

General information for centres

Unit title: Food Hygiene Intermediate

Unit code: HP4M 47

Unit purpose: This unit is designed to develop the candidate's knowledge and understanding of the principles of Food Safety. The unit is equivalent to the Royal Environmental Health Institute of Scotland (REHIS) Intermediate Food Hygiene certificate.

On completion of the unit, the candidate should be able to:

- 1 describe the principles of food safety identifying the role of bacteria and non-bacterial agents.
- 2 describe the production of safe food in relation to the prevention of food poisoning, food-borne illness and contamination by physical and allergenic materials.
- 3 explain the rationale behind food safety management systems based on the principles of Hazard Analysis and Critical Control Point (HACCP) and the role of current hygiene legislation.
- 4 explain the need for satisfactory design, construction and maintenance of food premises and equipment and the benefits of effective cleaning and disinfection.
- 5 explain the principles involved in the preservation and safe storage of food.

Credit points and level: 1 SQA Credit at SCQF level 7: (8 SCQF credit points at SCQF level 7*)

*SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from National 1 to Doctorates.

Recommended prior knowledge and skills: Candidates should have good communication competence demonstrated by the achievement of Core Skills *Communication* at SCQF level 5 or above. They should also have achieved an Elementary Food Hygiene Unit/qualification, for example NQ Unit DC0K 10 *Food Hygiene Elementary Intermediate 1* and/or achieved the REHIS Elementary Food Hygiene Certificate (or equivalent) or Standard Grade Home Economics at General level.

Core Skills: There are no opportunities to develop Core Skills in this unit.

Context for delivery: If this unit is delivered as part of a group award, it is recommended that it should be taught and assessed within the subject area of the group award to which it contributes.

Assessment: Each outcome can be assessed individually by means of closed-book questioning or it may be possible to combine outcomes. An exemplar instrument of assessment and marking guidelines have been produced to show the national standard of achievement required at SQA Advanced level.

Unit specification: statement of standards

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The sections of the unit stating the outcomes, knowledge and/or skills, and evidence requirements are mandatory.

Where evidence for outcomes is assessed on a sample basis, the whole of the content listed in the knowledge and/or skills section must be taught and available for assessment. Candidates should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

Outcome 1

Describe the principles of food safety identifying the role of bacteria and non-bacterial agents

Knowledge and/or Skills

- Benefits of high standards of food hygiene
- Types of micro-organisms
- Types of non-bacterial agents mycotoxin producing moulds
- Factors which affect growth of micro-organisms
- The role of spores in the survival of bacteria

Evidence requirements

Candidates will need to provide evidence to demonstrate their knowledge by showing that they can:

- identify the moral, legal and financial benefits of high standards of food hygiene.
- define: micro-organisms (moulds, yeasts, viruses, and bacteria) and describe their involvement in food spoilage, food poisoning and food-borne illness.
- identify the problems caused by chemicals (including metals) and by the consumption of poisonous plants, fish and viruses, their involvement in food poisoning and contamination and relevant preventative measures.
- describe binary fission, average generation time and the factors which affect the bacterial survival and multiplication: time, nutrients, pH level, moisture, atmosphere, temperature.
- describe the function of bacterial spores, their formation and their role in the survival of bacteria.

Evidence of knowledge for this outcome will be assessed on a sample basis. The sample must cover all knowledge and skills items listed above. The questions will be allocated marks and candidates must obtain a mark of 60% or more for this outcome.

Assessment guidelines

This outcome will be assessed by means of short answer responses to unseen closed-book questions. The assessment will be carried out in controlled conditions. The questions must cover all knowledge and skills items and it is envisaged the assessment will take approximately 30 minutes.

Centres must ensure that there are an appropriate number of questions available for any re-assessment to ensure that candidates are not offered an assessment which has been recently undertaken by other candidates. Questions must be of the same standard and must present the same level of challenge to candidates.

The assessment for this outcome could be combined with the assessment of the other four outcomes of the unit. It is envisaged that an assessment covering all five outcomes would last approximately 2.5 hours.

