# **SVQ Food & Drink Unit Handbook (4768) Units 101-150**

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#### Contents

1 Units		4
Unit 101	Batch finish flour confectionery	5
Unit 102	Batch produce advanced craft fermented dough products	8
Unit 103	Batch produce advanced craft flour confectionery products	12
Unit 104	Batch produce advanced craft non-fermented dou products	gh 16
Unit 105	Blend or mix ingredients in food manufacture	20
Unit 106	Care for livestock pre-slaughter in food manufactu	ire23
Unit 107	Care for poultry pre-slaughter in food manufacture	e26
Unit 108	Carry out bleeding operations for Halal meat	29
Unit 109	Carry out boning of meat or poultry	32
Unit 110	Carry out bulk filling in food and drink operations	35
Unit 111	Carry out butchery of red meat primal joints	38
Unit 112	Carry out cheese extrusion operations	42
Unit 113	Carry out cheese piercing operations	45
Unit 114	Carry out cheese pressing operations	48
Unit 115	Carry out cheese smoking operations	51
Unit 116	Carry out cheese waxing operations	54
Unit 117	Carry out manual bleeding operations	57
Unit 118	Carry out manual stunning of meat or poultry species	60
Unit 119	Carry out poultry butchery	63
Unit 120	Carry out primal cutting of meat or poultry	67
Unit 121	Carry out religious slaughter	70
Unit 122	Carry out rodding and clipping of meat carcasss	73
Unit 123	Carry out seaming or filleting of meat or poultry	76
Unit 124	Carry out trimming of meat or poultry	79
Unit 125	Carry out wild game butchery	83
Unit 126	Clean vehicle to maintain food safety	87
Unit 127	Complete pre-journey and post-journey procedure in food and drink operations	90
Unit 128	Contribute to bio-security in livestock holding in food manufacture	93
Unit 129	Contribute to bio-security in livestock markets	96
Unit 130	Contribute to optimising work areas in food manufacture	98

Unit 131	Contribute to the effectiveness of food retail	
	operations	102
Unit 132	Control a carcass electrical stimulation system	105
Unit 133	Control a carcass shackling system	108
Unit 134	Control an automated bleeding system	111
Unit 135	Control an automated de-hairing or de-featherin	g
	system	114
Unit 136	Control an automated stunning system	117
Unit 137	Control automated meat or poultry processing	
	operations	120
Unit 138	Control batching in food manufacture	123
Unit 139	Control bottle-washing in food manufacture	127
Unit 140	Control bottling and packing in food manufacture	re131
Unit 141	Control canning in food manufacture	135
Unit 142	Control conditioning in food manufacture	138
Unit 143	Control conversion in food manufacture	142
Unit 144	Control filling in food manufacture	146
Unit 145	Control fresh produce chopping operations	149
Unit 146	Control fresh produce drying operations	153
Unit 147	Control fresh produce grading operations	157
Unit 148	Control fresh produce peeling operations	161
Unit 149	Control fresh produce ripening operations	165
Unit 150	Control fresh produce washing operations	169



#### 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 101 Batch finish flour confectionery

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 finishing flour confectionery products in batches, in a non-automated bakery production environment. Flour confectionery which requires finishing typically includes cake- and sponge-based products, almond-based confectionery, flour confectionery slices and meringues.
	You will be able to correctly assemble products in readiness for finishing and fill products with fillings like jam or cream. You will be able to glaze and decorate surfaces to the required standards as described in a product specification. Compliance with health and safety, food safety and organisational requirements is an essential feature of this unit.

#### **Performance objectives**

The learner must be able to:

1. assemble and fill flour confectionery.

#### This means you:

- 1.1 identify and check the condition of products according to your instructions and specifications
- 1.2 correctly assemble and position products in readiness for finishing
- 1.3 identify and check the condition of fillings and depositing tools
- 1.4 correctly load fillings into depositing tools
- 1.5 cut and fill products according to your instructions and specifications
- 1.6 take prompt action to isolate substandard products
- 1.7 comply with health and safety, food safety, and organisational requirements throughout assembling and filling operations.

#### Performance objectives

The learner must be able to:

2. glaze and decorate flour confectionery.

#### This means you:

- 2.1 correctly identify tools for glazing and prepare glaze for application
- 2.2 apply glaze to products according to instructions and specification
- 2.3 correctly identify, and check the condition of, decorative media and piping tools
- 2.4 correctly apply decorative media to the surfaces of products according to instructions and specification
- 2.5 take prompt action to isolate substandard products
- 2.6 comply with health, safety, food safety and organisational requirements throughout glazing and decorating operations
- 2.7 operate within the limits of your own authority and capabilities.

#### **Essential knowledge**

- 1. the standards of health and safety and food safety to which you are required to work during flour confectionery processing, why it is important that you do so, and what might happen if standards are not met
- 2. why it is important to follow work instructions, product specifications or recipes with accuracy throughout flour confectionery processing to ensure successful products
- 3. how to seek advice and make process adjustments to mixtures to take into account any changes in ingredient performance, production timing and environmental conditions that are necessary to keep mixtures within specification
- 4. methods to help ensure that processing is consistent and reliable
- 5. common sources of flour confectionery contamination during processing
- 6. how to avoid contamination during processing and what might happen if this is not done
- 7. how to recognise and report mixtures or products that do not meet specification during processing
- 8. the procedure for rejecting and isolating failed mixtures, mixture portions or products
- 9. what the lines and methods of effective communication during processing are and why it is important to use them correctly
- 10. what the documentation requirements during processing are and why it is important to meet them
- 11. personal protective clothing/equipment and working practices which are useful in combating the potentially harmful effects of dust and allergies resulting from breathing or skin contact with ingredients or mixtures
- 12. important handling factors in processing which seek to maintain mixture quality and performance
- 13. how to maintain mixture condition and deal with time constraints and variations to conditions throughout processing
- 14. the correct method for loading and unloading trays in racks
- 15. the importance of effective cleaning of tins, trays and utensils, and their correct storage.

### Unit 101 Batch finish flour confectionery

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 and filling flour confectionery** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities

Evidence of **glazing and decorating flour confectionery** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities

### Unit 102 Batch produce advanced craft fermented dough products

SCQF Level:	6
Credit value:	5
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about the batch production of advanced craft fermented dough products in

This unit is about the batch production of advanced craft fermented dough products in a non-automated bakery production environment. Advanced craft fermented dough products typically include specialist breads which require specific processing skills, especially at the moulding, shaping and finishing stages. Examples of these products may include specialist oven-bottom breads; plaits; fancy dinner rolls; and display products like wheat sheaves, shapes and plagues.

You will be able to select and measure ingredients and mix relevant doughs for advanced craft fermented products. You will be able to portion, mould and shape doughs and process these through to the baked and finished products. Compliance with organisational requirements and the high quality standards expected of advanced craft products is an essential feature of this unit.

This unit is for you if your work involves you in processing the types of products defined by the term 'advanced craft fermented dough products' in batches. This could be either in specialist operational bakery role or as part of another food manufacturing/processing role which includes specialist operational bakery activities.

#### **Performance objectives**

The learner must be able to:

1. select, weigh and measure ingredients for advanced craft dough.

This means you:

1.1 check the correct instructions and specifications for mixing needs

- 1.2 check that weighed and measured ingredients are in the correct condition for use and make adjustments where this is necessary
- 1.3 isolate and report any substandard ingredients and source replacement supplies where this is necessary
- 1.4 check the safe availability of the mixing area and mixing equipment.

#### **Performance objectives**

The learner must be able to:

2. mix advanced craft dough.

#### This means you:

- 2.1 select the correct mixing equipment to meet mixing needs
- 2.2 mix ingredients according to instructions and specifications
- 2.3 check the quality of dough against specification and make any necessary dough consistency adjustments
- 2.4 place dough in the correct condition and location, and label where required, for further processing.

#### **Performance objectives**

The learner must be able to:

3. process advanced craft dough.

#### This means you:

- 3.1 divide dough accurately and reliably
- 3.2 mould and shape portioned dough accurately and reliably
- 3.3 apply cutting, folding, crimping and assembling techniques consistently to specification
- 3.4 use the correct tinning, traying-up and racking procedures
- 3.5 wash and dress dough surfaces to meet specification
- 3.6 minimise waste and correctly deal with scrap material
- 3.7 prove and bake dough to specification
- 3.8 cool and apply any specified post-bake finishing to baked products.

#### **Performance objectives**

The learner must be able to:

4. store and prepare advanced craft products for despatch.

#### This means you:

- 4.1 store the completed product safely
- 4.2 provide advice on the appropriate wrapping, packing and transportation arrangements for products
- 4.3 comply with organisational requirements.

#### **Essential knowledge**

- 1. common factors affecting the quality of ingredients during processing
- 2. the importance of handling and preparing ingredients at the optimum temperature and conditions for effective advanced craft processing
- 3. how to avoid and report contamination of ingredients and doughs during processing and what might happen if this is not done
- 4. what the lines and methods of effective communication are and why

- it is important to use them
- 5. what the documentation requirements are and why it is important to meet them
- 6. how to interpret advanced craft fermented dough product specifications or recipes to calculate or adjust the ratio of ingredients required and ensure they meet production needs
- 7. the importance of working within time constraints required by production schedules
- 8. how to maintain and manipulate the consistency of advanced craft fermented doughs to specification, in response to ingredient or environmental changes
- 9. the importance of using the correct techniques and applied skills to produce specified products consistently
- 10. the range of processing techniques and skills which can be applied to advanced craft fermented dough processing
- 11. how to apply fermented dough processing techniques and skills for advanced craft products.

### Unit 102 Batch produce advanced craft fermented dough products

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 **selecting**, **weighing** and **measuring ingredients for advanced craft dough** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **mixing advanced craft dough** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **processing advanced craft dough** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **storing and preparing advanced craft products for despatch** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

### Unit 103 Batch produce advanced craft flour confectionery products

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 batch production of advanced craft flour confectionery products in a non-automated bakery production environment. Advanced craft flour confectionery products typically include cake- and sponge-based products and almond- and sugar-based products which require specific processing skills. Examples of these products may include gateau/torte, seasonal and celebration cakes, roulade, japonaise, ratafia, and specialist almond/sugar products.
	You will be able to select and measure ingredients and mix relevant dough for advanced craft flour confectionery products. You will be able to portion and process these through to the baked and finished product. Compliance with organisational requirements and the high quality standards expected of advanced craft products is an essential feature of this unit.  This unit is for you if your work involves you in processing the types of products defined

by the term 'advanced craft flour

confectionery products' in batches. This could be either in specialist operational bakery role or as part of another food manufacturing/processing role which includes specialist operational bakery

#### **Performance objectives**

The learner must be able to:

1. select, weigh and measure ingredients for advanced craft flour confectionary.

activities.

This means you:

1.1 check the correct instructions and specifications for mixing needs

- 1.2 check that weighed and measured ingredients are in the correct condition for use and make adjustments where this is necessary
- 1.3 isolate and report any substandard ingredients and source replacement supplies where this is necessary
- 1.4 check the safe availability of the mixing area and mixing equipment.

#### **Performance objectives**

The learner must be able to:

2. mix advanced craft flour confectionary.

#### This means you:

- 2.1 select the correct mixing equipment to meet mixing needs
- 2.2 mix ingredients according to instructions and specifications
- 2.3 check the quality of mixture against specification and make any necessary mixture consistency adjustments
- 2.4 place mixture in the correct condition and location, and label where required, for further processing.

#### **Performance objectives**

The learner must be able to:

3. process advanced craft flour confectionary.

#### This means you:

- 3.1 portion and process mixture accurately and reliably
- 3.2 apply depositing and piping techniques consistently to specification
- 3.3 use the correct traying-up and racking procedures
- 3.4 wash and dress mixture surfaces to meet specification
- 3.5 minimise waste and correctly deal with scrap material
- 3.6 bake mixtures to specification
- 3.7 cool and apply any specified post-bake finishing to baked products.

#### **Performance objectives**

The learner must be able to:

4. store and prepare advanced craft products for despatch.

#### This means you:

- 4.1 store the completed product safely
- 4.2 provide advice on the appropriate wrapping, packing and transportation arrangements for products
- 4.3 comply with organisational requirements.

#### **Essential knowledge**

- 1. common factors affecting the quality of ingredients during processing
- 2. the importance of handling and preparing ingredients at the optimum temperature and conditions for effective advanced craft processing
- 3. how to avoid and report contamination of ingredients and flour confectionery mixtures during processing and what might happen if this is not done
- 4. what the lines and methods of effective communication are and why it is important to use them

- 5. what the documentation requirements are and why it is important to meet them
- 6. how to interpret advanced craft flour confectionery product specifications or recipes to calculate or adjust the ratio of ingredients required and ensure they meet production needs
- 7. the importance of working within time constraints required by production schedules
- 8. how to maintain and manipulate the consistency of advanced craft flour confectionery mixtures to specification, in response to ingredient or environmental changes
- 9. the importance of using the correct techniques and applied skills to produce specified products consistently
- 10. the range of processing techniques and skills which can be applied to advanced craft flour confectionery processing
- 11. how to apply flour confectionery processing techniques and skills for advanced craft products.

### Unit 103 Batch produce advanced craft flour confectionery products

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 **selecting**, **weighing** and **measuring ingredients for advanced craft flour confectionary** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **mixing advanced craft flour confectionary** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **processing advanced craft flour confectionary** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **storing and preparing advanced craft products for despatch** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

# Unit 104 Batch produce advanced craft non-fermented dough products

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

Aim:

This unit is about the batch production of advanced craft non-fermented dough products in a non-automated bakery production environment. Advanced craft non-fermented dough products typically include pastry and other dough-based products which require specific processing skills. Examples of these products may include specialist or continental pastry products; specialist Viennese and biscuit products; and choux-based products.

You will be able to select and measure ingredients and mix relevant doughs for advanced craft non-fermented products. You will be able to portion and process these through to the baked and finished products. Compliance with organisational requirements and the high quality standards expected of advanced craft products is an essential feature of this unit.

This unit is for you if your work involves you in processing the types of products defined by the term 'advanced craft non-fermented dough products' in batches. This could be either in specialist operational bakery role or as part of another food manufacturing/processing role which includes specialist operational bakery activities.

#### **Performance objectives**

The learner must be able to:

1. select, weigh and measure ingredients for advanced craft dough.

This means you:

1.1 check the correct instructions and specifications for mixing needs

- 1.2 check that weighed and measured ingredients are in the correct condition for use and make adjustments where this is necessary
- 1.3 isolate and report any substandard ingredients and source replacement supplies where this is necessary
- 1.4 check the safe availability of the mixing area and mixing equipment.

#### **Performance objectives**

The learner must be able to:

2. mix advanced craft dough.

This means you:

- 2.1 select the correct mixing equipment to meet mixing needs
- 2.2 mix ingredients according to instructions and specifications
- 2.3 check the quality of dough against specification and make any necessary dough consistency adjustments
- 2.4 place dough in the correct condition and location, and label where required, for further processing.

#### **Performance objectives**

The learner must be able to:

3. process advanced craft dough.

