the process 3.5 safely store knives after use 3.6 maintain effective communication 3.7 accurately complete all records. |
|--|

Essential knowledge

The learner will need to know and understand:

- | |
|--|
| <ul style="list-style-type: none"> 1. the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions that apply, and what may happen if they are not followed 2. the personal protective clothing that is required to support hand filleting 3. the tools and equipment required to support hand filleting 4. how to sharpen, maintain and store knives 5. how to obtain and interpret the relevant process and quality specifications 6. how to identify commonly used fish species 7. how to prepare and maintain work stations in a condition suitable for hand filleting 8. how to fillet round fish and flat fish efficiently to maximise yield 9. the body skeletal structure of commonly processed round and flat fish 10. the cuts needed to produce single and butterfly fillets |
|--|

11. how to assess the quality of whole fish and fish fillets
12. how to deal with fish which is not fit for use
13. common quality problems associated with hand filleting and likely causes
14. the importance of accuracy during filleting
15. what action to take when the process specification is not met
16. what parts of the filleted fish frame can be reworked and recycled
17. product control and traceability during filleting operations
18. how to dispose of waste according to organisational procedures
19. the limits of your own authority and competence and why it is important to work within those limits
20. what recording, reporting and communication is needed, how to carry this out correctly and the reasons why it is important to do so.

Unit 038 Fillet fish by hand

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **preparing to fillet by hand** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **filleting fish by hand** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **finishing hand filleting** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

SCQF Level:	5
Credit value:	6
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about grading fish or shellfish by hand. It details the skills required to prepare to and grade fish or shellfish. It is also about working to product specifications and production schedules.

You will be able to prepare to grade fish or shellfish by hand, including confirming the product specification. You will also be able to grade fish or shellfish by hand including achieving the required rate of grading. You will also be able to finish the grading process including the correct disposal of waste.

This unit is for you if you work in fish or shellfish processing and are involved in the grading of fish or shellfish by hand.

Performance objectives
The learner must be able to:
1. prepare to grade fish/shell fish by hand.
This means you:
1.1 prepare according to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
1.2 confirm grading specification
1.3 prepare the work area into a condition suitable for receiving fish or shellfish
1.4 take effective action in response to operating problems
1.5 maintain effective communications.

Performance objectives
The learner must be able to:
2. grade fish/shellfish by hand.
This means you:
2.1 operate to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions

- | |
|--|
| <ul style="list-style-type: none"> 2.2 grade fish or shellfish according to required size and quality requirements 2.3 achieve required rate of grading 2.4 handle and store fish or shellfish in a manner which maintains quality and condition 2.5 maintain condition of work area throughout grading process 2.6 label fish or shellfish accurately according to organisational requirements 2.7 transfer graded fish or shellfish to the next stage in the process 2.8 take effective action in response to operating problems 2.9 maintain effective communication. |
|--|

<p>Performance objectives</p>

<p>The learner must be able to:</p>

- | |
|--|
| <ul style="list-style-type: none"> 3. finish grading process. |
|--|

<p>This means you:</p>

- | |
|--|
| <ul style="list-style-type: none"> 3.1 finish according to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions 3.2 dispose of waste according to organisational procedures 3.3 make equipment and work station ready for future use after the completion of the process 3.4 maintain effective communication 3.5 accurately complete all records. |
|--|

Essential knowledge

The learner will need to know and understand:

- | |
|--|
| <ul style="list-style-type: none"> 1. the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions that apply, and what may happen if they are not followed 2. the facilities required to grade fish or shellfish 3. how to obtain and interpret grading specifications 4. how to identify commonly processed fish or shellfish species 5. how to prepare and maintain work areas used for grading 6. how to grade by size 7. how to assess and grade by quality 8. common quality problems and their likely causes 9. handling methods that maintain the quality and condition 10. the importance of accuracy during grading 11. how to deal with fish or shellfish that is not fit for use 12. what action to take when the grading specification is not met 13. how to dispose of waste correctly and why it is important to do so 14. product control and traceability during grading operations 15. the limits of your own authority and competence and why it is important to work within those limits 16. what recording, reporting and communication is needed, how to carry this out correctly and the reasons why it is important to do so. |
|--|

Unit 039 Grade fish/shellfish by hand

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **preparing to grade fish/shellfish by hand** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **grading fish/shellfish by hand** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **finishing the grading process** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Unit 040

Grade fish/shellfish by machine

SCQF Level:	5
Credit value:	4
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about controlling the machine grading of fish or shellfish. It details the skills required to start up, run and shut down grading equipment, as well as being able to take the appropriate action should operating problems occur. It is also about working to organisational product specifications and production schedules.