Outcome 2

Describe the production of safe food in relation to the prevention of food poisoning, food-borne illness and contamination by physical and allergenic materials

Knowledge and/or Skills

- Food poisoning and food-borne disease
- Sources, routes and foods commonly involved in food poisoning/food-borne infection
- Physical and allergenic contaminants and their sources
- Control of food poisoning and food-borne infection and other food safety hazards

Evidence requirements

Candidates will need to provide evidence to demonstrate their knowledge by showing that they can:

- describe the main differences between food poisoning and food-borne disease in terms of their effects and characteristics.
- define and provide examples of high-risk foods.
- describe cross contamination, differentiating between direct and indirect.
- identify the most common physical and allergenic contaminants and the most likely sources.
- identify the sources, food vehicles, and specific control measures of the following food-poisoning bacteria:
 - Salmonella species
 - Staphylococcus aureus
 - Clostridium perfringens
 - Bacillus cereus
 - Clostridium botulinum
- and the following food-borne illnesses:
 - *Campylobacter species*
 - Listeria species
 - V TEC (verocytotoxin producing E.coli)
 - Norovirus
- identify sources of physical and microbial contamination related to personal hygiene and describe how they can be controlled
- list occasions when a food handler should wash and disinfect their hands and describe a suitable method for washing, disinfecting and drying hands
- describe methods whereby contamination of food can be prevented including the FSA guidance on E. coli O157 Control Cross contamination.

Evidence of knowledge for this outcome will be assessed on a sample basis. The sample must cover all knowledge and skills items listed above. The questions will be allocated marks and candidates must obtain a mark of 60% or more for this outcome.

Assessment guidelines

This outcome will be assessed by means of short answer responses to unseen closed-book questions. The assessment will be carried out in controlled conditions. The questions must cover all knowledge and skills items and it is envisaged the assessment will take approximately 30–45 minutes.

Centres must ensure that there are an appropriate number of questions available for any re-assessment to ensure that candidates are not offered an assessment which has been recently undertaken by other candidates. Questions must be of the same standard and must present the same level of challenge to candidates.

The assessment for this outcome could be combined with the assessment of the other four outcomes of the unit. It is envisaged that an assessment covering all five outcomes would last approximately 2.5 hours.

Outcome 3

Explain the rationale behind food safety management systems based on the principles of HACCP and the role of current hygiene legislation.

Knowledge and/or Skills

- Current food-hygiene legislation
- Principles of HACCP
- ◆ HACCP-based systems
- The role of the supervisor/middle manager in food safety

Evidence requirements

Candidates will need to provide evidence to demonstrate their knowledge by showing that they can:

- describe the main requirements of current food-hygiene legislation, Food Safety Act 1990, Food Hygiene (Scotland) Regulations 1169/2011 and 852/2004.
- describe the role of the authorised enforcement officer and their powers.
- define the terms: hazards, controls, critical control points, monitoring, validation, verification and recording.
- describe the main benefits/advantages of having a HACCP-based system.
- outline the food hygiene/HACCP training requirements legally required for food handlers and the benefits of structured training.
- explain the purpose of having establishment specific standards eg house rules and give examples of these.
- describe responsibilities of supervisors/middle managers with regard to food-safety management systems, food safety policies, quality assurance and control, particularly with regard to HACCP and Allergen control.

Evidence of knowledge for this outcome will be assessed on a sample basis. The sample must cover all knowledge and skills items listed above. The questions will be allocated marks and candidates must obtain a mark of 60% or more for this outcome.

Assessment guidelines

This outcome will be assessed by means of short answer responses to unseen closed-book questions. The assessment will be carried out in controlled conditions. The questions must cover all knowledge and skills items and it is envisaged the assessment will take approximately 30–45 minutes.

Centres must ensure that there are an appropriate number of questions available for any re-assessment to ensure that candidates are not offered an assessment which has been recently undertaken by other candidates. Questions must be of the same standard and must present the same level of challenge to candidates.

The assessment for this outcome could be combined with the assessment of the other four outcomes of the unit. It is envisaged that an assessment covering all five outcomes would last approximately 2.5 hours.