This means you:

- 3.1 divide dough accurately and reliably
- 3.2 mould and shape portioned dough accurately and reliably
- 3.3 apply cutting, folding, crimping and assembling techniques consistently to specification
- 3.4 use the correct tinning, traying-up and racking procedures
- 3.5 wash and dress dough surfaces to meet specification
- 3.6 minimize waste and correctly deal with scrap material
- 3.7 prove and bake dough to specification
- 3.8 cool and apply any specified post-bake finishing to baked products.

#### **Performance objectives**

The learner must be able to:

4. store and prepare advanced craft products for despatch.

This means you:

- 4.1 store the completed product safely
- 4.2 provide advice on the appropriate wrapping, packing and transportation arrangements for products
- 4.3 comply with organisational requirements.

#### Essential knowledge

- 1. common factors affecting the quality of ingredients during processing
- 2. the importance of handling and preparing ingredients at the optimum temperature and conditions for effective advanced craft processing
- 3. how to avoid and report contamination of ingredients and nonfermented doughs during processing and what might happen if this is not done

- 4. what the lines and methods of effective communication are and why it is important to use them
- 5. what the documentation requirements are and why it is important to meet them
- 6. how to interpret advanced craft non-fermented dough product specifications or recipes to calculate or adjust the ratio of ingredients required and ensure they meet production needs
- 7. the importance of working within time constraints required by production schedules
- 8. how to maintain and manipulate the consistency of advanced craft non-fermented doughs to specification, in response to ingredient or environmental changes
- 9. the importance of using the correct techniques and applied skills to produce specified products consistently
- 10. the range of processing techniques and skills which can be applied to advanced craft non-fermented dough processing
- 11. how to apply non-fermented dough processing techniques and skills for advanced craft products.

## Unit 104 Batch produce advanced craft non-fermented dough products

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 **selecting**, **weighing** and **measuring ingredients for advanced craft dough** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **mixing advanced craft dough** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **processing advanced craft dough** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **storing and preparing advanced craft products for despatch** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

### Unit 105 Blend or mix ingredients in food manufacture

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 the skills needed for you to mix or blend ingredients in food and drink manufacture and/or supply operations.  Mixing or blending ingredients is important to the production of a final product that adheres to organisational quality and yield specifications.
	You will be able to prepare ingredients and tools and/or equipment for mixing or blending. You will also be able to follow organisational standard operating procedures and recipes and work within the limits of your responsibility

#### **Performance objectives**

The learner must be able to:

1. prepare to mix or blend ingredients.

#### This means you:

- 1.1 wear and use the correct personal protective equipment
- 1.2 source organisational equipment standard operating procedures
- 1.3 source the product recipe or specification detailing mixing or blending needs
- 1.4 ensure that all necessary tools, equipment and resources are available and fit for use
- 1.5 source ingredients requiring mixing or blending
- 1.6 isolate and take action if ingredients do not meet organisational quality specifications.

#### **Performance objectives**

The learner must be able to:

2. mix or blend ingredients.

#### This means you:

- 2.1 select the correct tools or equipment needed to carry out mixing or blending
- 2.2 mix or blend ingredients to organisational standard operating

- procedures and specifications
- 2.3 work within the limits of your responsibility and take action to address problems
- 2.4 complete the necessary documentation accurately and process to organisational requirements
- 2.5 store mixed or blended ingredients to organisational requirements.

#### **Essential knowledge**

- 1. the regulatory and organisational requirements relating to the mixing or blending of ingredients in food manufacture
- 2. how to source the tools, equipment and resources needed to mix or blend ingredients
- 3. why it is important to select the correct tool to mix or blend ingredients
- 4. the personal protective equipment needed for mixing or blending ingredients and how to use and wear it
- 5. the purpose of mixing or blending ingredients
- 6. the difference between mixing and blending
- 7. how to mix or blend to organisational requirements
- 8. the importance of using the correct type of mixing or blending tools or equipment according to the types or quantities of ingredients and the product recipe
- 9. the importance of loading ingredients at the correct temperatures, in the correct weights/volumes and the correct order
- 10. problems that result from overloading the mixing or blending container
- 11. how to avoid contamination of ingredients during handling, mixing or blending and what might happen if this is not done
- 12. how to work within the limits of your responsibility and take action to address problems
- 13. organisational labelling and documentation requirements relating to the mixing or blending of ingredients
- 14. how to label and store mixed or blended ingredients ready for further processing or packaging.

### Unit 105 Blend or mix ingredients 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 mix or blend ingredients** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **weighing or measuring ingredients** in your role in accordance with workplace procedures and within the limits of your own responsibilities.

#### Unit 106 Care for livestock preslaughter 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 caring for livestock pre- slaughter (the period between the arrival of livestock on the site and movement to the line for slaughter).
	This unit is for you if you work in meat processing operations and your role requires you to provide pre-slaughter care to livestock.

#### **Performance objectives**

The learner must be able to:

1. handle and separate livestock safely.

#### This means you:

- 1.1 handle livestock safely, humanely and in a way that minimises stress and injury
- 1.2 separate livestock which are dead-on-arrival, dying, diseased or injured
- 1.3 follow health, safety and hygiene procedures when caring for livestock.

#### **Performance objectives**

The learner must be able to:

2. monitor livestock holding areas.

#### This means you:

- 2.1 confirm the suitability of livestock holding area with the relevant person
- 2.2 keep livestock holding areas clean
- 2.3 check that livestock are held in numbers that do not cause stress or welfare problems
- 2.4 check and maintain adequate bedding, ventilation and light for the livestock.

#### **Essential knowledge**

- 1. your responsibilities under animal welfare regulations and legislation
- 2. your responsibilities under health and safety regulations and legislation
- 3. how to assess the suitability of environmental conditions and why that is important
- 4. why it is necessary to look after livestock
- 5. how to identify livestock that need separating
- 6. why sick, bad-tempered or injured livestock must be separated immediately and what may happen if this is not done
- 7. procedures for separating livestock
- 8. how to separate livestock safely and in a way that minimises stress
- 9. how to handle livestock safely in various locations
- 10. how to minimise stress and injury to livestock
- 11. how stress and injury to livestock affects the quality of meat
- 12. why livestock are located in holding areas and where these are
- 13. who to confirm the correct holding areas with
- 14. different fixtures and fittings required in the isolation areas
- 15. how to follow cleaning schedules using company procedures
- 16. how to clean holding areas efficiently and effectively.

#### Unit 106 Care for livestock preslaughter 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 **handling and separating livestock safely** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **monitoring livestock holding areas** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

### Unit 107 Care for poultry pre-slaughter 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:	Poultry may be held awaiting slaughter after arriving on site. If this happens, the poultry will need to be cared for during that time to ensure they do not suffer and their condition is maintained.
	The welfare of poultry is most important throughout this time and can directly affect the quality of the meat after slaughter.
	This unit covers the period between the arrival of poultry on the site and movement to the line for slaughter.
	This unit is appropriate for people whose job involves dealing with poultry in preslaughter.

#### **Performance objectives**

The learner must be able to:

1. monitor the welfare of poultry.

#### This means you:

- 1.1 check the condition of poultry waiting to be unloaded
- 1.2 identify dead-on-arrival, moribund, diseased or injured birds
- 1.3 check environmental conditions to ensure the welfare of poultry awaiting slaughter
- 1.4 follow company procedures to deal with problems with the environmental conditions and the conditions of poultry awaiting slaughter
- follow company procedures to inform appropriate people about dead-on-arrival, moribund, diseased or injured birds.

#### **Performance objectives**

The learner must be able to:

2. care for poultry pre-slaughter.

This means you:

- 2.1 handle birds safely and humanely
- 2.2 de-crate birds efficiently and humanely
- 2.3 separate birds which are dead-on-arrival, moribund, diseased or injured
- 2.4 hang on birds in an efficient and humane manner.

#### **Essential knowledge**

- 1. your responsibilities under animal welfare regulations and legislation
- 2. your responsibilities under health and safety regulations and legislation
- 3. how to assess the suitability of environmental conditions and why that is important
- 4. how to check vehicles, crates and birds in holding areas
- 5. how to separate and deal with birds that are separated when this is necessary
- 6. company procedures for moving poultry between different locations on site
- 7. company procedures for separating poultry
- 8. company procedures for monitoring poultry
- 9. company procedures for hanging on birds
- 10. how to handle poultry in a way that minimises stress
- 11. how to recognise different problems with poultry and how to deal with them
- 12. how to identify birds that need separating
- 13. how to separate poultry safely with minimum stress
- 14. how to recognise stress in poultry.

### Unit 107 Care for poultry pre-slaughter 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 **monitoring the welfare of poultry** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **caring for poultry pre-slaughter** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

### Unit 108 Carry out bleeding operations for Halal meat

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 carrying out bleeding operations in religious slaughter of animals. This job must be done by experienced people with provisional or full licences. The job is tightly controlled by laws that define humane methods of bleeding.
	The task is important to the meat industry because the way it is carried out affects the condition of the meat and whether it is suitable for human consumption and complies with Halal slaughter rules. If you do this work you need specialist skills so that the meat produced meets quality specifications.

#### **Performance objectives**

The learner must be able to:

1. prepare to carry out bleeding.

This means you:

- 1.1 assemble the correct tools and equipment and make sure they are suitable to carry out bleeding effectively
- 1.2 move to the right place at the bleeding point to carry out bleeding effectively
- 1.3 check that tools and equipment meet food safety requirements and follow procedures to deal with any problems
- 1.4 check facilities for holding animals or birds planned for bleeding and follow procedures to deal with any problems
- 1.5 check facilities for the feed of animals or birds to the bleeding point and follow procedures to deal with any problems.

#### **Performance objectives**

The learner must be able to:

2. bleed animals or birds.

This means you:

2.1 check that animals or birds are insensible to pain before bleeding and deal with any that might still feel pain

- 2.2 move the animal or bird into the correct position for bleeding
- 2.3 ensure the correct temperature for bleeding
- 2.4 use the correct tools and methods for bleeding safely and effectively
- 2.5 sever blood vessels correctly to make sure that blood is released from the carcass rapidly
- 2.6 follow procedures and legal requirements to maintain food safety during bleeding
- 2.7 ensure that all flowing blood has been removed from the carcass before moving on to the next stage of processing.

#### **Essential knowledge**

- 3. why animals are bled before human consumption
- 4. the principles of bleeding animals and birds
- 5. the blood vessels involved in the bleeding of animals or birds
- 6. the problems resulting from improper cutting of animals or birds
- 7. the ways of ensuring animals are insensible to pain before bleeding and why that is important
- 8. the methods of cutting animals or birds to maximise bleeding
- 9. the methods of bleeding for Halal slaughter
- 10. how to maintain tools and equipment for bleeding and cutting to ensure they are effective, safe and meet the required food safety standards
- 11. why hygiene is important in bleeding
- 12. the legislation relating to bleeding
- 13. the controls involved in bleeding and cutting.

### Unit 108 Carry out bleeding operations for Halal meat

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 carry out bleeding** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **bleeding animals or birds** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

### Unit 109 Carry out boning of meat or poultry

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 skills needed for you to carry out boning of meat or poultry in food and drink manufacture and/or supply operations. Removing bones from carcasss or cuts of meat or poultry is a key skill, important in producing a final product that adheres to organisational and customer requirements.
	You will be able to use the correct tools and equipment; maximise yield and maintain quality; handle and store meat and poultry; and dispose of waste products all whilst following organisational and regulatory standards.
	This unit is for you if you work in food and drink manufacture and/or supply operations and are involved in carrying out boning of meat or poultry.

#### **Performance objectives**

The learner must be able to:

1. prepare to carry out boning.

#### This means you:

- 1.1 adhere to organisational and regulatory standards when carrying out boning
- 1.2 use and wear personal protective equipment when carrying out boning operations
- 1.3 check with the relevant person the cuts of meat or poultry requiring boning
- 1.4 check the availability and cleanliness of work area, tools and equipment
- 1.5 source the meat or poultry requiring boning
- 1.6 choose the correct knives and ensure they are sharp, clean and suitable for purpose
- 1.7 check availability of storage areas for final product and waste materials
- 1.8 refer problems outside limits of your responsibility to relevant

people.

#### **Performance objectives**

The learner must be able to:

2. bone out meat.

#### This means you:

- 2.1 deal effectively with meat presented for boning that does not meet organisational specifications or customer requirements
- 2.2 use tools and equipment to bone out meat, following organisational standard operating procedures
- 2.3 adhere to organisational yield, quality and pace of production specifications when carrying out boning
- 2.4 keep waste from boning to a minimum and store for later disposal
- 2.5 work within the limits of your responsibility.

#### **Essential knowledge**

- 1. why it is important to follow organisational standard operating procedures when carrying out boning operations
- 2. the tools and equipment required to carry out boning of meat or poultry
- 3. why it is important to check the cleanliness of tools and equipment
- 4. how to handle the meat or poultry carcass to maintain its quality
- 5. how to avoid product contamination and maintain food safety during boning operations
- 6. how to access the correct organisational specifications
- 7. why it is important to adhere to organisational yield and quality specifications
- 8. the importance of precision cutting in boning operations
- 9. why it is important to maintain the pace and flow of production according to organisational requirements
- 10. how to store waste products for disposal from boning operations
- 11. how ineffective boning can lead to wastage, potential customer complaints and lost revenue
- 12. how to deal with operating problems within the limits of your responsibility.

### Unit 109 Carry out boning of meat or poultry

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 carry out boning** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

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

### Unit 110 Carry out bulk filling 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 carrying out bulk filling in food and drink operations. It covers preparing and carrying out bulk filling, closing down plant and equipment, and following industry regulations and standards.
	This unit is for you if you work in food and drink operations and your role requires you to carry out bulk filling operations.

#### **Performance objectives**

The learner must be able to:

1. carry out bulk filling in food and drink operations.

#### This means you:

- 1.1 ensure the work area is well organised, clean and tidy
- 1.2 receive and confirm bulk filling specification
- 1.3 confirm that services and filling equipment are available and are fit for use
- 1.4 identify the container/silo to be filled and confirm that it is available and fit for use
- 1.5 check that the delivery weight/volume corresponds with space available in the container
- 1.6 check that equipment is in correct working order
- 1.7 check that records are completed accurately and promptly
- 1.8 carry out bulk filling to specification
- 1.9 monitor to ensure that output rates are in line with specification
- 1.10 monitor containers/silos and deal correctly with any which do not meet specification
- 1.11 achieve the required output to specification
- 1.12 finish bulk filling according to specification
- 1.13 close down the plant and equipment correctly
- 1.14 deal correctly with any operational loss or gain
- 1.15 deal correctly with any loss or spillage
- 1.16 follow health and safety, hygiene and environmental standards or instructions when preparing and carrying out bulk filling.