You will be able to prepare fish for grading using a machine and carry out fish or shellfish grading by machine. You will also be able to finish grading by machine operations.

This unit is for you if you work in fish or shellfish processing and grade by machine.

Performance objectives

The learner must be able to:

1. prepare for fish/shellfish grading.

This means you:

- 1.1 operate to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
- 1.2 check product specifications at the right time
- 1.3 set up grading equipment according to specification
- 1.4 make sure that fish/shellfish is available and fit for use
- 1.5 make sure that services meet requirements
- 1.6 start up the equipment correctly and check that it is running to specification
- 1.7 take effective action in response to operating problems
- 1.8 maintain effective communication.

Performance objectives

The learner must be able to:
2. carry out fish/shellfish grading.

This means you:

- 2.1 meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
- 2.2 use equipment correctly and make sure that it is correctly supplied with materials and services
- 2.3 achieve the required grading output according to specification
- 2.4 make sure the product is correctly transferred to the next stage in the manufacturing operation
- 2.5 take effective action in response to operating problems within the limits of your responsibility
- 2.6 maintain effective communication.

Performance objectives

The learner must be able to:
3. finish fish/shellfish grading operations.

This means you:

- 3.1 meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
- 3.2 check the specifications to time shut down accurately
- 3.3 follow procedures to shut down equipment correctly
- 3.4 deal correctly with items that can be recycled or reworked
- 3.5 dispose of waste correctly
- 3.6 make equipment ready for future use after completion of the process
- 3.7 maintain effective communication
- 3.8 accurately complete all records.

Essential knowledge

The learner will need to know and understand:

1. the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions that apply, and what may happen if they are not followed
2. the purpose and importance of the process
3. what equipment and tools to use and their correct condition
4. what materials to use and in what quantity
5. how to obtain and interpret the relevant process or ingredient specification
6. what recording, reporting and communication is needed, how to carry this out correctly and the reasons why it is important to do so
7. what action to take when the process specification is not met
8. how to carry out the necessary pre-start checks and why it is important to do so
9. how to follow the start-up procedures for the process and why it is important to do so
10. how to obtain the necessary resources for the process
11. how to follow work instructions and why it is important to do so

12. common sources of contamination during processing, how to avoid these and what might happen if this is not done
13. how to operate, regulate and shut down the relevant equipment
14. when it is necessary to seek assistance and how to seek it
15. how to follow the relevant process control procedures and why it is important to do so
16. different ways to carry out the process
17. how to carry out the process in an efficient manner and why it is important to do so
18. what the limits of your own authority and competence are and why it is important to work within them
19. how to deal with items that can be recycled or reworked
20. how to dispose of waste correctly and why it is important to do so
21. how to make equipment ready for future use.

Unit 040 **Grade fish/shellfish by machine**

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **preparing for fish/shellfish grading** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **carrying out fish/shellfish grading** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **finishing the fish/shellfish grading operation process** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Unit 041

Gut and clean fish by hand

SCQF Level:	5
Credit value:	4
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about gutting fish by hand. It details the skills required to prepare gut and wash fish by hand. It is also about working to organisational product specifications and production schedules.

You will be able to prepare, carry out and finish hand gutting and washing of fish.

This unit is for you if you work in fish processing and are involved in the gutting and cleaning of fish by hand.

Performance objectives
The learner must be able to: 1. prepare to gut and wash fish.
This means you: 1.1 prepare according to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions 1.2 confirm process specification 1.3 prepare work station to ensure conditions are suitable for gutting 1.4 obtain tools and equipment required to support the gutting operation 1.5 sharpen knives into a condition suitable for achieving the required production specification 1.6 obtain fish to meet required process specification 1.7 confirm availability of clean potable water 1.8 take effective action in response to operating problems 1.9 maintain effective communication.