Outcome 4

Explain the need for satisfactory design, construction and maintenance of food premises and equipment and the benefits of effective cleaning and disinfection

Knowledge and/or Skills

- Principles of design of the working environment
- Uses of materials relevant for premises and equipment
- The importance of effective maintenance, cleaning and disinfection
- The purpose of provision of effective lighting, ventilation, services
- Waste storage and disposal systems
- The control of food pests
- Cleaning and disinfection of food premises, equipment and utensils

Evidence requirements

Candidates will need to provide evidence to demonstrate their knowledge by showing that they can:

- describe the principles involved in the satisfactory design of food premises, equipment and utensils.
- describe the types of materials used in the construction of food premises and equipment.
- explain the need for proper maintenance of premises and equipment and how this might be achieved.
- explain the importance of the necessity for the satisfactory provision of lighting, ventilation, water, power supplies and drainage highlighting good practice/legal requirements.
- describe the main types of waste storage and disposal systems available for food premises.
- explain how the Waste (Scotland) Regulations 2012 can impact food businesses.
- identify the main hazards associated with food pests.
- describe the habitat, characteristics, food requirements, and signs of infestation of food pests.
- describe a system for the effective cleaning and disinfection of premises, work surfaces and equipment.
- understand chemical disinfectants British Standards BS EN 1276:1997 or BS EN 13697:2001.

Evidence of knowledge for this outcome will be assessed on a sample basis. The sample must cover all knowledge and skills items listed above. The questions will be allocated marks and candidates must obtain a mark of 60% or more for this outcome.

Assessment guidelines

This outcome will be assessed by means of short answer responses to unseen closed-book questions. The assessment will be carried out in controlled conditions. The questions must cover all knowledge and skills items and it is envisaged the assessment will take approximately 30–45 minutes.

Centres must ensure that there are an appropriate number of questions available for any re-assessment to ensure that candidates are not offered an assessment which has been recently undertaken by other candidates. Questions must be of the same standard and must present the same level of challenge to candidates.

The assessment for this outcome could be combined with the assessment of the other four outcomes of the unit. It is envisaged that an assessment covering all five outcomes would last approximately 2.5 hours.

Outcome 5

Explain the principles involved in the preservation and safe storage of food

Knowledge and/or Skills

- Importance of satisfactory storage
- Storage units
- Defrosting and cooling of food
- Stock rotation of food
- Date marking of food
- Principles of food preservation

Evidence requirements

Candidates will need to provide evidence to demonstrate their knowledge by showing that they can:

- explain the importance and practical application of satisfactory storage to minimise the risk of contamination and decomposition of food and the prevention of microbial growth.
- identify the importance of the following factors in relation to the effectiveness of unit: siting, maintenance and cleaning, appropriate loading, temperature checks.
- explain the controls necessary when defrosting food.
- explain the correct procedures for cooling hot or cooked food to be used at a later stage.
- describe what is meant by stock rotation and its benefits.
- explain the use of terms 'Use-by' and 'Best Before' on foods.
- describe the basic principles involved in the preservation of food by the use of high/low temperature, dehydration, chemicals, modification of atmosphere and smoking.

Evidence of knowledge for this outcome will be assessed on a sample basis. The sample must cover all knowledge and skills items listed above. The questions will be allocated marks and candidates must obtain a mark of 60% or more for this outcome.

Assessment guidelines

This outcome will be assessed by means of short answer responses to unseen closed-book questions. The assessment will be carried out in controlled conditions. The questions must cover all knowledge and skills items and it is envisaged the assessment will take approximately 30–45 minutes.

Centres must ensure that there are an appropriate number of questions available for any re-assessment to ensure that candidates are not offered an assessment which has been recently undertaken by other candidates. Questions must be of the same standard and must present the same level of challenge to candidates.

The assessment for this outcome could be combined with the assessment of the other four outcomes of the unit. It is envisaged that an assessment covering all five outcomes would last approximately 2.5 hours.

Administrative information

| Unit code: | HP4M 47 |
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| Unit title: | Food Hygiene Intermediate |
| Super class category: | NH |
| Original date of publication: | August 2017 |
| Version: | 01 |

History of changes:

| Version | Description of change | Date |
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Unit specification: support notes

Unit title: Food Hygiene Intermediate

This part of the unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this unit is at the discretion of the centre, the notional design length is 40 hours.