#### **Essential knowledge**

- 1. relevant health and safety, hygiene and environmental standards and instructions and what may happen if these are not followed
- 2. relevant industry regulations (eg Customs and Excise) and what may happen if these are not followed
- 3. how to get information about the material being delivered/produce being despatched, filling raters, containers and filling equipment
- 4. what to do if there is an interruption to material transfer
- 5. what services are required and what may happen if they are not available or out of specification
- 6. why it is important to check that containers/silos meet specification and what to do if you discover any faults or damage
- 7. acceptable loss and gain limits and the consequences if these are exceeded
- 8. why it is important to deal correctly with any loss or spillage and what may happen if this is not done
- 9. the limits of your authority and why it is important to work within them
- 10. why complete and accurate records are important
- 11. the importance of effective communication.

# Unit 110 Carry out bulk filling 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 bulk filling in food and drink operations** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

## Unit 111 Carry out butchery of red meat primal joints

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 needed for you to carry out butchery of cattle, sheep, pigs, rabbits and hares in food and drink manufacture and/or supply operations. Butchery of primal joints is a key skill in meat production and butchery sales outlets. It is important for providing a final product that fulfils organisational and customer requirements.  You will be able to use the correct tools and
	equipment; adhere to organisational specifications for joints or cuts of red meat; handle and store meat, maintaining product quality; and dispose of waste products, all whilst following organisational and regulatory standards.
	This unit is for you if you work in food and drink manufacture and/or supply operations and are involved in carrying out butchery of red meat primal joints.

#### **Performance objectives**

The learner must be able to:

1. prepare to carry out red meat butchery.

- 1.1 adhere to organisational and regulatory standards when carrying out butchery of red meat
- 1.2 wear and use personal protective equipment according to organisational procedures
- 1.3 check with the relevant person the cuts of red meat required
- 1.4 check the availability and cleanliness of the work area, tools and equipment
- 1.5 source the red meat joint or carcass requiring butchery
- 1.6 check the red meat joint or carcass is free from specified risk material
- 1.7 choose the correct knives and ensure they are sharp, clean and suitable for purpose.

The learner must be able to:

2. carry out butchery.

This means you:

- 2.1 produce cuts or primal joints of red meat that adhere to organisational quality and yield specification
- 2.2 string the joint or cut if necessary
- 2.3 carry out butchery in a timely way, maintaining pace of butchery to organisational requirements
- 2.4 minimise waste when producing cuts or primal joints of red meat
- 2.5 work within the limits of your responsibility, referring problems to the relevant people when necessary.

#### **Performance objectives**

The learner must be able to:

3. complete butchery operations.

- 3.1 ensure cuts are available for storage or next stage of process
- 3.2 clean personal protective equipment, work area, tools and equipment to organisational procedures
- 3.3 store waste for disposal according to regulatory and organisational standard procedures.

#### **Essential knowledge**

- 1. how to access organisational procedures
- 2. the organisational and regulatory procedures that must be adhered to when carrying out butchery of red meat
- 3. the personal protective equipment required to carry out butchery of red meat
- 4. the tools and equipment needed to carry out butchery of red meat
- 5. why it is important to have hygienically clean personal protective equipment, work area, tools and equipment
- 6. the importance of precision cutting in red meat butchery
- 7. the specific knives used in red meat butchery
- 8. how to use the specific knives used in red meat butchery
- 9. why it is important to use the correct knife for each cutting specification
- 10. how to access the organisational quality and yield specifications for specific cuts of red meat and why it is important to adhere to them when carrying out red meat butchery
- 11. the typical ways in which beef, lamb, pig, and rabbit and hare carcasss are cut into primal joints, following cutting lines, before cutting for sale
- 12. the typical red meat cuts possible from primal joints
- 13. how continental butchery can be used to produce cuts of red meat
- 14. the list of cuts of meat specific to beef, lamb, pork, rabbit and hare
- 15. why string is commonly used in the presentation of red meat and how this process is carried out
- 16. the butchery methods used in red meat butchery including slicing, dicing and jointing
- 17. the importance of keeping waste to a minimum, its effect on yield and the economic value of the carcass
- 18. the edible offal cuts from red meat and how they are butchered for sale
- 19. the inedible by-products from red meat
- 20. how to recognise Specified Risk Material in red meat and how to deal with Specified Risk Material according to regulatory and organisational procedures
- 21. the different types of waste occurring as a result of red meat butchery and how they should be disposed of.

### Unit 111 Carry out butchery of red meat primal joints

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 carry out red meat butchery** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

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

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

# Unit 112 Carry out cheese extrusion operations

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 needed for you to extrude cheese in food and drink manufacture and/or supply operations. Extruding cheese is important to the production of a final product that adheres to organisational quality and yield specifications.
	You will be able to prepare tools, equipment and resources. You will also be able to use and follow organisational requirements for extruding cheese, work within the limits of your responsibility and take action to address problems.
	This unit is for you if you work in food and drink manufacture and/or supply operations and are involved in extruding cheese.

#### **Performance objectives**

The learner must be able to:

1. prepare to extrude cheese.

- 1.1 wear and use the correct personal protective equipment
- 1.2 source production schedule cheese extruding requirements
- 1.3 source the product specification and equipment standard operating procedures
- 1.4 ensure that necessary work area and resources are available and fit for use
- 1.5 source cheese product requiring extrusion.

The learner must be able to:

2. extrude cheese.

#### This means you:

- 2.1 feed cheese through extruder maintaining throughput
- 2.2 maintain pace of production
- 2.3 work within the limits of your responsibility and take action to address problems
- 2.4 complete the necessary documentation accurately and process to organisational requirements
- 2.5 make extruded cheese available for the next stage of processing.

#### **Essential knowledge**

- 1. the regulatory and organisational requirements relating to extruding cheese
- 2. how to source organisational cheese extrusion production schedules and extruded cheese quality specification
- 3. why it is important to adhere to organisational production schedules and quality specifications
- 4. what personal protective equipment is required when extruding cheese and how to use and wear it
- 5. the tools, equipment and resources required to extrude cheese and how to source them
- 6. how to select the correct extrusion nozzle and why it is important to do so
- 7. how to source cheese requiring extrusion
- 8. how to control the extrusion equipment to organisational standard operating procedures
- 9. how to feed cheese into the extruder, maintaining equipment and production flow requirements
- 10. the action to be taken if the equipment is overloaded
- 11. the action to be taken if equipment, process and quality checks do not adhere to organisational specifications
- 12. the limits of your responsibility and how to take action to address problems
- 13. how to complete organisational documentation requirements.

# Unit 112 Carry out cheese extrusion 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 extrude cheese** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **extruding cheese to agreed standards** in your role in accordance with workplace procedures and within the limits of your own responsibilities.

# Unit 113 Carry out cheese piercing operations

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 needed for you to control piercing of cheese in dairy processing in food and drink manufacture and/or supply operations. Cheese piercing equipment is used in the production of a wide range of mould ripened cheese. Controlling the piercing of cheese is important for the production of a final product that adheres to organisational quality specifications.
	You will be able to prepare tools and equipment needed to carry out cheese piercing operations. You will also be able to follow organisational specifications for piercing cheese, work within the limits of your responsibility and take action to address problems.
	This unit is for you if you work in food and drink manufacture and/or supply operations and are involved in controlling cheese piercing operations.

#### **Performance objectives**

The learner must be able to:

1. prepare to control cheese piercing.

- 1.1 wear and use the correct personal protective equipment
- 1.2 source the product specification and equipment standard operating procedures
- 1.3 ensure that necessary tools, equipment and resources are available and fit for use
- 1.4 source cheese product requiring piercing.

The learner must be able to:

2. control cheese piercing.

This means you:

- 2.1 control piercing of cheese adhering to product specification and equipment standard operating procedures
- 2.2 maintain pace of production
- 2.3 work within the limits of your responsibility and take action to address problems
- 2.4 complete the necessary documentation accurately and process to organisational requirements
- 2.5 make pierced cheese available for the next stage of processing or storage.

#### **Essential knowledge**

- 1. the regulatory and organisational requirements that relate to piercing of cheese
- 2. how to source organisational pierced cheese specification and standard operating procedures
- 3. why it is important to adhere to product specifications and equipment standard operating procedures
- 4. what personal protective equipment is required when piercing cheese and how to use and wear it
- 5. what tools and equipment are needed to pierce cheese and how to source them
- 6. how to source cheese requiring piercing
- 7. how to control the piercing equipment to organisational standard operating procedures
- 8. how to load the piercing equipment
- 9. why it is important to maintain production flow
- 10. the action to be taken if equipment, process and quality checks do not adhere to organisational specifications
- 11. what the limits of your responsibility are, and how to take action to address problems
- 12. how to complete organisational documentation.

# Unit 113 Carry out cheese piercing 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 control cheese piercing** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **controlled cheese piercing** in your role in accordance with workplace procedures and within the limits of your own responsibilities.

## Unit 114 Carry out cheese pressing 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 the skills needed for you to press cheese in food and drink manufacture and/or supply operations. Pressing cheese curds is important for the production of a variety of cheeses.
	You will be able to prepare equipment needed to carry out cheese pressing operations. You will also be able to control the pressing process. You will also be able to adhere to product recipes and organisational equipment standard operating procedures.
	This unit is for you if you work in food and drink manufacture and/or supply operations and are involved in pressing cheese.

#### **Performance objectives**

The learner must be able to:

1. prepare to press curd.

This means you:

- 1.1 adhere to regulatory and organisational requirements when pressing curd
- 1.2 use and wear personal protective equipment when pressing curd
- 1.3 source product recipe and organisational standard operating procedures
- 1.4 ensure that all necessary tools, equipment and services are available and fit for use.

#### **Performance objectives**

The learner must be able to:

2. control pressing of curds.

This means you:

2.1 adhere to organisational standard operating procedures when pressing curd

- 2.2 ensure safety catches are in operation and press is free from obstructions
- 2.3 press cheese to specific pressure and time specifications as stated in the product recipe
- 2.4 make pressed curd available to the next stage of processing or packaging
- 2.5 evaluate faults for impact on operations and take prompt action within the limits of your own responsibility
- 2.6 complete the necessary documentation accurately and process to organisational requirements.

#### **Essential knowledge**

- 1. the regulatory and organisational requirements that relate to the pressing of cheese
- 2. the tools, equipment and resources needed to press cheese
- 3. how to access product specifications and organisational standard operating procedures
- 4. the importance of adhering to quality specifications and organisational standard operating procedures
- 5. what personal protective equipment is required when pressing cheese and why it is important to use and wear it
- 6. the safety devices present on pressing equipment and how to use them
- 7. why it is important to follow recipe specifications for pressure/time combinations needed to press specific cheese
- 8. why it is important to work within the limits of your responsibility and take action to address problems.

# Unit 114 Carry out cheese pressing 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 press curd** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **controlling the pressing of curds** in your role in accordance with workplace procedures and within the limits of your own responsibilities.

# Unit 115 Carry out cheese smoking operations

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 needed for you to smoke cheese in food and drink manufacture and/or supply operations. Smoking cheese is a traditional technique used to create a uniquely flavoured cheese product.
	You will be able to prepare resources and the work area. You will also be able to use follow organisational requirements for smoking cheese, work within the limits of your responsibility and take action to address problems.
	This unit is for you if you work in food and drink manufacture and/or supply operations and are involved in smoking cheese.

#### **Performance objectives**

The learner must be able to:

1. prepare to smoke cheese.

- 1.1 wear and use the correct personal protective equipment
- 1.2 source production schedule cheese smoking requirements
- 1.3 source the product specification and equipment standard operating procedures
- 1.4 check smokehouse is operating to required organisational requirements
- 1.5 source cheese and shelving required to carry out cheese smoking.

The learner must be able to:

2. smoke cheese.

#### This means you:

- 2.1 load mesh shelving with cheese requiring smoking
- 2.2 load smokehouse ensuring sufficient space around each cheese
- 2.3 smoke cheese following product specification requirements
- 2.4 complete the necessary documentation accurately and process to organisational requirements
- 2.5 work within the limits of your responsibility and take action to address problems.

#### **Essential knowledge**

- 1. the regulatory and organisational requirements that relate to smoking cheese
- 2. how to source cheese smoking specification and organisational standard operating procedures
- 3. why it is important to adhere to product specifications and equipment standard operating procedures
- 4. what personal protective equipment is required for smoking cheese and how to use and wear it
- 5. how to source cheese requiring smoking
- 6. why it is important to check there is sufficient fuel to ensure sufficient smoking for the product to be smoked to specification
- 7. why it is important to load smokehouse shelving to organisational requirements and how to do so
- 8. how to check the smokehouse is at correct temperature for smoking and why it is important to do so
- 9. how to avoid contamination of the cheese product during smoking
- 10. what the limits of your responsibility are and how to take action to address problems
- 11. why it is important to complete organisational documentation requirements and how to do so.

# Unit 115 Carry out cheese smoking 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 smoke cheese** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **smoking cheese to agreed standards** in your role in accordance with workplace procedures and within the limits of your own responsibilities.

## Unit 116 Carry out cheese waxing operations

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 needed for you to carry out cheese waxing operations in food and drink manufacture and/or supply operations. Waxing is a traditional method of packaging a variety of different types of cheese.
	You will be able to prepare equipment and materials to wax cheese. You will also be able to wax cheese, working within the limits of your responsibility and adhering to organisational specifications and standard operating procedures.
	This unit is for you if you work in food and drink manufacture and/or supply operations and are involved in carrying out cheese waxing operations.

#### **Performance objectives**

The learner must be able to:

1. prepare to wax cheese.

- 1.1 adhere to regulatory and organisational requirements when waxing cheese
- 1.2 use and wear personal protective equipment when waxing cheese
- 1.3 check work area, tools and equipment are clean and available for use
- 1.4 check equipment, materials, ingredients and services are available and fit for use
- 1.5 check that the a suitable storage area is available to receive the waxed cheese.

The learner must be able to:

2. wax cheese.

#### This means you:

- 2.1 take adequate precautions regarding personal hygiene, hand washing in particular
- 2.2 ensure the wax is at the correct temperature, colour and consistency for waxing
- 2.3 wax cheese according to organisational specifications
- 2.4 evaluate faults for impact on operations
- 2.5 work within the limits of your responsibility and take action to address problems
- 2.6 make waxed cheese available to relevant storage area.

#### **Essential knowledge**

- 1. the regulatory and organisational requirements that relate to the waxing of cheese
- 2. the tools, equipment, facilities and resources needed to wax cheese
- 3. what personal protective equipment is required for waxing cheese and why it is important to wear and use it
- 4. why it is important to maintain pace of production when waxing cheese
- 5. how to access organisational specifications relating to waxing cheese
- 6. the importance of adhering to quality specifications and to organisational requirements when waxing cheese
- 7. the action to be taken if quality checks do not meet product specification
- 8. how to work within the limits of your authority and take action to address problems
- 9. the importance of maximising yield when waxing cheese.

## Unit 116 Carry out cheese waxing 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 wax cheese** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **waxing cheese to agreed standards** in your role in accordance with workplace procedures and within the limits of your own responsibilities.

# Unit 117 Carry out manual bleeding 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 the skills needed for you to carry out manual bleeding of meat or poultry species in food and drink manufacture and/or supply operations. Carrying out manual bleeding operations is important for the production of meat or poultry that is fit for human consumption, adheres to welfare regulations and meets quality specifications.  You will be able to prepare work area, tools and equipment and to carry out sticking and bleeding. You will also be able to adhere to regulatory and organisational welfare and quality standards.  This unit is for you if you work in food and drink manufacture and/or supply operations and are involved in manual bleeding operations.