Performance objectives
The learner must be able to: 2. gut and wash fish by hand.
This means you: 2.1 operate to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental

standards and instructions
2.2 split fish and effectively remove contents of gut cavity
2.3 wash and effectively clean gut cavity
2.4 achieve required rate of production
2.5 handle and store fish in a manner which maintains quality and condition
2.6 dispose of waste material to maintain condition of work station
2.7 sharpen knives as required to maintain their effectiveness as cutting tools
2.8 make sure the product is correctly transferred to the next stage in the manufacturing operation
2.9 take effective action in response to operating problems
2.10 maintain effective communication.

Performance objectives
The learner must be able to:
3. finish hand gutting and washing.
This means you:
3.1 finish according to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
3.2 deal correctly with materials that can be recycled or reworked
3.3 dispose of waste material according to organisational procedures
3.4 make equipment and work station ready for future use, after the completion of the process
3.5 maintain effective communication
3.6 accurately complete all records.

Essential knowledge

The learner will need to know and understand:

1. the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions that apply, and what may happen if they are not followed
2. the personal protective clothing that is required to support hand processing
3. the tools and equipment required to support gutting and cleaning
4. why it is important to use potable water to clean fish
5. how to sharpen, maintain and store knives
6. how to obtain and interpret the relevant process specification
7. how to prepare and maintain work stations in a condition suitable for hand processing
8. how to gut and wash fish to effectively remove all internal organs
9. how to assess the quality of whole and gutted clean fish
10. expected yields from gutting process
11. product control and traceability during gutting operations
12. how to deal with fish that are not fit for use
13. common quality problems associated with gutting and cleaning and their likely causes
14. what action to take when the process specification is not met
15. what parts of the processed fish can be reworked and recycled

16. how to dispose of waste correctly and why it is important to do so
17. the limits of your own authority and competence and why it is important to work within those limits
18. what recording, reporting and communication is needed, how to carry this out correctly and the reasons why it is important to do so.

Unit 041 Gut and clean fish by hand

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **preparing to gut and wash fish** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **gutting and washing fish by hand** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **finishing hand gutting and washing** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

SCQF Level:	5
Credit value:	4
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	<p>This unit is about preparing for fish harvesting operations, where fish are to be dispatched for human consumption. It includes preparing harvesting facilities and equipment ready for the hygienic handling and dispatch of fish. It requires that the work is completed in accordance with the standard operating procedures operated by the site to maintain hygienic conditions using routine and non-routine tasks.</p> <p>This unit requires that you are able to deal with the following factors during harvesting:</p> <ol style="list-style-type: none"> 1. changes in environmental conditions 2. malfunction of equipment 3. fish which do not meet given specification.

Performance objectives
The learner must be able to:
1. prepare to and harvest fish.
This means you:
1.1 carry out work safely in line with health and safety requirements
1.2 check that fish have been conditioned ready for dispatch
1.3 prepare harvesting equipment and facilities to facilitate the effective dispatch and storage of fish
1.4 apply harvest methods effectively in a manner which minimises the stress caused to fish
1.5 dispatch a fish humanely
1.6 handle harvested fish in a manner which maintains flesh quality
1.7 establish fish effectively within chilled storage
1.8 follow personal hygiene procedures in line with good practice and hygiene legislation
1.9 observe and report on harvested fish and variations from expected harvest specification
1.10 deal with factors that can disrupt the harvesting process within own limits of authority
1.11 clean and store harvesting equipment after use
1.12 dispose of waste (blood, fish not meeting quality specification) according to site waste management procedures

1.13 provide accurate information to maintain records in support of harvesting.

Essential knowledge

The learner will need to know and understand:

2. the health and safety requirements associated with harvesting
3. how food safety legislation controls the production of fish and dead fish for human consumption
4. legal requirements which control the dispatch of fish
5. own responsibilities under food hygiene legislation
6. the requirements of humane dispatch including the different methods and techniques used
7. how environmental legislation controls the disposal of waste
8. how and why dead fish are stored to maintain flesh quality including the use of ice to suit prevailing environmental conditions
9. why it is important to minimise fish stress during harvest
10. why it essential for harvested fish to meet customer requirements
11. how and why fish are conditioned in preparation for harvest
12. why fish that do not meet required harvesting specification must be controlled
13. the equipment and methods used to harvest fish.