Guidance on the content and context for this unit

This unit is intended to develop the candidate's knowledge of food hygiene, building upon knowledge gleaned while undertaking an Elementary Food Hygiene course or National Certificate related unit. A strong emphasis should be placed on the importance of controls and how as a part of a food safety management system they can be effective as a means of eliminating or reducing the recognised food hazards: Microbiological, Physical, Chemical and Allergenic to a safe level. Candidates should be encouraged to complete Hazard Analysis/HACCP charts in order to ensure a holistic understanding in practice of the practicalities of this concept. Candidates should be encouraged to create a 'Glossary of Terms' for this unit to aid understanding of food hygiene specific terminology. These terms should include the following: *Food Hygiene, HACCP, hazards, controls, CCPs, validation, verification, monitoring, recording, hazard analysis, micro-organism, pathogen, food poisoning, food spoilage, gastroenteritis, healthy carrier, convalescent carrier, case, binary fission, optimum, toxins, incubation/onset period, contamination, cross contamination, high risk food, food allergen, allergy and intolerance, cleaning, disinfection, disinfectant, sterilisation, bactericide, detergent, bactericidal detergent, sanitizer, food pest.*

Outcome 1

This helps to 'set the scene' in terms of the problems associated with the practice of poor food hygiene practices in the workplace and the benefits of having high standards. It looks at the recent food poisoning figures and any trends there may be in terms of new pathogens or particular problem areas/practices. It then involves the consideration of micro-organisms and non-bacterial agents. Bacteriology is also linked to this outcome allowing underpinning knowledge to be developed at an early teaching/learning stage, this would include size, shape, structural features and toxin formation.

Candidates should be introduced to the consequences of poor food hygiene.

The causes and trends of food poisoning outbreaks over the past 10-year period in Scotland should also be considered.

Outcome 2

This outcome allows close examination of physical, chemical and bacterial contamination and focuses on their sources and control mechanisms. This outcome also allows examination of allergenic awareness in relation to the 14 common allergens and their likely sources, along with the potential hazards to the consumer arising through allergenic contamination of other food and drink products. Candidates should be encouraged to link this knowledge to any practical cookery activities they may be involved in at the time, identifying which of the 14 allergens may be present in any food or drinks prepared. A study should also take place of the important food poisoning bacteria and those responsible for food borne illness, giving practical examples of outbreaks linked to each, where possible.

In relation to personal hygiene, reference should be made to:

- ♦ boils
- ♦ cuts
- ♦ spots
- ♦ skin infections
- ♦ sneezing
- ♦ coughing
- ♦ smoking
- eating in a food room
- wearing jewellery/nail varnish
- reporting of illness

There should also be an introduction of hazards associated with the presence of food pests.

Outcome 3

This outcome provides the opportunity for the candidate to come to terms with the extremely important concept of HACCP with all its theory and practical application within a food business. It also introduces current food hygiene legislation and its relevance to HACCP, temperatures, the role of the Environmental Health Officer (EHO) and their powers especially in terms of notices. The Food Standards Agency should be covered here, looking at their role in terms of food safety. Candidates should be encouraged to complete HACCP charts which may be linked to any practical cookery activities they may be involved in at the time.

The following should be covered:

- The main requirements of the Food Safety Act; Food Hygiene (Scotland) Regulations 2006; Regulation EC No 852/2004 and the General Food Regulations 2004
- EU Food Information for Consumer Regulation 1169/2011 and Food Information regulations 2014
- The role and powers of authorised enforcement officers to include the issue of Hygiene Improvement Notice and Hygiene Emergency Prohibition Notice
- The seven principles of HACCP as defined by the Codex Alimentarius
- The role of the Food Standards Agency and how it relates to the local authority
- The background to food-hazard analysis systems and the rationale behind them
- The main prerequisite requirements for a food business prior to HACCP implementation
- Examples of food safety management systems SFBB (Safer Food Better Business) and CookSafe Food Safety Assurance System
- The responsibilities of supervisors/middle managers to include: the establishment of food-safety

policies, quality assurance and control, auditing systems, inspecting premises, staff training, control of allergenic hazards

Outcome 4

This outcome looks at the practicalities of the design of food premises/equipment and how their effectiveness in terms of food safety can be achieved. Legal aspects as well as good practice issues should be investigated with planning exercises, visits to existing food premises encouraged.