#### **Performance objectives**

The learner must be able to:

1. prepare to carry out sticking and bleeding.

- 1.1 wear and use personal protective equipment
- 1.2 check availability of work area, tools and equipment and that they are clean and safe to use
- 1.3 check availability of animal or bird for bleeding
- 1.4 address any problems and inform relevant people if outside the limits of your responsibility.

The learner must be able to:

2. stick and bleed animal or bird.

#### This means you:

- 2.1 check that animals or birds are insensible to pain before bleeding and deal with any that might still feel pain
- 2.2 move the animal or bird into the correct position for bleeding
- 2.3 use the correct tool for bleeding safely and effectively
- 2.4 sever blood vessels correctly to make sure that blood is released from the carcass rapidly
- 2.5 follow organisational and regulatory standards to maintain food hygiene during bleeding
- 2.6 make animal or bird available to the next stage of processing
- 2.7 work within the limits of your responsibility.

#### **Essential knowledge**

- 3. why it is important to follow organisational and regulatory quality and welfare standards when carrying out manual bleeding operations
- 4. how to access organisational standard operating procedures
- 5. why meat and poultry species are bled before human consumption
- 6. the tools and equipment needed to carry out manual bleeding operations
- 7. how to maintain tools and equipment for bleeding and cutting to ensure they are effective and safe, and meet the required hygiene standards
- 8. why it is important to check the cleanliness of tools and equipment
- 9. how to handle the animal or bird to maintain its quality
- 10. quality and welfare problems resulting from improper sticking or cutting of meat or poultry species
- 11. ways of ensuring animals are insensible to pain before sticking and bleeding, and why that is important
- 12. how to check for signs of ineffective stunning
- 13. how to carry out sticking or bleeding operations to maximise bleeding
- 14. how ineffective bleeding can lead to wastage, potential customer complaints and lost revenue
- 15. how to deal with operating problems within the limits of your responsibility.

# Unit 117 Carry out manual bleeding 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 carry out sticking and bleeding** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **sticking and bleeding animals or birds** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

## Unit 118 Carry out manual stunning of meat or poultry species

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 needed for you to carry out manual stunning of meat or poultry species in food and drink manufacture and/or supply operations. Carrying out manual stunning of meat or poultry species is important for the production of meat and poultry that adheres to regulatory and organisational welfare standards.  You will be able to prepare to stun meat or poultry species, adhere to meat or poultry welfare and safety standards, restrain meat or poultry, and use manual stunning equipment.  This unit is for you if you work in food and drink manufacture and/or supply operations and are involved in the manual stunning of meat and poultry species.

#### **Performance objectives**

The learner must be able to:

1. prepare to carry out manual stunning.

- 1.1 adhere to regulatory and organisational requirements when carrying out manual stunning
- 1.2 wear and use personal protective equipment
- 1.3 check availability of stunning and restraining equipment
- 1.4 check stunning and restraining equipment is in working order
- 1.5 check availability of animals for stunning
- 1.6 communicate readiness for stunning to lairage colleagues.

The learner must be able to:

2. carry out manual stunning.

#### This means you:

- 2.1 check animal welfare standards have been adhered to
- 2.2 restrain animal, maintaining animal welfare standards
- 2.3 recognise point on meat or poultry species where stun will take place
- 2.4 accurately manually stun meat or poultry species
- 2.5 maintain rate of stunning to ensure rate of production is sustained
- 2.6 make carcass available to next stage of production process.

#### **Essential knowledge**

- 1. how to access organisational procedures
- 2. the organisational and regulatory procedures that must be adhered to when carrying out manual stunning of meat or poultry species
- 3. the animal welfare standards relating to the manual stunning of meat or poultry species
- 4. the specific health and safety standards to be adhered to when using manual stunning equipment
- 5. the personal protective equipment required to carry out manual stunning of meat and poultry species
- 6. the tools and equipment needed to carry out manual stunning of meat or poultry species
- 7. the key features of restraining equipment
- 8. why it is important to restrain meat or poultry while carrying out manual stunning operations
- 9. the importance of accuracy when carrying out manual stunning of meat or poultry species
- 10. the key features of a captive bolt stunning system
- 11. the key features of a mushroom head stunning system
- 12. the advantages and disadvantages of manual stunning systems
- 13. signs of ineffective stunning of meat or poultry species
- 14. why it is important to communicate to relevant colleagues when ineffective stunning has taken place.

## Unit 118 Carry out manual stunning of meat or poultry species

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 carry out manual stunning** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

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

### Unit 119 Carry out poultry butchery

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 needed for you to carry out butchery of chickens, turkeys, ducks, geese and avian game in food and drink manufacture and/or supply operations. Carrying out butchery of poultry is a key skill in production of meat and in butchery outlets. It is important for the production of a product that meets organisational and customer requirements.
	You will be able to carry out butchery of poultry to organisational procedures. You will also be able to use the correct tools and equipment when carrying out butchery, storing poultry, and disposing of waste products.
	This unit is for you if you work in food and drink manufacture and/or supply operations and are involved in carrying out butchery of poultry.

#### **Performance objectives**

The learner must be able to:

1. prepare to carry out poultry butchery.

- 1.1 adhere to organisational and regulatory standards when carrying out butchery of poultry
- 1.2 wear and use personal protective equipment according to organisational procedures
- 1.3 check the cuts of poultry meat required with the relevant person
- 1.4 check the availability and cleanliness of work area, tools and equipment
- 1.5 source the poultry joint or carcass requiring butchery
- 1.6 choose the correct knives and ensure they are sharp, clean and suitable for purpose.

The learner must be able to:

2. carry out poultry butchery.

#### This means you:

- 2.1 produce cuts, joints or dressed carcasss of poultry that adhere to organisational specification
- 2.2 carry out butchery in a timely way, maintaining pace of butchery if appropriate
- 2.3 minimise waste when producing cuts of poultry
- 2.4 work within the limits of your responsibility, referring problems to the relevant people when necessary.

#### **Performance objectives**

The learner must be able to:

3. complete butchery operations.

#### This means you:

- 3.1 ensure cuts are available for storage or next stage of process
- 3.2 clean personal protective equipment, work area, tools and equipment to organisational procedures
- 3.3 store waste for disposal according to regulatory and organisational standard procedures.

#### **Essential knowledge**

- 1. how to access organisational procedures
- 2. the organisational and regulatory procedures that must be adhered to when carrying out butchery of poultry
- 3. the personal protective equipment required to carry out butchery of poultry
- 4. the tools and equipment needed to carry out butchery of poultry
- 5. why it is important to have hygienically clean personal protective equipment, work area, tools and equipment
- 6. the importance of precision cutting in poultry butchery
- 7. the specific knives used in poultry butchery
- 8. how to use the specific knives used in poultry butchery
- 9. why it is important to use the correct knife for each cutting specification
- 10. how to access the organisational quality and yield specifications for specific cuts of poultry and why it is important to adhere to these when carrying out poultry butchery
- 11. the typical cuts and joints possible from poultry carcasss
- 12. why string is commonly used in the presentation of poultry and how this process is carried out
- 13. how to dress a whole chicken, turkey, duck, goose, rabbit or hare for wholesale or retail sale
- 14. how to utilise continental butchery to produce cuts of poultry
- 15. the importance of keeping waste to a minimum and its effect on yield and the economic value of the carcass
- 16. the edible offal cuts from poultry and how they are butchered for sale

- 17. the inedible by-products from poultry and how they can be utilised
- 18. how to dispose of waste from poultry processing according to regulatory and organisational requirements.

### Unit 119 Carry out poultry butchery

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 carry out poultry butchery** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

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

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

# Unit 120 Carry out primal cutting of meat or poultry

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 skills needed for you to carry out primal cutting of meat in food and drink manufacture and/or supply operations. Beef, lamb, pork, venison and goat carcass sides and quarters are generally broken down into primal cuts as the first stage of butchery. Primal cutting requires a high level of skill and has a significant effect on the overall efficiency of butchery operations.  You will be able to use the correct tools and equipment; maximise yield and maintain quality; handle and store meat or poultry; and dispose of waste products all whilst following organisational and regulatory standards.  This unit is for you if you work in food and
	drink manufacture and/or supply operations and are involved in carrying out primal cutting of meat or poultry.

#### **Performance objectives**

The learner must be able to:

1. prepare to process a carcass,

- 1.1 wear and use appropriate personal protective equipment
- 1.2 source availability of work area, tools and equipment
- 1.3 check the work area is clear and ready so that the process can be carried out efficiently, safely and hygienically
- 1.4 check that carcass to be processed are readily available and follow organisational procedures if supplies are short
- 1.5 check that there is a facility available to receive the processed carcass.

The learner must be able to:

2. process a carcass,

#### This means you:

- 2.1 use appropriate tools and equipment safely to process carcass
- 2.2 process carcass efficiently, safely and hygienically to meet customer specifications
- 2.3 check that the meat or poultry joints meet organisational quality and yield specifications
- 2.4 maintain pace of production according to organisational requirements
- 2.5 keep waste to a minimum and store in the correct place for disposal
- 2.6 move the processed meat for storage or to the next stage of production.

#### **Essential knowledge**

- 1. why it is important to follow organisational and regulatory operating procedures when carrying out primal cutting of meat or poultry
- 2. the work area, tools and equipment needed to carry out primal cutting
- 3. why it is important to check the cleanliness of work area, tools and equipment
- 4. how to avoid contamination and maintain food safety during primal cutting operations
- 5. how to handle the meat or poultry carcass to maintain its quality
- 6. the key primal cuts of red and white meat species
- 7. the importance of precision cutting in primal butchery
- 8. the specific knives used in primal butchery
- 9. how to use the specific knives used in primal butchery
- 10. how to access the organisational quality and yield specifications and why it is important to adhere to them when carrying out primal butchery
- 11. why it is important to maintain the pace of production according to organisational requirements
- 12. how to dispose of waste from primal butchery according to regulatory and organisational requirements.

# Unit 120 Carry out primal cutting of meat or poultry

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 process a carcass** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **processing a carcass** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

### Unit 121 Carry out religious slaughter

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 slaughtering animals to the requirements of religious standards. If you work in this area and carry out slaughter operations you must follow closely defined procedures, eg Zibah and Shechita. These procedures and standards are intended to ensure humane slaughter, hygiene and food safety. They also aim to contribute to animal welfare in this most sensitive part of the industry process. Specific licences are required to work in this area.  People who work in manual slaughter have specialist skills This unit is for you if your job involves working in a religious slaughter area of a meat facility. Slaughter is through non-
	automated methods.

#### **Performance objectives**

The learner must be able to:

1. check equipment and facilities for religious slaughter.

- 1.1 make sure all equipment needed for slaughter is available at the point of slaughter
- 1.2 check that all equipment needed for slaughter is working correctly and safe to operate before starting to slaughter
- 1.3 check that animals are available for slaughter and have not come into contact with animals who are not due to be religiously slaughtered
- 1.4 check that the landing area is clean and free from obstacles
- 1.5 check that the line is staffed and ready to receive slaughtered animals
- 1.6 follow procedures to solve any problems with tools or staffing in the slaughter area
- 1.7 follow procedures according to your religion.

The learner must be able to:

2. carry out religious slaughter.

#### This means you:

- 2.1 ensure the animal is placed in a suitable and safe position that meets the religious and animal welfare codes of practice
- 2.2 ensure that the animal's chest is facing the correct way for slaughter and follow other pre-slaughter procedures for your religion
- 2.3 position the slaughtering tools in the correct position
- 2.4 operate the slaughter tools in the correct and safe manner, making the correct incision
- 2.5 check to make sure effective slaughter has taken place and ensure nothing further is done if a time delay is required by civil or religious regulation
- 2.6 in the case of ineffective slaughter, ensure appropriate action is taken
- 2.7 make sure that the animal is removed from the slaughter area in the manner that minimises carcass damage
- 2.8 after the required time, ensure that the animal is correctly shackled for lifting to the bleeding or dressing rail
- 2.9 ensure that the necessary reporting has taken place
- 2.10 ensure that the tools have been checked and cleaned ready for the next animal.

#### **Essential knowledge**

- 1. why it is important to position an animal correctly for slaughter
- 2. why it is important to position the slaughter implement in the prescribed position to ensure the correct depth of cut and effective slaughtering
- 3. the positions of implements to achieve effective slaughter
- 4. why it is important to check back-up systems are in place
- 5. how to operate the slaughter implements correctly
- 6. the pre-slaughter checks to be carried out
- 7. how to lift slaughtered animals to the bleeding or dressing rail
- 8. why it is important for animals to be kept calm
- 9. the physiological aspects of slaughter (eg the effects of stress)
- 10. the legal and religious regulations concerning the signs of effective and ineffective slaughter
- 11. the methods of slaughter allowed by law and by religious regulation
- 12. the legal requirements for the slaughter of animals
- 13. the controls that relate to slaughter.

### Unit 121 Carry out religious slaughter

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 **checking equipment and facilities for religious slaughter** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

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

### Unit 122 Carry out rodding and clipping of meat carcasss

SCQF Level:	4
Credit value:	4
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 carry out rodding and clipping of cattle, sheep and goat carcasss in food and drink manufacture and/or supply operations. Rodding and clipping is also known as sealing the alimentary canal and weasand sealing. It is important in ensuring the production of a hygienically clean carcass. Sealing the oesophagus prevents contamination of the carcass with gut contents.
	You will be able to prepare equipment and work area needed to carry out rodding and sealing operations. You will also be able to work to organisational and regulatory requirements, work within the limits of your responsibility and refer problems to the relevant people.  This unit is for you if you work in food and

#### **Performance objectives**

The learner must be able to:

1. prepare to carry out rodding and clipping.

#### This means you:

1.1 adhere to organisational and regulatory standards when carrying out rodding and clipping

production.

drink manufacture and/or supply operations and are involved in carrying out rodding and

clipping of meat in food and drink

- 1.2 wear and use personal protective equipment according to organisational procedures
- 1.3 check the availability and cleanliness work area, tools, equipment and sealing clips or bands
- 1.4 make sure the carcass is in the most effective position for rodding and clipping

1.5 place yourself in the most effective place and position for rodding and clipping.

#### **Performance objectives**

The learner must be able to:

2. carry out rodding and clipping.

#### This means you:

- 2.1 use equipment to carry out rodding, adhering to organisational standard operating procedures and specifications
- 2.2 maintain pace of rodding according to organisational production requirements
- 2.3 clip oesophagus ensuring it is sealed
- 2.4 work within the limits of your responsibility
- 2.5 ensure carcass is available for next stage of process
- 2.6 store waste for disposal according to regulatory and organisational standard procedures.