Unit 042 Harvest fish for food supply

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **preparing to and harvest fish.**

Unit 043

Intake fish/shellfish

SCQF Level:	5
Credit value:	6
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council

Aim: This unit is about the intake of fish or shellfish. It details the skills required to set up intake areas and then intake fish or shellfish according to organisational procedures. It includes the inspection processes relevant to vehicles, packaging and product (size, condition, freshness and quality). It is also about working to organisational product specifications and production schedules.

You will be able to prepare, carry out and finish the intake of fish/shellfish

This unit is for you if you work in fish or shellfish processing and are involved in the intake of fish or shellfish.

Performance objectives
The learner must be able to: 1. prepare to intake fish/shellfish.
This means you: 1.1 prepare according to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions 1.2 confirm intake specifications 1.3 prepare work area into a condition suitable for receiving fish or shellfish 1.4 take effective action in response to operating problems 1.5 maintain effective communication.

Performance objectives
The learner must be able to: 2. intake fish/shellfish.
This means you: 2.1 operate to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions

- 2.2 assess condition of transportation vehicle against intake specification
- 2.3 assess condition of packaging against intake specification
- 2.4 effectively sample and inspect fish or shellfish according to intake specification
- 2.5 confirm intake specification and label fish or shellfish accurately according to organisational requirements
- 2.6 handle and store fish or shellfish during intake in a manner which maintains quality and condition
- 2.7 maintain condition of work area throughout intake process
- 2.8 transfer fish or shellfish to the next stage in the process
- 2.9 take effective action to control any non-conforming products
- 2.10 take effective action in response to operating problems
- 2.11 maintain effective communication.

Performance objectives

The learner must be able to:

3. finish intake process.

This means you:

- 3.1 finish according to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
- 3.2 dispose of waste according to organisational procedures
- 3.3 make equipment and work area ready for next intake
- 3.4 maintain effective communication
- 3.5 accurately complete all records.

Essential knowledge

The learner will need to know and understand:

1. the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions that apply, and what may happen if they are not followed
2. the facilities required to intake fish or shellfish
3. how to obtain and interpret the intake specifications
4. how to identify fish or shellfish species
5. how to prepare and maintain work areas used for the intake of fish or shellfish
6. how to inspect the condition of vehicles
7. how to recognise fish or shellfish species by size
8. how to recognise fish or shellfish quality
9. common quality problems and their likely causes
10. how fish or shellfish are transported to maintain condition and quality
11. how to assess condition of transportation materials and facilities
12. how to effectively sample batches of fish or shellfish
13. inspection methods relating to temperature, quality, freshness, condition and labelling
14. the importance of following organisational intake procedures
15. handling methods that maintain the condition of fish or shellfish
16. labelling and traceability relevant to the intake of fish or shellfish
17. how to deal with non-conforming fish or shellfish that is not fit for use

18. what action to take when the process specification is not met
19. how to dispose of waste correctly and why it is important to do so
20. the limits of your own authority and competence and why it is important to work within those limits
21. what recording, reporting and communication is needed, how to carry this out accurately and the reasons why it is important to do so.

Unit 043 Intake fish/shellfish

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **preparing to intake fish/shellfish** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **taking in fish/shellfish** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **finishing the intake process** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Unit 044

Lift and handle materials safely in food manufacture

SCQF Level:	6
Credit value:	6
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about keeping healthy and safe when moving and handling materials in the workplace. You will be able to follow the relevant health and safety and hygiene requirements and procedures for moving and handling materials. You will be able to use transport routes and equipment correctly.

Performance objectives

The learner must be able to:

1. lift and handle according to your organisation's standards and instructions.

This means you:

- 1.1 wear appropriate personal protective equipment
- 1.2 follow your organisation's standards and instructions on health and safety
- 1.3 follow your organisation's standards and instructions on food safety
- 1.4 follow your organisation's standards and instructions on environmental safety.

Performance objectives

The learner must be able to:

2. accurately assess risks before lifting and handling.

This means you:

- 2.1 take precautions to protect yourself
- 2.2 take precautions to protect other people
- 2.3 take precautions to protect the products from damage
- 2.4 seek assistance when required.

Performance objectives

The learner must be able to:

3. use handling equipment correctly.