Also in this outcome, there is an opportunity to look at food pests and the part they play in food hygiene/spoilage, the legal position in terms of infestation and how they might be controlled by effective design and construction and by various controls.

It should cover:

- the need for proper maintenance of premises and equipment and how this might be achieved.
- the main hazards associated with food pests rodents, birds and insects.
- the habitat, characteristics, food requirements, signs of infestation of food pests.
- what is meant by Environmental Control, Physical Control and Chemical Control methods
- energies, eg physical, chemical, heat, used in the cleaning process with practical application.
- cleaning terms to be understood with practical application, including: Bactericide, Cleaning, Detergent, Disinfectant, Disinfection, Bactericidal Detergent, Sanitiser and Sterilisation.

Outcome 5

This outcome examines the importance of the correct storage of food as a means of preventing food poisoning/spoilage. In particular effective storage of high risk/raw foods/ready-to-eat foods should be emphasised and the role of stock rotation. Procedures for the defrosting of stored food and the cooling down of hot food should be highlighted. Food preservation techniques/methods should be dealt with here emphasising the important part this plays in the food industry and understanding the principles involved in the preservation and subsequent storage of foodstuffs.

It should cover:

- foods fresh fruit and vegetables, raw meat and poultry, fish and shellfish, frozen foods, high-risk foods, canned and dried goods, eggs.
- the importance of the following factors in relation to the effectiveness of the storage unit: siting, maintenance and cleaning, appropriate loading, temperature checks in order to have an effective refrigerator
- examples of food preservation by the use of pasteurisation, ultra-heat treatment, sterilisation, canning, chilling, freezing, vacuum packing, dehydration, and the use of salt and sugar.

Guidance on the delivery and assessment of this unit

Lecturers responsible for the delivery of this unit should be suitably qualified, preferably with a Diploma in Advanced Food Hygiene and with knowledge of HACCP. Current REHIS approved text books and web based materials, or that from other recognised companies, will help with the delivery. Guest speakers may be considered, eg an Environmental Health Officer for input into legislation.

This unit is likely to form part of a group award, one in which the candidates are provided with the skills and competences necessary to become Hospitality Supervisors/Managers/Middle managers. This Unit is vital in order to provide them with the knowledge necessary to be responsible for food hygiene in a practical situation including having an awareness of HACCP as the basis on which food-safety management systems need to be based. Candidates should be encouraged to apply their knowledge in other areas of their course (where appropriate) particularly if they are to be assessed in units that involve practical cookery. The achievement of this unit will allow candidates to apply to REHIS for an Intermediate food hygiene certificate.

Open learning

If this unit is delivered by open or distance-learning methods, additional resources will be required for candidate support, assessment and quality assurance.

Equality and inclusion

This unit specification has been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners should be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence.

Further advice can be found on our website www.sqa.org.uk/assessmentarrangements.

General information for candidates

Unit title: Food Hygiene Intermediate

This unit is designed to give you an understanding of the principles of Food Hygiene. The unit is equivalent to the Royal Environmental Health Institute of Scotland's (REHIS) Intermediate Food Hygiene Certificate. Successful achievement of the unit will provide you with the level of knowledge expected of someone working in a supervisory role within the food industry.

There are five outcomes in this unit.

In the first outcome you will be introduced to the problems associated with poor food-hygiene practices and the benefits of having high standards of hygiene.

The second outcome examines both physical and bacterial contamination and focuses on their sources and control mechanisms.

The third outcome focuses on the extremely important concept of HACCP (Hazard Analysis and Critical Control Points). This will include both theory and practical application within a food business.

In the fourth outcome you will look at the practicalities of designing food premises to ensure they are effective in terms of achieving food safety and the need for proper maintenance of premises and equipment. You will also consider food pests and the part they play in food hygiene/spoilage and how they might be controlled by effective design and construction.

In the final outcome you will look at the importance of the correct storage of food — particularly high risk food, raw food and ready to eat foods - as a means of preventing food poisoning/spoilage. Food preservation techniques and methods will also be covered in this outcome.

The assessment of the five outcomes will be by means of unseen closed-book short answer questions.

On successful achievement of this unit, you will be eligible to apply to REHIS for the Intermediate Food Hygiene Certificate.