

H6CC 75 Unit Support Notes — Safety Requirements of the Food and Drink Manufacturing Industry (National 5)



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Please refer to the note of changes at the end of this document for details of changes from previous version (where applicable).

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Introduction

These support notes are not mandatory. They provide advice and guidance on approaches to delivering and assessing the Safety Requirements of the Food and Drink Manufacturing Industry (National 5) Unit.

They are intended for teachers and lecturers who are delivering this Unit.

They should be read in conjunction with:

- ◆ the National 5 Safety Requirements of the Food and Drink Manufacturing Industry *Unit Specification*
- ◆ the National 5 Food and Drink Manufacturing Industry *Course Specification*
- ◆ the National 5 Safety Requirements of the Food and Drink Manufacturing Industry *Course Support Notes*
- ◆ appropriate assessment support materials

General guidance on the Unit

Aims

The general aim of the Unit is to give learners an awareness of the safety requirements in the food and drink manufacturing industry.

This Unit will introduce learners to general aspects of safety in the food and drink manufacturing industry and could be tailored to a specific food or drink product depending on the geographical location.

Learners will gain an understanding of the legislation/compliances/cultural influences that govern food and drink production and manufacture. Learners will also become aware of general health and safety aspects associated with industry. This will give learners an insight into how legislation and procedures are fundamentally important for the production of safe products.

This Unit is suitable for learners who are S4 and above to give them an insight into the industry and for those hoping to gain employment in the food and drink manufacturing industry. It is also suitable for those who are employed but wish to broaden their knowledge and skills for work in the food and drink industry.

It aims to facilitate progression to further study including into National Progression Award in Food Manufacture (SCQF level 6) and then possibly onto Higher National and degree programmes in Food Science and Technology.

Learners who complete this Unit will be able to:

- 1 Give a general overview of the legislation governing the food and drink manufacturing industry.
- 2 Identify food safety hazards and control measures.

Progression into the Unit

Entry to this Unit is at the discretion of the centre. However, learners would normally be expected to have attained the skills, knowledge and understanding required by one or more of the following or equivalent qualifications and/or experience:

- ◆ National 4 Health and Food Technology Course or relevant component Units
- ◆ National 4 Hospitality: Practical Cookery Course or relevant component Units
- ◆ National 4 Biology Course or relevant component Units

There may also be progression from National 4 Chemistry, National 4 Environmental Science, National 4 Physics or National 4 Science Courses.

In terms of prior learning and experience, relevant experiences and outcomes may also provide an appropriate basis for doing this Unit.

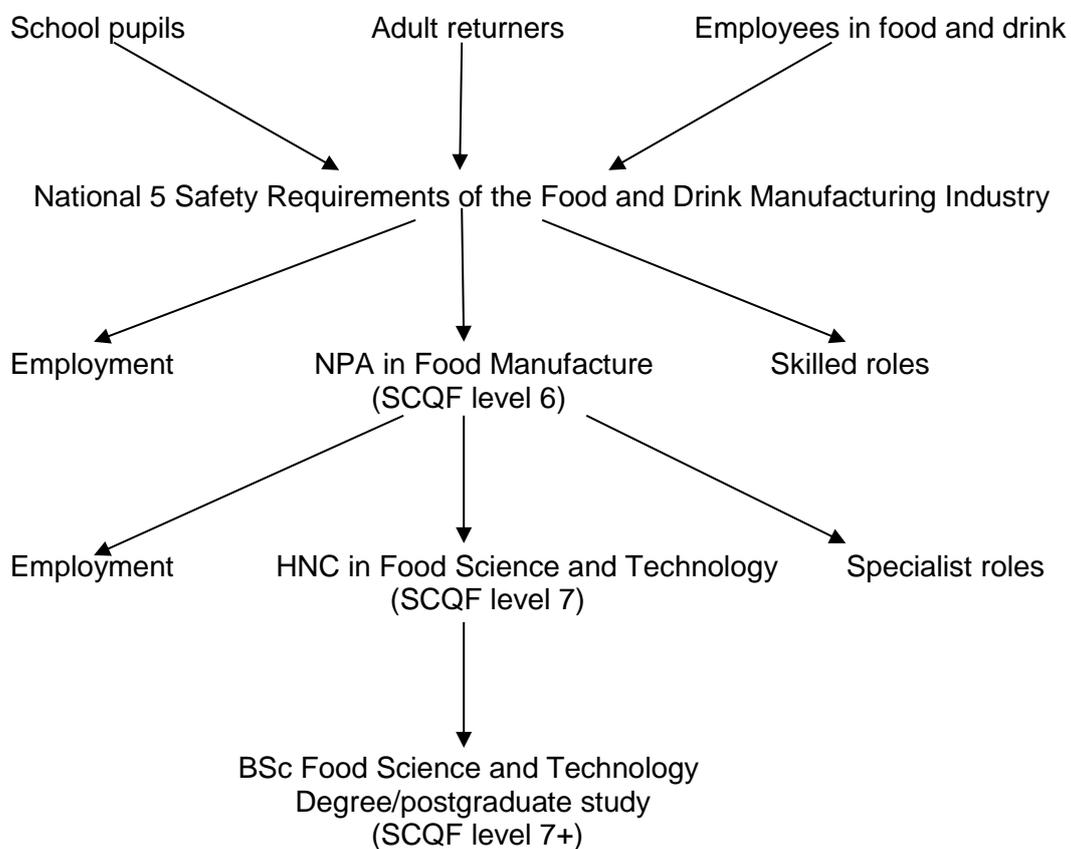
Skills, knowledge and understanding covered in this Unit