This means you:

- | |
|--|
| 3.1 check that any required handling equipment is fit for use
3.2 use handling equipment correctly
3.3 return handling equipment to the correct place after use. |
|--|

Performance objectives
The learner must be able to: 4. move or transport material.
This means you: 4.1 obtain the required materials and make sure that they are of the correct quantity and quality 4.2 use the correct lifting and handling techniques 4.3 avoid injury to yourself and others 4.4 use the correct transport route to move materials to the correct place 4.5 complete all records accurately and promptly.

Essential knowledge

The learner will need to know and understand:

- | |
|--|
| <ol style="list-style-type: none">1. health and safety and food safety standards relevant to moving and handling materials and why it is important that you follow them2. why it is important to wear the appropriate personal protective equipment and what may happen if this is not done3. the correct manual handling techniques and what may happen if they are not used4. the safe lifting limits for yourself and any equipment that you use5. how to carry out safety checks on lifting equipment and why it is important to do so6. why it is important to check that the load is suitable to be moved and that you use the right handling equipment for the task7. the transport routes to take and why it is important to stick to them8. the hazards to yourself and others when moving and handling materials9. what to do if you find that the materials or handling equipment are defective10. the rules and procedures for the different work areas that affect you when moving and handling materials11. the limits of your own authority and competence and why it is important to work within these limits12. how to determine what the handling and moving will require in terms of assistance from others and the use of equipment13. the recording and communication needed, how to carry this out correctly and the reasons why it is important to do so. |
|--|

Unit 044 **Lift and handle materials safely in food manufacture**

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **lifting and handling** according to workplace procedures.

Evidence of **assessing risks before lifting and handling** in accordance with workplace procedures. This must include taking precautions in the context of two types of risk

Evidence of **handling equipment correctly** in accordance with workplace procedures.

Evidence of moving or transporting material in accordance with workplace procedures. This must include **lifting and handling** in two of the following situations:

- lifting manually on your own
- lifting manually with the help of another person
- using a device which aids lifting and handling.

Unit 045

Maintain workplace food safety standards in manufacture

SCQF Level:	5
Credit value:	6
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about keeping your workplace clean and hygienic. It involves understanding the importance of minimising the risks of product contamination, cross-contamination and food poisoning; pests and infestation; and the storage and disposal of waste.

Performance objectives

The learner must be able to:

1. keep the workspace clean.

This means you:

- 1.1 keep your immediate work area clean and tidy
- 1.2 keep tools, utensils and equipment in good order, in a hygienic condition and stored correctly
- 1.3 keep ingredients and products separate and in their assigned places.

Performance objectives

The learner must be able to:

2. work in a way that keeps food safe.

This means you:

- 2.1 follow procedures to dispose of food waste and scrap promptly and hygienically
- 2.2 avoid product contamination and cross-contamination at all stages of processing operations
- 2.3 follow the correct procedures for dealing with product contamination and cross-contamination
- 2.4 follow your organisation's procedures for items that may cause allergic reactions.

Essential knowledge

The learner will need to know and understand:

1. how personal hygiene and behaviour affects food safety in the workplace
2. the relevant statutory and non-statutory reportable diseases
3. why it is important to treat and cover cuts, boils, skin infections and grazes and how to do so
4. how food handling practices affect food safety in the workplace
5. how the methods and frequency of cleaning and maintenance of equipment, surfaces and environment affect food safety in the workplace
6. the main types of pests and infestation; how they can occur; how to prevent infestation; how to recognise infestation and what to do if you discover it in the workplace
7. the types of product contamination and cross-contamination; how they can occur; how to prevent or minimise the risk of it occurring; and what you can do if you discover contamination or cross-contamination
8. the types of food poisoning; how food poisoning organisms enter food; the factors that affect the growth of these organisms; how the organisms can be transferred from one food to another; the symptoms of food poisoning; and how to prevent food poisoning from happening
9. why food needs to be kept at specified temperatures and how to ensure this
10. the causes of food spoilage, how to recognise it and what to do if you discover food spoilage.

Unit 045 **Maintain workplace food safety standards in manufacture**

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **keeping the workspace clean** in accordance with workplace procedures.

Evidence of **keeping food safe** in accordance with workplace procedures. Evidence of following the correct procedures for dealing with two types of contamination.