#### **Essential knowledge**

- 1. why it is important to follow organisational and regulatory operating procedures when carrying out rodding and clipping operations
- 2. the work area, tools, equipment and disposables needed to carry out rodding and clipping
- 3. why it is important to check the cleanliness of work area, tools and equipment
- 4. how to avoid contamination and maintain food safety during rodding and clipping operations
- 5. how to handle the meat carcass to maintain its quality
- 6. why precision clipping is important to rodding and clipping
- 7. why it is important to maintain the flow of production to organisational requirements
- 8. why it is important to adhere to organisational yield and quality requirements
- 9. how to store waste products for disposal
- 10. how ineffective rodding and clipping can lead to wastage, potential customer complaints and lost revenue
- 11. how to deal with operating problems within the limits of your responsibility.

## Unit 122 Carry out rodding and clipping of meat carcasss

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 carry out rodding and clipping** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

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

## Unit 123 Carry out seaming or filleting of meat or poultry

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 skills needed for you to carry out seaming or filleting of meat or poultry in food and drink manufacture and/or supply operations. Seaming or filleting to remove whole muscle from bones or from other muscle is a key skill in meat production, important in producing a final product that adheres to organisational and customer requirements.  You will be able to use the correct tools and equipment; maximise yield and maintain quality; handle and store meat or poultry; and dispose of waste products all whilst following organisational and regulatory standards.  This unit is for you if you work in food and drink manufacture and/or supply operations and are involved in carrying out seaming or filleting of meat or poultry.

#### **Performance objectives**

The learner must be able to:

1. prepare for seaming or filleting.

- 1.1 adhere to organisational and regulatory standards when carrying out seaming or filleting
- 1.2 use and wear personal protective equipment
- 1.3 check the seaming or filleting required with the relevant person
- 1.4 check the availability and cleanliness of the work area, tools and equipment
- 1.5 source the meat or poultry requiring seaming or filleting
- 1.6 choose the correct knives and ensure they are sharp, clean and suitable for purpose
- 1.7 check availability of storage areas for final product and waste
- 1.8 refer problems outside limits of your responsibility to relevant people.

The learner must be able to:

2. carry out seaming or filleting.

#### This means you:

- 2.1 check that meat for seaming or filleting meets organisational specifications, and follow organisational procedures to deal with it if it does not
- 2.2 produce fillets to quantities that meet organisational yield and quality specifications
- 2.3 make fillets available to next stage of processing
- 2.4 maintain pace of production according to organisational requirements
- 2.5 store waste for disposal according to organisational standards
- 2.6 work within the limits of your responsibility.

#### **Essential knowledge**

- 1. why it is important to follow organisational and regulatory operating procedures when carrying out seaming or filleting operations
- 2. the work area, tools and equipment needed to carry out seaming or filleting
- 3. why it is important to check the cleanliness of tools and equipment
- 4. how to avoid contamination and maintain food safety during seaming or filleting operations
- 5. how to handle the meat or poultry carcass to maintain its quality
- 6. why precision cutting is important to filleting or seaming
- 7. seaming or filleting cutting lines and guides for meat and/or poultry
- 8. why it is important to maintain the flow of production
- 9. why it is important to adhere to organisational yield and quality requirements
- 10. how to store waste products for disposal
- 11. how ineffective seaming or filleting can lead to wastage, potential customer complaints and lost revenue
- 12. how to deal with operating problems within the limits of your responsibility.

## Unit 123 Carry out seaming or filleting of meat or poultry

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 seaming or filleting** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

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

## Unit 124 Carry out trimming of meat or poultry

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 skills needed for you to carry out trimming of meat or poultry in food and drink manufacture and/or supply operations. Trimming is important at all stages of the process through production from post-slaughter carcass trimming to trimming joints and pre-sale cuts and joints. Trimming to remove waste and unwanted fat, bone gristle etc is important for the production of a final product that adheres to organisational classification, quality and yield specifications.
	You need to be able to use the correct tools and equipment; maximise yield and maintain quality; handle and store meat or poultry; and dispose of waste products all whilst following organisational and regulatory standards.  This unit is for you if you work in food and

#### **Performance objectives**

The learner must be able to:

1. prepare to carry out trimming.

#### This means you:

- 1.1 adhere to regulatory and organisational requirements
- 1.2 use appropriate personal protective equipment for trimming
- 1.3 assemble the tools and equipment to carry out trimming efficiently, safely and hygienically

meat or poultry.

drink manufacture and/or supply operations and are involved in carrying out trimming of

- 1.4 check the work area is ready for trimming to be completed efficiently, safely and hygienically
- 1.5 check that the meat or poultry to be trimmed is readily available and follow organisational procedures to replenish supply when necessary

The learner must be able to:

2. trim meat cuts.

#### This means you:

- 2.1 check that the meat or poultry for trimming meets customer or organisational specifications, and follow organisational procedures to deal with it if it does not
- 2.2 use appropriate tools and equipment to trim meat or poultry at the pace needed to meet production requirements efficiently, safely and hygienically
- 2.3 trim meat or poultry to meet customer or organisational quality and yield specifications
- 2.4 minimise waste from trimming and store for disposal
- 2.5 maintain pace of trimming to organisational requirements
- 2.6 work within the limits of your responsibility and refer problems to relevant people.

#### **Performance objectives**

The learner must be able to:

3. complete butchery operations.

This means you:

- 3.1 ensure cuts are available for storage or next stage of process
- 3.2 clean personal protective equipment, work area, tools and equipment to organisational procedures
- 3.3 store waste for disposal according to regulatory and organisational standard procedures.

#### **Essential knowledge**

- 1. why it is important to follow organisational standard operating procedures and product specifications when carrying out trimming operations
- 2. why trimming is carried out on post-slaughter carcasss, joints and pre-sale cuts
- 3. the muscle, fat, bone, connective tissue, ligaments and collagen of meat or poultry
- 4. the tools and equipment required to carry out trimming of meat or poultry
- 5. why it is important to check the cleanliness of tools and equipment
- 6. how to handle the meat or poultry to maintain its quality
- 7. how to avoid product contamination and maintain food safety during trimming operations
- 8. how to access the correct organisational specifications
- 9. why it is important to adhere to organisational yield and quality specifications
- 10. the importance of trimming to the presentation of meat or poultry for sale

- 11. the importance of precision cutting in trimming operations
- 12. why it is important to maintain the pace and flow of production according to organisational requirements
- 13. how to store waste products from trimming operations for disposal
- 14. how ineffective trimming can lead to wastage, potential customer complaints and lost revenue
- 15. how to deal with operating problems within the limits of your responsibility.

## Unit 124 Carry out trimming of meat or poultry

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 carry out trimming** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

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

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

### Unit 125 Carry out wild game butchery

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 needed for you to carry out butchery of wild game primal joints to individual joints or cuts of meat or poultry, including in food and drink manufacture and/or supply operations. Carrying out butchery of wild game is important for the production of a final product that meets organisational and customer product specification requirements.  You will be able to carry out butchery of wild game to organisational procedures. You will also be able to use correct tools and equipment when carrying out butchery, store wild game, dispose of waste products.  This unit is for you if you work in food and drink manufacture and/or supply operations and are involved in carrying out wild game butchery.

#### **Performance objectives**

The learner must be able to:

1. prepare to carry out wild game butchery.

- 1.1 adhere to organisational and regulatory standards when carrying out butchery of wild game
- 1.2 wear and use personal protective equipment according to organisational procedures
- 1.3 check the cuts of wild game meat required with the relevant person
- 1.4 check the availability and cleanliness of work area, tools and equipment
- 1.5 source the wild game joint requiring butchery
- 1.6 choose the correct knives and ensure they are sharp, clean and suitable for purpose.

The learner must be able to:

2. carry out butchery.

This means you:

- 2.1 produce cuts, joints or dressed carcass of wild game that adhere to organisational specification
- 2.2 carry out butchery in a timely way, maintaining pace of butchery if appropriate
- 2.3 minimise waste when producing cuts of wild game
- 2.4 work within the limits of your responsibility, referring problems to the relevant people when necessary.

#### Performance objectives

The learner must be able to:

3. complete butchery operations.

This means you:

- 3.1 ensure cuts are available for storage or next stage of process
- 3.2 clean personal protective equipment, work area, tools and equipment to organisational procedures
- 3.3 store waste for disposal according to regulatory and organisational standard procedures.

#### **Essential knowledge**

- 1. how to access organisational procedures
- 2. the organisational and regulatory procedures that must be adhered to when carrying out butchery of wild game
- 3. the personal protective equipment required to carry out butchery of wild game
- 4. the tools and equipment needed to carry out butchery of wild game
- 5. why it is important to have hygienically clean personal protective equipment, work area, tools and equipment
- 6. the major differences between slaughtered wild and farmed game carcasses
- 7. why it is important to take account of carcass damage and contamination when preparing to carry out butchery of wild game
- 8. how to maximise yield from different weights of game carcass
- 9. the importance of precision cutting in wild game butchery
- 10. the specific knives used in wild game butchery
- 11. how to use the specific knives used in wild game butchery
- 12. why it is important to use the correct knife for each cutting specification
- 13. how to access the organisational specifications for specific cuts of wild game and why it is important to adhere to these when carrying out wild game butchery
- 14. the different ways in which it is possible to carry out butchery of wild game depending on national and regional variations, and customer and personal requirements
- 15. how to utilise continental butchery to produce cuts of wild game
- 16. different ways in which wild game joints and cuts can be presented

- and how they differ from the traditional way of presenting wild game
- 17. the typical cuts and joints possible from avian and mammalian wild game carcasses
- 18. the importance of keeping waste to a minimum and its effect on yield and the economic value of the wild game
- 19. the edible offal cuts from wild game and how they are butchered for sale
- 20. the inedible by-products from wild game and how they can be utilised
- 21. how to dispose of waste from poultry processing according to regulatory and organisational requirements.

### Unit 125 Carry out wild game butchery

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 carry out wild game butchery** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

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

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

## Unit 126 Clean vehicle to maintain food safety

SCQF Level:	3
Credit value:	2
Endorsement by a	This unit is endorsed by Skills for Logistics
SSC:	
Aim:	This unit covers cleaning your vehicle to maintain food safety in a logistics environment. It covers the knowledge and skills required of workers in the logistics sector in relation to the EU regulations that make it a legal requirement for all businesses that deal with food (ie food, drink and animal feeds) to have Food Safety Management Systems embedded into their operating and management systems.  This unit is relevant to those who work in all parts of the food supply chain, including vehicle drivers, warehousing and storage operatives, supervisors and managers.

#### Performance objectives

The learner must be able to:

1. clean vehicle interior to maintain food safety.

- 1.1 follow the cleaning instructions in the organisation's food safety management procedures
- 1.2 unload the vehicles of contents
- 1.3 remove all loose and soiling
- 1.4 use suitable cleaning equipment safely and according to instructions
- 1.5 use appropriate cleaning agents, according to manufacturers' recommended strength, to clean all vehicle interior surfaces
- 1.6 assess your cleaning as you carry out the work
- 1.7 take appropriate action when instances of pest infestation are identified and report to the appropriate person
- 1.8 rinse all surfaces and disinfect with an odour free disinfectant, at recommended strength, leaving surfaces free from cleaning residues
- 1.9 wipe or air dry the vehicle interior, depending on the food being carried.

#### **Essential knowledge**

- 1. where to obtain the organisation's food safety management procedures
- 2. why food or other contents must be moved before cleaning
- 3. the correct methods of cleaning and the consequences of not doing this correctly
- 4. the range of cleaning equipment, and how and when to use equipment safely and effectively
- 5. the range of cleaning agents suitable for the surfaces you are cleaning, and how and when to use them safely and effectively
- 6. how to check for cleaning residues
- 7. what to do when instances of pest infestation are identified
- 8. the method of drying the vehicle for different types of food, and why this is important.

## Unit 126 Clean vehicle to maintain food safety

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 vehicle interior to maintain food safety** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

## Unit 127 Complete pre-journey and post-journey procedures in food and drink operations

SCQF Level:	5
Credit value:	3
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about completing pre-journey and post-journey procedures in food and drink operations.
	You will be able to carry out pre-journey procedures to ensure the vehicle, documentation and vehicle load are ready for transport. You will also be able to carry out end of journey procedures.
	This unit is for you if you work in food and drink operations and you are required to drive a vehicle to deliver goods.

#### **Performance objectives**

The learner must be able to:

1. carry out pre-journey procedures.

- 1.1 identify the vehicle and equipment being used for transporting the load
- 1.2 carry out pre-journey inspections on the vehicle in line with manufacturer's instructions, company policy, and relevant legislation, regulation and industry codes of practice
- 1.3 complete all pre-journey documentation
- 1.4 prepare and set up the vehicle to optimise performance and efficiency for the journey
- 1.5 confirm the safety and security of loads in accordance with relevant legislation, regulation and industry codes of practice
- 1.6 confirm vehicle and loads are free from damage and in accordance with manufacturers' and industry guidelines
- 1.7 confirm vehicle and loads are free from contamination according to manufacturers' and industry hygiene and food safety guidelines
- 1.8 check temperature of load and vehicle
- 1.9 load vehicle in correct order and document accordingly
- 1.10 take the appropriate action to resolve any problems or difficulties found with the vehicle or the load

1.11 report and record any defects or damage in line with operational and organisational procedures.

#### Performance objectives

The learner must be able to:

2. carry out post-journey procedures.

#### This means you:

- 2.1 park and shut down the vehicle safely and securely
- 2.2 confirm the load has been collected or delivered in line with the schedule
- 2.3 confirm that all the necessary documentation has been completed and signed by the relevant person(s) and copies returned to the appropriate office
- 2.4 complete driver's records and make sure they comply with relevant legislation, regulation and industry codes of practice
- 2.5 report any damage or road traffic accidents to the relevant person(s) in line with operational and organisational procedures
- 2.6 complete a vehicle defect report when required in line with operational and organisational procedures
- 2.7 report any customer feedback in line with operational and organisational procedures.

#### **Essential knowledge**

- 1. types of load for delivery or collection
- 2. type of vehicle transporting the consignment
- 3. relevant legislation, regulations and industry codes of practice related to pre-journey and post-journey procedures
- 4. the importance of good hygiene in relation to vehicles and consequent consignment contamination
- 5. the importance of ensuring the vehicle and products are maintained at the correct temperature
- 6. food safety legislation, manufacturers' and industry guidelines in relation to the loading and unloading of vehicles and transport of loads
- 7. manufacturers' and industry guidelines for preventing contamination and damage to the goods in transport
- 8. operational and organisational procedures for reporting and recording damage and defects
- 9. the importance of effective communication
- 10. documentation requirements when transporting goods
- 11. security implications when parking
- 12. vehicle defect recording procedures.

# Unit 127 Complete pre-journey and post-journey procedures 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 pre-journey procedures** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

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

## Unit 128 Contribute to bio-security in livestock holding in food manufacture

SCQF Level:	4
Credit value:	5
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is for you if your role requires you to enter areas where livestock are kept.
	It is about making sure you maintain biosecurity and preventing cross-contamination by wearing the correct clothing, and using equipment properly. It is also about reporting any concerns you have quickly to the appropriate people.

#### **Performance objectives**

The learner must be able to:

1. prepare to enter the site.