Unit 046

Maintain the workplace and health and safety in food manufacture

SCQF Level:	5
Credit value:	6
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about working safely in a food and drink manufacturing environment. It covers working within defined safety limits; following emergency procedures and using personal protective equipment correctly.

This unit is for you if you work in food and drink operations and your job requires you to enter the food manufacturing or processing area.

Performance objectives
The learner must be able to: 1. work within defined safety limits.
This means you: 1.1 behave responsibly and work without causing risks to yourself and others 1.2 carry out instructions on safety notices and hazard signs 1.3 follow operational requirements 1.4 report hazards, defects and faults promptly 1.5 keep workplace and surfaces clean and clear of hazards 1.6 follow your organisation's procedures in the case of infectious disease.

Performance objectives
The learner must be able to: 2. follow emergency procedures.
This means you: 2.1 follow the correct procedures on discovering, or being alerted to, an emergency 2.2 keep emergency escape routes clear of obstruction 2.3 use safety systems and alarms correctly

Performance objectives

The learner must be able to:

3. use personal protective equipment correctly.

This means you:

- 3.1 wear appropriate personal protective equipment as stated in organisational procedures
- 3.2 dispose of personal protective equipment correctly after use.

Essential knowledge

The learner will need to know and understand:

1. how to define health and safety hazards and risks and identify them in the workplace
2. the main health risks in the workplace and steps that can be taken to control them
3. the most common causes of accidents in the workplace and steps that help to prevent them
4. the safety precautions required in the workplace
5. the reasons for taking safety precautions and the consequences of not doing so
6. safe working practices and why it is important to follow them
7. how to contact and obtain help from colleagues with first aid qualifications
8. the procedures that should be followed in different emergencies and why they should be followed
9. why it is important to plan tasks and take the necessary precautions and what might happen if this is not done
10. how to report accidents and incidents and why reporting them is important
11. the need for safety notices and hazard warning signs
12. the hazards, defects and faults which could arise in the workplace and how they can be avoided or minimised
13. the rules and hazards associated with particular equipment
14. the reasons for using correct tools and equipment and how they should be used
15. why tools and equipment should be maintained and stored correctly
16. how to isolate faulty and defective equipment
17. the range of personal protective equipment and its care
18. why it is important to adjust workplace equipment to suit the individual
19. the hazardous substances that are in the workplace and steps that should be taken to protect you and others from them
20. the storage methods for materials and chemicals.

Unit 046 **Maintain the workplace and health and safety in food manufacture**

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **working within defined safety limits** in accordance with workplace procedures.

Evidence of **following emergency procedures** in accordance with workplace procedures.

Evidence of **using personal protective equipment correctly** in accordance with workplace procedures. This must include two pieces of personal protective equipment.

Unit 047

Contribute to the application of improvement techniques for achieving excellence in a food environment

SCQF Level:	6
Credit value:	7
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council

Aim: This unit is about the skills needed for you to contribute to the application of improvement techniques in food and drink manufacture and/or supply operations. It is vital that improvement techniques are applied and maintained so that they are fit for purpose in support of achieving excellence. This is important to the productivity and success of manufacture, processing and supply of food and drink within the food supply chain. Contribution is typically provided through working in a team, although this does not exclude individual contributions from outside of close working teams.

You will be able to show that you can contribute systematically to the application and maintenance of improvement techniques applied in your workplace. You will also be able to show that you can make recommendations regarding more effective application of improvement techniques which relate to your role. You will be able to comply with your company policy for use of improvement techniques, take responsibility for your contribution, and refer any issues outside of the limit of your authority to others.

This unit is for you if you work in food and drink manufacture and/or supply operations and are involved in operational practice sufficiently to be able to make a valued contribution to the application of improvement techniques. This could be either as an autonomous and focused operational role or as part of another food manufacturing/processing or supply role which includes some operational

responsibilities.

Performance objectives

The learner must be able to:

- | |
|--|
| 1. identify opportunities for the application of improvement techniques. |
|--|

This means you:

- | |
|---|
| 1.1 identify opportunities and make positive suggestions about improvement techniques |
| 1.2 gather initial information to inform potential application improvements |
| 1.3 assess information and check that your suggestions can be justified and are realistic |
| 1.4 secure approval for your contribution to application. |

Performance objectives

The learner must be able to:

- | |
|----------------------------------|
| 2. apply improvement techniques. |
|----------------------------------|

This means you:

- | |
|--|
| 2.1 use improvement techniques within your work area |
| 2.2 obtain all the information, documentation and resources required to use improvement techniques |
| 2.3 identify any targets or key performance indicators which relate to the use of the improvement techniques |
| 2.4 ensure that the use of improvement techniques are complementary to the requirements of the food safety management system |
| 2.5 identify any deficiencies in documentation or resources required |
| 2.6 make valid recommendations for changes to policy or procedures to support the application of improvement techniques |
| 2.7 refer any issues outside the limit of your authority to a responsible person. |

Performance objectives

The learner must be able to:

- | |
|--|
| 3. obtain and provide feedback on application of improvement techniques. |
|--|

This means you:

- | |
|--|
| 3.1 seek feedback on the value of your contribution to the application |
| 3.2 check progress towards the achievement of targets or performance indicators |
| 3.3 provide feedback on your contribution to application to the relevant person. |

Essential knowledge

The learner will need to know and understand:

1. the health, safety and food hygiene requirements of the area in which you are applying improvement techniques
2. the purpose and objectives of improvement techniques you are applying
3. how improvement techniques can produce performance benefits and support and/or sustain food safety standards
4. what your company policy or protocol is in applying improvement techniques
5. what documentation is required to inform improvement techniques
6. the scope of information and data required to apply improvement techniques
7. the relationship between improvement techniques and standard operating procedures, quality and continuous improvement
8. how improvement techniques and their application are communicated in your workplace
9. what the best methods are for formulating recommendations
10. how to present recommendations
11. how to give and receive feedback regarding your contribution to application of improvement techniques
12. the limits of your own authority, and reporting arrangements in the event of problems that you cannot resolve.

Unit 047

Contribute to the application of improvement techniques for achieving excellence in a food environment

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **identifying opportunities** for the application of improvement techniques.

Evidence of **applying improvement techniques**.

Evidence of **obtaining and providing feedback on application of improvement techniques**.

Unit 048

Contribute to sustainable practice in a food environment

SCQF Level:	5
Credit value:	5
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about working in a sustainable way in food manufacture or supply. You will need to work effectively to ensure the efficient use of resources and to minimise waste. In addition, you need to assess your own performance and identify and implement opportunities to improve efficiency.
	This unit is for you, if you work in a food environment.

Performance objectives

The learner must be able to:

1. contribute to sustainability in a food environment.

This means you:

- 1.1 work effectively according to organisational production specifications
- 1.2 assess own performance to identify possible efficiency improvements
- 1.3 report accurately any opportunities to improve the efficiency of resource usage
- 1.4 report promptly and accurately variations in resource usage and any actions you have taken in response
- 1.5 implement actions to improve the efficiency of resource usage
- 1.6 work effectively to avoid and minimise waste.

Essential knowledge

The learner will need to know and understand:

1. what is meant by sustainable food manufacture
2. why it is important to work to organisational production specifications
3. how to assess your own performance for opportunities to improve

efficiency

4. the importance of reporting incidences of inefficient resource usage
5. how not working to organisational production specifications can impact on resource usage and sustainability
6. energy as a resource and the opportunities available for reducing energy usage
7. how efficient energy usage supports sustainable food manufacture
8. water as a resource and the opportunities available for reducing water usage
9. how the efficient use of water supports sustainable food manufacture
10. how minimising waste supports sustainable food manufacture
11. transport as a resource and the opportunities available for reducing transport usage
12. how the efficient use of transport as a resource supports sustainable food manufacture
13. how the efficient use of resources supports the economic sustainability of the organisation
14. the social benefits of sustainable food manufacturing
15. your own responsibilities relevant to sustainable food manufacture.

Unit 048 **Contribute to sustainable practice in a food environment**

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

|

Evidence of **contributing to sustainability in a food environment** in accordance with workplace procedures.

SCQF Level:	6
Credit value:	3
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	<p>Communicate by making sure that the 'message' is delivered and received as intended.</p> <p>Links: SAS / A212 and SAS / A111.</p> <p>Specific skills:</p> <ol style="list-style-type: none"> 1. communicating 2. interpersonal skills 3. managing resources 4. managing time 5. negotiating 6. presenting yourself 7. problem solving 8. organising 9. planning 10. recording 11. using technology.