#### This means you:

- 1.1 use personal protective equipment that is clean and hygienic, fit for use and worn correctly
- 1.2 seek advice from the appropriate person if further explanation is required concerning specific tasks.

#### **Performance objectives**

The learner must be able to:

2. maintain bio-security while on site.

- 2.1 work to your organisation's rules on bio-security while on site and when entering and leaving the site
- 2.2 use personal protective equipment correctly and in accordance with organisational requirements
- 2.3 take steps to avoid unnecessary contamination and cross-contamination of the site.

The learner must be able to:

3. report any concerns on bio-security.

This means you:

- 3.1 communicate clearly and in a way that encourages effective working relationships
- 3.2 pass on any concerns to the correct person or people as quickly as possible.

#### **Essential knowledge**

- 1. tasks and activities for which you are responsible
- 2. how to carry out tasks and activities
- 3. who to go to for further information and advice on specific tasks and activities
- 4. the importance of seeking further information or advice on how to do specific tasks and activities, and the risks involved if you do not do this
- 5. what clothing, footwear and equipment is suitable and required by your organisation
- 6. bio-security procedures on site and when entering and leaving the site
- 7. how contamination and cross-contamination occurs, and the possible effects on livestock
- 8. standards of bio-security for the work area
- 9. health and safety procedures regarding bio-security
- 10. methods of working effectively with others
- 11. methods of communicating effectively
- 12. the reasons why effective communication is important.

## Unit 128 Contribute to bio-security in livestock holding 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 enter site** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **maintaining bio-security while on site** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **reporting concerns on bio-security** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

### Unit 129 Contribute to bio-security in livestock markets

SCQF Level:	4
Credit value:	2
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit includes contributing to the biosecurity measures when you are on-site and when entering and leaving the site. You are expected to report any concerns about biosecurity to the appropriate person or people so that they can instigate the relevant action(s).
	This unit is for you if you work in a livestock market.

#### **Performance objectives**

The learner must be able to:

1. contribute to bio-security.

This means you:

- 1.1 maintain the organisational bio-security measures while on site and when entering and leaving the site
- 1.2 use personal protective equipment correctly and in accordance with organisational requirements
- 1.3 take steps to avoid unnecessary contamination and crosscontamination of the site
- 1.4 recognise and report all concerns regarding bio-security to the appropriate person or people.

#### **Essential knowledge**

- 2. bio-security procedures on-site and when entering and leaving the
- 3. how contamination and cross-contamination occurs, and the possible consequences for livestock
- 4. standards of bio-security for the work area
- 5. health and safety procedures regarding bio-security.

## Unit 129 Contribute to bio-security in livestock markets

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 bio-security in your workplace** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

### Unit 130 Contribute to optimising work areas in food manufacture

SCQF Level:	7
Credit value:	6
Endorsement by a SSC:	This unit is endorsed by Improve, the Food & Drink Skills Council
Aim:	This unit is about optimising the use of the work area and equipment through effective monitoring and control. Efficient maintenance is an important requirement in food and drink manufacturing.  This unit is about planning, organising and using resources in order to make the best use of the work area and equipment. It includes preparing and contributing to the maintenance of the work area and equipment. You will be able to identify any deviations from expected performance of the work area and equipment and consider the implications for maintenance. You will be able to offer solutions for the identified deviations and take the necessary corrective action. The ability to communicate and the ability to maintain accurate and comprehensive records is also a feature of this unit.

#### **Performance objectives**

The learner must be able to:

1. control the preparation of the work area and equipment for use.

- 1.1 access and interpret information and instructions for the use of the work area and employment of equipment over the work period, and assess the impact on operations
- 1.2 allocate duties and responsibilities to others as appropriate to their proven competence and availability
- 1.3 inspect the work location, machinery and equipment and check them against statutory environmental and operational requirements
- 1.4 inspect the services and utilities available to the work location, machinery and equipment and check that they meet operational requirements
- 1.5 check that sufficient materials are available at the work locations,

- machines and equipment to meet production requirements before work commences
- 1.6 evaluate reports received on the status of machinery and equipment after start-up and identify the impact on operations
- 1.7 identify and record contravention of statutory regulations and departures from operational requirements in the work location, machinery and equipment
- 1.8 report the contravention promptly to the relevant person(s), and take corrective action within the limits of your authority
- 1.9 complete the documentation accurately and legibly and make it available to the relevant person(s).

The learner must be able to:

2. control the use of work areas.

- 2.1 access and interpret production requirements to achieve the production targets and quality specifications
- 2.2 agree the production requirements with relevant person(s) and implement these
- 2.3 seek clarification from relevant person(s) where conflict is identified between sources of information
- 2.4 evaluate the output of individuals against production targets and quality specifications and make arrangements to deal with rest periods, tedium of activity and diversity of individual competence in accordance with operational requirements
- 2.5 confirm the achievement of quality specifications, throughput targets and output with relevant persons at regular intervals to enable early identification of faults and problems
- 2.6 minimise wastage of consumable items and other materials and recycle reusable materials in accordance with operational and statutory requirements
- 2.7 identify problems influencing the quality of products and the attainment of output targets, and take relevant corrective actions within the limits of your authority
- 2.8 complete the work in the allotted time and within operational constraints
- 2.9 investigate and report work which cannot be completed in the allotted time to the relevant person(s)
- 2.10 complete the documentation accurately and legibly and make it available to the relevant person(s).

#### **Essential knowledge**

- 1. the types of information and instructions needed to control the preparation of the work area
- 2. how to access, interpret and evaluate information and instructions including production requirements
- 3. why information and instructions need to be accessed, interpreted and evaluated
- 4. the range of corrective actions which can be taken
- 5. the importance of taking corrective action and the procedures involved
- 6. how to complete documentation and to whom to make it available
- 7. the importance of accurate and complete records
- 8. why it is important to know the competence and availability of others in the work area
- 9. how to allocate duties and responsibilities to others
- 10. the roles and responsibilities of others working in the area
- 11. how to inspect the work location, machinery and equipment, and why it is important to carry out inspections
- 12. how to inspect the services and utilities and why it is important to carry out inspections
- 13. why reports need to be received on the status of machinery after start-up
- 14. how to identify the impact of reports received on operations
- 15. food hygiene, health and safety, the environmental, legal regulations and how they apply to the work area and equipment
- 16. why contravention of statutory regulations needs to be recorded and reported
- 17. the reporting and recording procedures
- 18. why output of individuals should be evaluated against production targets and quality specifications and how to do the evaluation
- 19. why achievement of quality specifications, throughput targets and output needs to be confirmed at regular intervals
- 20. how to confirm achievement of quality specifications, throughput targets and output
- 21. how to deal with rest periods, tedium of activity and diversity of individual competence
- 22. the effects of wastage on production and on the organisation
- 23. how to minimise wastage of consumable items and other materials
- 24. how to recycle reusable materials and why they should be recycled
- 25. the ways in which conflict can arise between sources of information and how to achieve clarification
- 26. the faults and problems which can occur, why they occur, and how to identify them
- 27. why faults and problems need to be identified as early as possible
- 28. why work needs to be completed in the allotted time and how this can be achieved
- 29. the importance of investigating and reporting work which cannot be achieved.

## Unit 130 Contribute to optimising work areas 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 **controlling the preparation of the work area and equipment for use** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **controlling the use of work areas** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

# Unit 131 Contribute to the effectiveness of food retail operations

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 organising basic tasks and work activity within an already planned retail schedule. It is also about contributing to improvements in a food and drink retail environment. Food and drink retail may involve one or more areas such as serving customers, displaying products, preparing and selling take-away foods, and serving at fast food counters or at tables.  You will be able to organise tasks so that part of a retail schedule can be worked through efficiently. You will be able to make a contribution towards identifying opportunities for improvements in an aspect of retail practice.
	of retail practice.

#### **Performance objectives**

The learner must be able to:

1. organise your own activities within food and drink retail operations.

- 1.1 obtain correct instructions and specifications for your retail work schedule
- 1.2 organise your work activity to make the best use of resources within operational requirements
- 1.3 report any resource deficiencies to the relevant person
- 1.4 check that your retail work schedule is realistic and achievable within the constraints of the workplace
- 1.5 check that your activity meets health, safety and hygiene requirements and you use the appropriate personal protective clothing and equipment.

The learner must be able to:

2. contribute to the improvement of food and drink retail operations.

This means you:

- 2.1 make a positive contribution to recognising improvements in retail operations
- 2.2 gather accurate information about possible improvements
- 2.3 suggest improvements which are required and realistic
- 2.4 share ideas for improvements with the relevant people and react positively to feedback you receive
- 2.5 communicate your ideas in enough detail to allow further action to be agreed.

#### **Essential knowledge**

- 1. your duties under hygiene and health and safety requirements, and what might happen if these are not met
- 2. how and where to get relevant work instructions, schedules and specifications
- 3. the importance of organising activities within a schedule to achieve the best results
- 4. how to organise work activities efficiently and alter these if there are changes in retail needs
- 5. how to organise work activities so that products are always at their best when they are sold
- 6. how, where and when to make helpful suggestions for possible improvements to retail operations
- 7. why continuous improvement is necessary and its benefits
- 8. how to identify the benefits from improvements in the short and long term
- 9. where and when to get help and advice
- 10. what the lines and methods of effective communication are and why it is important to communicate effectively.

# Unit 131 Contribute to the effectiveness of food retail 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 **organising your own activities within food retail operations** in accordance with workplace specifications. This must include two types of resources e.g. time, materials, space or equipment.

Evidence of **contributing to the improvement of food retail operations** in accordance with workplace procedures.

## Unit 132 Control a carcass electrical stimulation system

SCQF Level:	6
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 needed for you to control a meat carcass electrical stimulation system in food and drink manufacture and/or supply operations. Electrical stimulation of carcasss may help increase tenderness in the beef or lamb final product.  You will need to be able to prepare to control a meat carcass electrical stunning system, safely control it and adhere to regulatory and organisational standards.  This unit is for you if you work in food and
	drink manufacture and/or supply operations and are involved in controlling a carcass electrical stimulation system.

#### **Performance objectives**

The learner must be able to:

1. prepare to control an electrical stimulation system.

- 1.1 adhere to regulatory and organisational requirements when operating an electrical stimulation system
- 1.2 wear and use personal protective equipment
- 1.3 check availability of electrical stimulation equipment
- 1.4 check equipment is in working order
- 1.5 check animals are being stunned and bled and are available for electrical stimulation.

The learner must be able to:

2. control an electrical stimulation system.

#### This means you:

- 2.1 check carcass is shackled to allow safe electrical stimulation
- 2.2 use equipment to electrically stimulate carcasss, adhering to organisational standard operating procedures
- 2.3 maintain rate of electrical stimulation to ensure organisational rate of production is maintained
- 2.4 make carcass available to next stage in production process
- 2.5 work within limits of your responsibility.

#### **Essential knowledge**

- 1. the organisational and regulatory procedures that must be adhered to when controlling an electrical stimulation system
- 2. the specific health and safety standards to be adhered to when using electrical stimulation equipment
- 3. the personal protective equipment required when controlling an electrical stimulation system
- 4. why animal carcasss are electrically stimulated
- 5. the key features of an electrical stimulation system
- 6. the key controls of an electrical stimulation system
- 7. how to access organisational specifications
- 8. why it is important to adhere to organisational standard operating procedures and specifications
- 9. how to check the electrical stimulation system is operating correctly and electrical stimulation has taken place
- 10. how the positioning of the electrode on the carcass length, spinal cord or intra muscle can alter the effectiveness of the electrical stimulation
- 11. why the hanging position of the carcass can alter the effectiveness of electrical stimulation
- 12. voltages used in the electrical stimulation of beef and lamb
- 13. why it is important to work within the limits of your responsibility and refer problems to the relevant people.

## Unit 132 Control a carcass electrical stimulation system

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 control an electrical stimulation system** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **controlling an electrical stimulation system** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

## Unit 133 Control a carcass shackling system

SCQF Level:	6
Credit value:	4
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 control a carcass shackling system in food and drink manufacture and/or supply operations. Controlling a shackling system is important for the efficient movement of meat or poultry carcasss around a production facility. It also aids operatives at each stage of the production process to carry out each task more efficiently and effectively, with less manual handling of the carcass.
	You will be able to operate a carcass shackling system, ensuring regulatory and organisational health and safety and production requirements are adhered to.  This unit is for you if you work in food and drink manufacture and/or supply operations and are involved in controlling a carcass shackling system.

#### **Performance objectives**

The learner must be able to:

1. prepare to control carcass shackling systems.

- 1.1 adhere to regulatory and organisational requirements when operating a carcass shackling system
- 1.2 use and wear personal protective equipment when carrying out carcass shackling
- 1.3 check availability of shackling equipment
- 1.4 check equipment is in working order
- 1.5 check the working area is clear of colleagues and equipment.

The learner must be able to:

2. control a carcass shackling system.

## This means you:

- 2.1 shackle carcass or part carcass
- 2.2 check carcass is shackled safely
- 2.3 return shackling equipment to storage area
- 2.4 make carcass available to next stage in production process
- 2.5 work within the limits of your responsibility and refer problems to the relevant people.

# **Essential knowledge**

- 1. the organisational and regulatory procedures that must be adhered to when operating a carcass shackling system
- 2. the specific health and safety standards to be adhered to when using a carcass shackling system
- 3. the personal protective equipment required when operating a carcass shackling system
- 4. why it is important to ensure the work area is clear when operating a carcass shackling system
- 5. why animal carcass are shackled
- 6. the key features of a carcass shackling system
- 7. how carcass shackling systems can differ
- 8. the advantages and disadvantages of carcass shackling systems
- 9. the advantages and disadvantages of manual carcass handling systems
- 10. how to check the carcass shackling system is operating correctly.

# Unit 133 Control a carcass shackling system

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 control a carcass shackling system** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **controlling a carcass shackling system** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

# Unit 134 Control an automated bleeding system

SCQF Level:	6
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 needed for you to control an automated bleeding system in food and drink manufacture and/or supply operations. Controlling an automated bleeding system is important for maintaining supply to the meat and poultry production process. It is also important for maintaining the safe, hygienic production of meat and poultry.
	You will be able to prepare an automated system for bleeding operations. You will also be able to control the bleeding system, adhering to organisational and regulatory requirements.
	This unit is for you if you work in food and drink manufacture and/or supply operations and are involved in controlling an automated bleeding system.

## **Performance objectives**

The learner must be able to:

1. prepare to control an automated bleeding system.

- 1.1 adhere to regulatory and organisational requirements
- 1.2 wear and use personal protective equipment
- 1.3 check that power is switched on and the equipment is working before birds are fed into the system
- 1.4 check that the feed to the cutting equipment is switched on and is operating at the required speed
- 1.5 check or set the cutting equipment to the height and pitch that match the size of the birds to be processed
- 1.6 check the first birds into the equipment to ensure they are being cut effectively and humanely
- 1.7 follow organisational procedures to deal with any problems that might mean that cutting is not safe, hygienic or humane.

The learner must be able to:

2. control an automated bleeding system.