Performance objectives

The learner must be able to:

1. communicate in a business environment.

This means you:

- 1.1 communicate with other people to make sure the 'message' of communication has been delivered and received as intended
- 1.2 select the most appropriate method of communication for the audience
- 1.3 communicate clearly and coherently, taking into account the needs of the audience
- 1.4 safeguard confidential information
- 1.5 give others the opportunity to ask questions and check their understanding
- 1.6 actively focus on information that other people are communicating, questioning any points you are unsure about
- 1.7 make constructive contributions to discussions, developing points and ideas
- 1.8 make sure that the communication has met its purpose
- 1.9 present a positive image of yourself and your organisation.

Essential knowledge

The learner will need to know and understand:

1. the purpose and benefits of making sure that communication delivers the 'message' which is intended to be received
2. what methods of communication are available to you
3. your organizational structures, procedures and communication channels
4. the different audiences with which you might need to communicate and their needs
5. how to identify the appropriate methods of communication for different audiences
6. how to structure your communication so that it is clear and accurate
7. the purpose and value of empathising with your audience and adapting the way that you communicate to meet their needs
8. how non-verbal communication affects the impact you have on other people
9. how to interpret and respond positively to non-verbal communication
10. how to identify confidential information in line with your organisation's procedures
11. the purpose of safeguarding confidential information and how to do this
12. the purpose and benefits of giving other people the opportunity to ask questions and check their understanding, and how to respond positively to these
13. how to contribute constructively to discussions
14. how to focus actively on what others are communicating
15. how to evaluate the effectiveness of your communication and deal with situations where its purpose has not been achieved
16. the purpose and value of presenting a positive image of yourself and your organisation
17. the purpose and benefits for organisations to have a friendly and purposeful way of dealing with contacts
18. the types of contacts you deal with, the requirements that they have and how to meet their needs
19. types of problems that may occur with contacts – including conflict and aggression – and how to deal with these.

Unit 049 **Communicate in a business environment**

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **communicating in a business environment** in accordance with workplace procedures.

Unit 050

Deal with waste in food and drink operations

SCQF Level:	5
Credit value:	4
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about how to deal effectively with waste. The materials generated in food and drink operations are the product itself, by-product and recyclable and disposable waste.

This unit is for those working in food and drink operations that deal with waste.

Performance objectives

The learner must be able to:

1. deal with waste in food and drink operations.

This means you:

- 1.1 use the correct personal protective equipment
- 1.2 separate waste following company procedures
- 1.3 handle waste safely and hygienically
- 1.4 keep waste in the correct place and separated from ingredients and other products
- 1.5 use tools and equipment for the handling of waste as appropriate, following company procedures
- 1.6 remove waste from production areas
- 1.7 store waste following organisational procedures
- 1.8 regularly check production areas for waste that should be removed
- 1.9 contain waste and avoid spillage when moving waste in production areas
- 1.10 identify and report problems associated with the collection and storage of waste, according to company procedures
- 1.11 follow the legal and regulatory requirements and health and safety, hygiene and environmental standards and instructions.

Essential knowledge

The learner will need to know and understand:

1. forms of waste including solid, liquid, hazardous and recyclable waste
2. types of hazardous waste – unfit for human consumption, health and safety hazard, legally restricted waste
3. the importance of separating waste into types
4. waste as a source of contamination and cross-contamination
5. value of some types of waste as a source of income
6. costs of waste – penalties, reduction in yields
7. the importance of keeping records of waste
8. procedures for handling of waste in production areas
9. procedures for dealing with different types of hazardous waste and spillages
10. procedures for dealing with waste intended for recycling, re-use or further processing
11. the use of personal protective equipment when handling waste
12. reasons for training staff in waste management
13. hazards involved in the handling of waste
14. hygiene and food safety problems associated with the separation, handling and storage of waste
15. legal requirements for dealing with waste in food production areas
16. hygiene and food safety problems associated with the use of by-products to be reworked to be processed for human consumption
17. environmental impact of waste
18. positive uses of waste
19. the waste hierarchy.

Unit 050 Deal with waste in food and drink operations

Supporting information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and assessment criteria. The evidence must be provided in the following ways taking into account any of the special considerations below.

Evidence of **dealing with waste in food and drink operations** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.