## This means you:

- 2.1 monitor the feed into the cutting point and make sure birds are fed in meeting regulatory requirements and at the speed of production
- 2.2 monitor cutting to make sure birds are properly cut in line with regulatory requirements
- 2.3 take the necessary action to deal with birds that are not properly
- 2.4 monitor the flow of birds from the cutting point to make sure there are no delays or breaks in production
- 2.5 work within the limits of your responsibility.

## **Essential knowledge**

- 1. why it is important to follow organisational and regulatory quality and welfare standards when controlling an automated bleeding system
- 2. how to access organisational standard operating procedures
- 3. why animals are bled before human consumption
- 4. the key features of an automated bleeding system
- 5. why it is important to check the cleanliness of tools and equipment
- 6. how to maintain tools and equipment for bleeding and cutting to ensure they are effective, safe and meet the required hygiene standards
- 7. how to check for signs of ineffective stunning
- 8. the key features of an automated bleeding system and how they are controlled
- 9. how to control the automated bleeding system
- 10. ways of monitoring the feed into and from the cutting equipment and why monitoring is important
- 11. signs of effective and ineffective bleeding
- 12. quality and welfare problems resulting from improper sticking or cutting of meat or poultry species
- 13. ways of ensuring animals are insensible to pain before sticking and bleeding and why that is important
- 14. how ineffective bleeding can lead to wastage, potential customer complaints and lost revenue
- 15. how to deal with operating problems within the limits of your authority.

# Unit 134 Control an automated bleeding system

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 control an automated bleeding system** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **controlling an automated bleeding system** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

# Unit 135 Control an automated dehairing or de-feathering system

SCQF Level:	6
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 needed for you to control an automated de-hairing and/or defeathering system in food and drink manufacture and/or supply operations. Controlling an automated de-hairing and/or de-feathering system is important for the production of meat and poultry that meets production requirements and quality specifications.
	You will be able to prepare to control a scalding system, a de-hairing or defeathering system and/or a singeing system. You will also be able to adhere to regulatory and organisational requirements, address problems within the limits of your responsibility and control operation of these systems.
	This unit is for you if you work in food and drink manufacture and/or supply operations and are involved in operation of an automated de-hairing and/or de-feathering system.

## **Performance objectives**

The learner must be able to:

1. prepare to control a scalding de-hairing/de-feathering system.

- 1.1 adhere to regulatory and organisational requirements when operating a de-hairing/de-feathering system
- 1.2 wear and use personal protective equipment
- 1.3 check cleanliness and availability of services for de-hairing/defeathering equipment
- 1.4 check availability of carcass to de-hairing system
- 1.5 start de-hairing/de-feathering system
- 1.6 communicate readiness for scalding process to relevant colleagues.

The learner must be able to:

2. control scalding system.

## This means you:

- 2.1 control operation of the scalding system
- 2.2 maintain rate of scalding to ensure rate of production is maintained
- 2.3 address operating problems within the limits of your responsibility
- 2.4 communicate any problems outside your remit to the relevant colleague.

## **Performance objectives**

The learner must be able to:

3. control a de-hairing or de-feathering or singeing system.

### This means you:

- 3.1 control operation of the de-hairing or de-feathering or singeing system
- 3.2 maintain rate of de-hairing or de-feathering or singeing to ensure rate of production is maintained
- 3.3 check de-hairing or de-feathering or singeing against organisational quality specifications
- 3.4 address problems with de-hairing or de-feathering system within the limits of your responsibility
- 3.5 advise relevant colleagues of problems with de-hairing system outside the limits of your responsibility
- 3.6 make carcass available to next stage of production process.

## Essential knowledge

- 1. the organisational and regulatory procedures that must be adhered to when operating an automated de-hairing system
- 2. the specific health and safety standards to be adhered to when operating an automated de-hairing or de-feathering system
- 3. the personal protective equipment required when operating an automated de-hairing or de-feathering system
- 4. the key features of an automated de-hairing or de-feathering system
- 5. why carcasss are scalded before de-hairing or de-feathering can take place
- 6. the optimum time temperature for carcass scalding prior to dehairing or defeathering
- 7. how the scalding time and temperature can vary depending on the time of year
- 8. why it is important to keep the carcass moving during scalding
- 9. why singeing of pork carcasss is carried out
- 10. signs of ineffective de-hairing or de-feathering
- 11. why it is important to communicate to relevant colleagues when ineffective de- hairing/de-feathering has taken place
- 12. why it is important to work within the limits of your responsibility
- 13. how to address problems outside the limits of your responsibility.

# Unit 135 Control an automated dehairing or de-feathering system

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 control a scalding de-hairing/de-feathering system** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **controlling the scalding system** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **controlling a de-hairing or de-feathering or singeing system** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

# Unit 136 Control an automated stunning system

SCQF Level:	7
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 needed for you to control an automated stunning system in food and drink manufacture and/or supply operations. Operating an automated stunning system is important for maintaining the safe, hygienic production of meat or poultry, including the maintenance of animal welfare. It is also important for maintaining supply to the meat or poultry production process.
	You will be able to prepare the work area, tools and equipment to control an automated stunning system. You will also be able to control an automated stunning system adhering to regulatory and organisational standards.
	This unit is for you if you work in food and drink manufacture and/or supply operations and are involved in controlling an automated stunning system.

### **Performance objectives**

The learner must be able to:

1. prepare to control an automated stunning system.

- 1.1 adhere to regulatory and organisational requirements when carrying out manual stunning
- 1.2 wear and use personal protective equipment
- 1.3 check that power is switched on and the equipment is working before red and white meat species are exposed to the stunning operations
- 1.4 check that the feed to the stunning equipment is switched on and running at the proper speed
- 1.5 check that the sticking point is ready to receive stunned meat or poultry species
- 1.6 check the first meat or poultry species into the equipment to ensure they are properly stunned

1.7 refer problems outside the limits of your responsibility to the relevant people.

### **Performance objectives**

The learner must be able to:

2. control an automated stunning system.

#### This means you:

- 2.1 ensure that meat or poultry species are fed to the stunning point at the right speed
- 2.2 ensure that the feed of meat or poultry species into the stunning point meets regulatory requirements
- 2.3 monitor efficiency of stunning to ensure meat or poultry species are properly stunned in accordance with regulatory requirements
- 2.4 take the necessary action to deal with inadequately stunned animals or birds
- 2.5 monitor the flow of meat or poultry species from the stunning equipment to the sticking point to ensure that it meets legal requirements
- 2.6 address problems within the limits of your responsibility.

## **Essential knowledge**

- 1. why it is important to follow organisational standard operating procedures during the control of the automated stunning of red and white meat species
- 2. why animals or birds are stunned before sticking
- 3. regulatory requirements relating to the welfare of the animals or birds
- 4. the key features of an automated stunning system
- 5. how to start up automated stunning operations
- 6. why it is important to check the cleanliness of tools and equipment
- 7. how to access the organisational standard operating procedures
- 8. how to handle the meat or poultry carcass to maintain its quality
- 9. how to identify effective and ineffective stunning of animals and birds
- 10. the consequences of failure in the stunning equipment
- 11. how ineffective stunning can lead to a reduction of flow to the next stage of processing
- 12. what action to take when incomplete stunning takes place
- 13. how to deal with operating problems within the limits of your responsibility.

# Unit 136 Control an automated stunning system

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 control an automated stunning system** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **controlling an automated stunning system** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

# Unit 137 Control automated meat or poultry processing operations

SCOF Level

SCQF Level:	6
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 needed for you to control automated meat or poultry processing operations in food and drink manufacture and/or supply. Controlling operations within an automated meat or poultry processing system is important for the production of meat and poultry that adheres to regulatory and organisational standards. It is also important for the production of a quality product that meets final product specifications.  You will be able to control operations within an automated meat or poultry processing system according to regulatory and organisational requirements, and address problems within the limits of your responsibility.  This unit is for you if you work in food and drink manufacture and/or supply operations and are involved in controlling operations within an automated meat or poultry processing system.
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Performance objective	s
The learner must be able	
prepare to control an operation.	automated meat or poultry processing
This means you:	

adhere to regulatory and organisational requirements when

check equipment is clean and safe to operate in line with the organisational standard operating procedures

for processing according to organisational standard operating

1.5 check that carcasss are entering the operation at the specified

ensure the automated operation is set correctly to receive carcasss

controlling automated processing operations

1.2 wear and use personal protective equipment

procedures and specifications

1.4

speed to meet organisational production requirements.

### Performance objectives

The learner must be able to:

2. control an automated processing operation.

### This means you:

- 2.1 maintain pace of production, addressing problems within the limits of your responsibility
- 2.2 promptly inform relevant people if problems occur outside the limits of your responsibility
- 2.3 check carcasss are processed effectively according to organisational specifications
- 2.4 check poultry discharge area addressing problems within limits of your responsibility
- 2.5 ensure the output from the automated processing operation provides a continuous supply to the next stage of the system.

## **Essential knowledge**

- 1. the regulatory and organisational requirements relating to the control of meat and poultry further processing
- 2. the specific health and safety standards to be adhered to when using an automated slicing or dicing machine
- 3. the personal protective equipment required when operating an automated slicing or dicing machine
- 4. why meat and poultry is further processed
- 5. the key features of an automated meat or poultry processing system
- 6. the advantages and disadvantages of an automated meat and poultry system compared to manual further processing
- 7. how to access organisational specifications
- 8. the importance of adhering to product specifications
- 9. why it is important to maximise yield during further processing
- 10. signs of ineffective processing
- 11. why it is important to address problems within the limits of your responsibility
- 12. how to report problems to the relevant people.

# Unit 137 Control automated meat or poultry processing 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 control an automated meat or poultry processing operation** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **controlling an automated processing operation** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

# Unit 138 Control batching 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 or measuring different ingredients to a pre-determined specification for inclusion in the 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 batching.

### 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 batching
- 1.2 check product specifications at the right time
- 1.3 set up equipment according to specification
- 1.4 make sure that material for batching 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 batching.

- 2.1 meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when carrying out batching
- 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.

The learner must be able to:

3. finish batching.

### 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 batching
- 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**

- 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 138 Control batching 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 batching** in accordance with workplace procedures.

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

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

# Unit 139 Control bottle-washing 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 controlling bottle-washing in food manufacture. 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 production schedules.
	Bottle-washers are designed to clean used glass bottles that are to be recycled. They are complex items of equipment that rely on correct maintenance of liquid levels, detergent concentrations and temperature profiles. The bottle-washer environment can be hazardous and correct Personal Protective Equipment (PPE), especially eye protection, should always be worn.

## **Performance objectives**

The learner must be able to:

1. prepare for bottle-washing.

- 1.1 prepare according to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
- 1.2 check washer tank levels, temperatures and chemical concentrations
- 1.3 set up equipment according to specification
- 1.4 make sure that bottles, crates/cases and product are 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.

The learner must be able to:

2. carry out bottle-washing.

### This means you:

- 2.1 carry out according to 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 empty bottles that are not grossly contaminated
- 2.3 check for any caustic carry-over using approved methods
- 2.4 achieve the required throughput
- 2.5 take effective action safely 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 bottle-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 follow procedures to shut down equipment correctly
- 3.3 deal correctly with items that can be recycled or reworked
- 3.4 return surplus materials and consumables to the correct place at the end of the production run
- 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**

- 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 reasons for accurate control of temperature when storing and processing dairy products
- 3. the purpose and importance of the process
- 4. what impact the process has on effluent generation and how to minimise this impact
- 5. what equipment and tools to use and their correct condition and operation
- 6. what materials to use and in what quantity
- 7. how to obtain and interpret the relevant process or ingredient specification
- 8. what recording, reporting and communication is needed, how to carry this out correctly and the reasons why it is important to do so
- 9. what action to take when the process specification is not met

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

# Unit 139 Control bottle-washing 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 bottle-washing** in accordance with workplace procedures.

Evidence of **carrying out bottle-washing** in accordance with workplace procedures.

Evidence of **finishing bottle-washing** in accordance with workplace procedures.

# Unit 140 Control bottling and packing in food manufacture

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 controlling bottling and packing processes 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 bottling and packing.

- 1.1 prepare according 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 bottling and packing materials and product are 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.

The learner must be able to:

2. carry out bottling and packing.

## This means you:

- 2.1 carry out according to 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 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 bottling and packing.

- 3.1 finish according to 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 return surplus materials and consumables to the correct place at the end of the production run
- 3.6 dispose of waste correctly
- 3.7 make equipment ready for future use after completion of the process
- 3.8 maintain effective communication
- 3.9 accurately complete all records.

## **Essential knowledge**

- 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 140 Control bottling and packing 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 bottling and packing** in accordance with workplace procedures.

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

Evidence of **finishing for bottling and packing** in accordance with workplace procedures.

# Unit 141 Control canning in food manufacture

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 skills required to control the canning of food or drink in food manufacture. The unit details the skills required to prepare for, start up and complete canning line operations successfully. It includes skills to take the appropriate action should operating problems occur, working to product specifications, production schedules and standard operating procedures.  This unit is for you if you carry out operative tasks which control the canning line in food manufacture.

### **Performance objectives**

The learner must be able to:

1. prepare for canning.

### This means you:

- 1.1 operate to the legal or regulatory requirements; the organisational health and safety, hygiene and environmental standards; and the standard operating procedures, when preparing for canning
- 1.2 check the product specifications and production schedule at the right time
- 1.3 set up equipment according to specification
- 1.4 make sure that product supply is ready to be used for canning.

### **Performance objectives**

The learner must be able to:

2. start and control canning.

- 2.1 operate to the legal or regulatory requirements; the organisational health and safety, hygiene and environmental standards; and the standard operating procedures, when canning
- 2.2 use equipment correctly and make sure that it is correctly supplied with materials and services

- 2.3 follow procedures to start up equipment correctly
- 2.4 achieve the required output to the correct specification
- 2.5 take effective action in response to operating problems within the limits of your responsibility
- 2.6 maintain effective communication.

The learner must be able to:

3. complete canning.

### This means you:

- 3.1 operate to the legal or regulatory requirements; the organisational health and safety, hygiene and environmental standards, and the standard operating procedures, when completing canning
- 3.2 follow procedures to shut down equipment correctly
- 3.3 make equipment ready for future use after completion of the canning operations
- 3.4 accurately complete all records.

## **Essential knowledge**

- 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 141 Control canning 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 canning** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **starting and controlling canning** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **completing canning** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

# Unit 142 Control conditioning 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 physically changing the properties of a product through organic or physical processes 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 conditioning.

## 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 conditioning
- 1.2 check product specifications at the right time
- 1.3 set up equipment according to specification
- 1.4 make sure that material for conditioning 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 conditioning.

- 2.1 meet the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when carrying out conditioning
- 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.

The learner must be able to:

3. finish conditioning.

### 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 conditioning
- 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**

- 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 142 Control conditioning 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 conditioning** in accordance with workplace procedures.

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

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

# Unit 143 Control conversion 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 manufacturing parts of products or finished products from a raw material in food and drink. 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 conversion.

- 1.1 operate to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions when preparing for conversion
- 1.2 check product specifications at the right time
- 1.3 set up equipment according to specification
- 1.4 make sure that material for conversion 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.

The learner must be able to:

2. carry out conversion.

### 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 conversion
- 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 conversion.

## 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 conversion
- 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**

- 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 143 Control conversion 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 conversion** in accordance with workplace procedures.

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

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

# Unit 144 Control filling 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 skills needed for you to control filling in food and drink manufacture and/or supply operations. Filling containers is important for the production of a wide range of food and drink products including milk, soup and soft drinks.
	You will be able to prepare work area, equipment and resources needed to control filling in food manufacture. You will also be able to follow organisational standard operating procedures, work within the limits of your responsibility and take action to address problems.
	This unit is for you if you work in food and drink manufacture and/or supply operations and are involved in controlling filling.

### **Performance objectives**

The learner must be able to:

1. prepare to control filling.

- 1.1 wear and use the correct personal protective equipment
- 1.2 source organisational equipment standard operating procedures
- 1.3 source the specification detailing filling specification
- 1.4 ensure that the necessary work area, equipment and resources are available and fit for use.

The learner must be able to:

2. control filling.

This means you:

- 2.1 select the correct equipment and packaging requirements when controlling filling
- 2.2 control filling of food or drink product, adhering to organisational standard operating procedures
- 2.3 work within the limits of your responsibility and take action to address problems
- 2.4 complete the necessary documentation accurately and process to organisational requirements
- 2.5 make filled container available to next stage of processing or storage.

#### **Essential knowledge**

- 1. the regulatory and organisational requirements that relate to control filling in food manufacture
- 2. how to source organisational standard operating procedures
- 3. the importance of adhering to organisational standard operating procedures
- 4. what personal protective equipment is required when controlling filling in food manufacture and how to use and wear it
- 5. how to source the tools, equipment and resources needed to control filling in food manufacture
- 6. how to dispense product into packaging, adhering to organisational standard operating procedures
- 7. how to work within the limits of your responsibility and take action to address problems
- 8. how to make filled product available for storage ready for further processing or packaging.

# Unit 144 Control filling 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 control filling** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **controlling filling** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

# Unit 145 Control fresh produce chopping operations

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 needed for you to chop fresh produce in food and drink manufacture and/or supply operations. It covers the use of cutting equipment in the production of fresh produce. The correct operation of cutting equipment is essential to maintaining the quality of the final product.
	You will be able to set up and chop fresh produce. This unit is also about working to organisational product specifications and production schedules.
	This unit is for you if you work in food and drink manufacture and/or supply operations and are involved in production operations.

### **Performance objectives**

The learner must be able to:

1. prepare for chopping.

- 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 produce 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.

The learner must be able to:

2. control chopping.

### 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 produce and services
- 2.3 establish, monitor and maintain chopping process according to specification
- 2.4 achieve the required output to the correct specification
- 2.5 make sure the product is correctly transferred to the next stage in the manufacturing operation
- 2.6 take effective action in response to operating problems within the limits of your responsibility
- 2.7 maintain effective communication.

#### **Performance objectives**

The learner must be able to:

3. finish chopping operations.

- 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**

- 1. what recording, reporting and communication is needed; how to carry this out correctly; and the reasons why it is important to do so
- 2. what action to take when the process specification is not met
- 3. how to carry out the necessary pre-start checks and why it is important to do so
- 4. how to follow the start-up procedures for the process and why it is important to do so
- 5. how to obtain the necessary resources for the process
- 6. how to follow work instructions and why it is important to do so
- 7. common sources of contamination during processing, how to avoid these and what might happen if this is not done
- 8. how to operate, regulate and shut down the relevant equipment
- 9. when it is necessary to seek assistance and how to seek it
- 10. how to follow the relevant process control procedures and why it is important to do so
- 11. different ways to carry out the process
- 12. how to carry out the process in an efficient manner and why it is important to do so
- 13. what the limits of your own authority and competence are and why it is important to work within them
- 14. how to deal with items that can be recycled or reworked
- 15. how to dispose of waste correctly and why it is important to do so
- 16. how to make equipment ready for future use.

# Unit 145 Control fresh produce chopping 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 chopping** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **control chopping** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

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

# Unit 146 Control fresh produce drying operations

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 needed to control the machine drying of fresh produce in food and drink manufacture and/or supply operations. The correct operation of drying equipment is essential to maintaining the quality of the final product.
	You will be able to set up and dry fresh produce. This unit is also about working to organisational product specifications and production schedules.
	This unit is for you if you work in food and drink manufacture and/or supply operations and are involved in production operations.

### **Performance objectives**

The learner must be able to:

1. prepare for drying.

- 1.1 operate to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
- 1.2 confirm drying specification
- 1.3 set up equipment according to drying specification
- 1.4 make sure that produce 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.

The learner must be able to:

2. control machine drying.

#### 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 produce and services
- 2.3 establish, monitor and maintain drying process according to specification
- 2.4 achieve the required output to the correct specification
- 2.5 make sure the product is correctly transferred to the next stage in the manufacturing operation
- 2.6 take effective action in response to operating problems within the limits of your responsibility
- 2.7 maintain effective communication.

### **Performance objectives**

The learner must be able to:

3. finish drying operations.

- 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**

- 1. what recording, reporting and communication is needed; how to carry this out correctly; and the reasons why it is important to do so
- 2. what action to take when the process specification is not met
- 3. how to carry out the necessary pre-start checks and why it is important to do so
- 4. how to follow the start-up procedures for the process and why it is important to do so
- 5. how to obtain the necessary resources for the process
- 6. how to follow work instructions and why it is important to do so
- 7. common sources of contamination during processing, how to avoid these and what might happen if this is not done
- 8. how to operate, regulate and shut down the relevant equipment
- 9. when it is necessary to seek assistance and how to seek it
- 10. how to follow the relevant process control procedures and why it is important to do so
- 11. different ways to carry out the process
- 12. how to carry out the process in an efficient manner and why it is important to do so
- 13. what the limits of your own authority and competence are and why it is important to work within them
- 14. how to deal with items that can be recycled or reworked
- 15. how to dispose of waste correctly and why it is important to do so
- 16. how to make equipment ready for future use.

# Unit 146 Control fresh produce drying 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 drying** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **controlling machine drying** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

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

# Unit 147 Control fresh produce grading operations

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 needed to control the machine grading of fresh produce in food and drink manufacture and/or supply operations. The correct operation of grading equipment is essential to maintaining the quality of the final product.
	You will be able to set up and grade fresh produce. This unit is also about working to organisational product specifications and production schedules.
	This unit is for you if you work in food and drink manufacture and/or supply operations and are involved in production operations.

### **Performance objectives**

The learner must be able to:

1. prepare for grading.

- 1.1 operate 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 set up equipment according to grading specification
- 1.4 make sure that produce of required specification 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.

The learner must be able to:

2. control machine 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 make sure that the plant is correctly supplied with produce and services
- 2.3 establish, monitor and maintain grading process according to specification
- 2.4 achieve the required output to the correct specification
- 2.5 make sure the product is correctly transferred to the next stage in the manufacturing operation
- 2.6 take effective action in response to operating problems within the limits of your responsibility
- 2.7 maintain effective communication.

#### **Performance objectives**

The learner must be able to:

3. finish grading operations.

- 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

- 1. what recording, reporting and communication is needed; how to carry this out correctly; and the reasons why it is important to do so
- 2. what action to take when the process specification is not met
- 3. how to carry out the necessary pre-start checks and why it is important to do so
- 4. how to follow the start-up procedures for the process and why it is important to do so
- 5. how to obtain the necessary resources for the process
- 6. how to follow work instructions and why it is important to do so
- 7. common sources of contamination during processing, how to avoid these and what might happen if this is not done
- 8. how to operate, regulate and shut down the relevant equipment
- 9. when it is necessary to seek assistance and how to seek it
- 10. how to follow the relevant process control procedures and why it is important to do so
- 11. different ways to carry out the process
- 12. how to carry out the process in an efficient manner and why it is important to do so
- 13. what the limits of your own authority and competence are and why it is important to work within them
- 14. how to deal with items that can be recycled or reworked
- 15. how to dispose of waste correctly and why it is important to do so
- 16. how to make equipment ready for future use.

# Unit 147 Control fresh produce grading 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 grading fresh produce operations** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

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

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

# Unit 148 Control fresh produce peeling operations

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 needed for you to peel fresh produce in food and drink manufacture and/or supply operations. It covers the use of equipment to remove the skins of fresh produce. The correct operation of peeling equipment is essential to maintaining the quality of the final product.
	You will be able to set up and skin fresh produce. This unit is also about working to organisational product specifications and production schedules.
	This unit is for you if you work in food and drink manufacture and/or supply operations and are involved in production operations.

#### **Performance objectives**

The learner must be able to:

1. prepare for peeling.

- 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 produce 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.

The learner must be able to:

2. control peeling.

#### 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 produce and services
- 2.3 establish, monitor and maintain peeling process according to specification
- 2.4 achieve the required output to the correct specification
- 2.5 make sure the product is correctly transferred to the next stage in the manufacturing operation
- 2.6 take effective action in response to operating problems within the limits of your responsibility
- 2.7 maintain effective communication.

#### **Performance objectives**

The learner must be able to:

3. finish peeling operations.

- 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**

- 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 148 Control fresh produce peeling 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 peeling** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **controlling peeling** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

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

# Unit 149 Control fresh produce ripening operations

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 needed for you to control the process of fresh produce ripening in food and drink manufacture and/or supply operations. It is about loading produce into ripening facilities and then maintaining them under the conditions that are necessary for ripening. The correct operation of ripening facilities is essential to maintaining the quality of the final product.
	You will be able to set up and maintain the ripening process. This unit is also about working to organisational product specifications and production schedules.
	This unit is for you if you work in food and drink manufacture and/or supply operations and are involved in production operations.

### **Performance objectives**

The learner must be able to:

1. establish and maintain produce in a ripening facility.

- 1.1 operate to the legal or regulatory requirements and the organisational health and safety, hygiene and environmental standards and instructions
- 1.2 obtain ripening specification
- 1.3 prepare ripening facility to ensure a hygienic working condition suitable for receiving produce
- 1.4 assess condition and quality of produce
- 1.5 prepare produce and load into ripening facility according to specification
- 1.6 establish environmental conditions within ripening facility to optimise the ripening process
- 1.7 observe, measure and report on ripening
- 1.8 identify and report incidences where ripening is not happening according to specification
- 1.9 maintain environmental conditions within the system to achieve required ripening

1.10 maintain accurate records of the ripening process.

#### Performance objectives

The learner must be able to:

2. unload ripening facilities.

#### 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 facilitate the cooling process to prepare for unloading
- 2.3 unload produce in a manner which maintains quality
- 2.4 establish produce in clean storage, in preparation for despatch
- 2.5 clean ripening facility into a hygienic condition in preparation for the batch
- 2.6 maintain effective communication
- 2.7 maintain accurate records of ripening.

#### **Essential knowledge**

- 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 and why produce is ripened
- 3. the ripening specifications of various products and how these vary according to seasonality
- 4. countries of origins, seasons and varieties
- 5. how and why produce is prepared for ripening
- 6. pre-ripening stowage and treatments
- 7. how to access condition and quality of pre-ripened produce
- 8. how the pre-ripened condition of the produce can impact on the ripening process
- 9. the facilities used to ripen produce and how they are loaded and used to optimise the ripening process
- 10. the ripening facilities that are needed to support the ripening process
- 11. the environmental conditions required for effective ripening and cooling
- 12. how packaging, spacing, airflow, temperature, ventilation, artificial enhancers and product mix can aid/inhibit the ripening process
- 13. how to monitor and maintain the ripening process
- 14. how to measure ripeness in fresh produce and identify quality issues
- 15. how the ripening process can impact on product quality issues
- 16. how to handle post-ripened produce
- 17. the importance of effective ripening linked to profitability
- 18. the importance of maintaining product control and traceability during ripening operations
- 19. the destructive and non-destructive monitoring techniques used with ripened fresh produce
- 20. how ineffective ripening can lead to wastage and potential customer complaints
- 21. the storage conditions required to maintain the quality of ripened produce

- 22. how to dispose of waste according to organisational procedures
- 23. the limits of your own authority and competence and why it is important to work within those limits
- 24. what recording, reporting and communication is needed; how to carry this out correctly; and the reasons why it is important to do so.

# Unit 149 Control fresh produce ripening 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 **establishing and maintaining ripening operations** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

Evidence of **unloading ripening facilities** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

# Unit 150 Control fresh produce washing operations

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 needed for you to wash fresh produce in food and drink manufacture and/or supply operations. It covers the preparation of produce washes and the use of washing equipment to remove debris and residues from the surface of fresh produce. The correct operation of washing equipment is essential to maintaining the quality of the final product.
	You will be able to set up and wash fresh produce. This unit is also about working to organisational product specifications and production schedules.
	This unit is for you if you work in food and drink manufacture and/or supply operations and are involved in production operations.

### **Performance objectives**

The learner must be able to:

1. prepare to wash fresh produce.

- 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 washing specification
- 1.3 prepare washing facilities into a condition suitable for receiving product
- 1.4 add water and prepare wash according to washing specification
- 1.5 obtain produce according to specification requirements
- 1.6 take effective action in response to operating problems
- 1.7 maintain effective communication.

The learner must be able to:

2. control washing.

#### 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 produce in washing facility
- 2.3 establish, monitor and maintain washing process according to washing 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 product from washing facility and transfer to the next stage in the process
- 2.7 take effective action in response to operating problems
- 2.8 maintain effective communication.

## **Performance objectives**

The learner must be able to:

3. finish produce washing operations.

- 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 and wash according to organisational procedures
- 3.3 make washing facilities ready for future use, after the completion of the process
- 3.4 maintain effective communication
- 3.5 accurately complete all records.

#### Essential knowledge

- 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. why produce is washed
- 3. how the washing process can help maintain food safety
- 4. the treatments that are used to prepare water for use in the washing process
- 5. the washing facilities that are required to wash produce
- 6. how to obtain and interpret the washing specifications
- 7. how produce and water quality can impact on the washing process
- 8. how to assess the quality of the water used to wash product
- 9. how to prepare the wash to be used in the washing process including the safe use of any additives controlled by COSHH
- 10. how to prepare washing facilities for operation
- 11. the methods used to hold produce in water and control washing times
- 12. how produce quality and size impacts on washing times
- 13. how and why it is important to monitor the washing process and water quality
- 14. how to assess the quality of washed produce
- 15. why and how washing can form a contamination point
- 16. how washed produce should be handled to maintain condition and quality
- 17. common quality problems and their likely causes
- 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 importance of effective washing operations linked to profitability
- 21. the importance of maintaining product control and traceability during washing operations
- 22. how ineffective washing operations can lead to wastage and potential customer complaints
- 23. how to deal with operating problems within limits of your own authority and competence and why it is important to work within those limits
- 24. what recording, reporting and communication is needed; how to carry this out correctly; and the reasons why it is important to do so.

# Unit 150 Control fresh produce washing 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 wash fresh produce** as part of your role in accordance with workplace procedures and within the limits of your own responsibilities.

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

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