Information about skills, knowledge and understanding is given in the Skills for Work Food and Drink Manufacturing Industry *Course Support Notes*.

If this Unit is being delivered on a free-standing basis, teachers and lecturers are free to select the skills, knowledge, understanding and contexts which are the most appropriate for delivery in their centres as well as what is appropriate for the career opportunities of the learners in their area.

Progression from this Unit

Progression opportunities from this Unit onto further Units at this or the next SCQF level could include:



Approaches to learning, teaching and assessment

Where possible, learning should occur through interaction with others, undertaking activities and through the building of a portfolio of outcomes and evaluations. Learners may benefit from:

- ◆ working in small research groups
- ◆ basic knowledge of a science-based subject (this is not essential)
- ◆ presenting their findings to the class, either individually or as a group
- ◆ class discussion of findings
- ◆ working individually to produce portfolios
- ◆ research activities to locate and analyse information online
- ◆ visits from those involved in the food and drink manufacturing industry (eg manufacturing professionals, environmental health professionals or local processors)

It is recommended that evidence of practical skills demonstrated and tasks completed is gathered in individual learner portfolios. These may include outputs from group work but the majority of the evidence should be produced by each individual learner.

If learners have varied food manufacturing interests, opportunities may exist for the assessment brief to be tailored to meet individual areas of interest.

Alternatively, learners could work on a single theme determined by the centre.

All activities should encourage the development of self-confidence and understanding of others. It is anticipated that discussion of learners' experiences and findings is carried out throughout the Unit and this used as a basis on which to build personal knowledge and experience, as well as to enable comparison with others regarding different food production/manufacturing areas.

Delivery of this Unit should be as practical as possible.

By adopting the learning and teaching approaches highlighted above and in the Outcomes and corresponding Evidence Requirements, this Unit will provide learners with the opportunity to develop the following essential skills for life, learning and work:

- ◆ time management, by meeting assignment deadlines and completion of tasks
- ◆ analytical and interpretative skills, by analysing data and collecting information
- ◆ presentation skills, by producing information to be shared with other learners
- ◆ independent learning, by producing individual reports and portfolios
- ◆ responsibility, by taking charge of their learning and producing the outcomes required
- ◆ confidence, by working and presenting information to classmates as well as meeting individuals from industry
- ◆ citizenship, by making links with industry

Where this Unit is taken as part of the Skills for Work: Food and Drink Manufacturing Industry Course, learners will be able to develop their skills and knowledge further, thus increasing the opportunity for employment/promotion in the sector.

Some examples of learning and teaching activities are given in the following table:

Outcome	Approaches to learning and teaching	Approaches to assessment	Approaches to gathering evidence
Outcome 1 Give a general overview of the legislation governing the food and drink manufacturing industry			
1.1 Giving examples of legislation relating to personnel	Legislation could be investigated that relates to personal hygiene, Hazard Analysis and Critical Control Point (HACCP) and health and safety in food manufacture in general, or a specific product or industry, eg hand washing, Personal Protective Equipment (PPE), monitoring and recording, manual handling, cleaning and disinfection.	An open-book, flexible approach to assessment should be employed. This would allow the diversity of the industry to be investigated by learners.	This could be a portfolio, based on research carried out on specific legislation that governs the food and drink manufacturing industry. Poster presentation/oral presentation of the information collected would also be acceptable.
1.2 Giving examples of legislation relating to a specific product	Investigation to provide overview of types of legislation relating to product could include traceability, labelling, (food information for consumers), weights and measures, date marking, Protected Geographical Indication (PGI).	An open-book, flexible approach to assessment should be employed. This would allow the diversity of products to be investigated by learners.	This could be a portfolio, based on investigations evaluating information given on the food and drink labels. Poster presentation/oral presentation of the information collected would also be acceptable.
1.3 Giving examples of legislation relating to a specific workplace	Investigation into general health and safety requirements, and food safety requirements relating to a	An open-book, flexible approach to assessment should be employed. This would allow learners to investigate a specific	This could be a portfolio, based on relevant legislation for a specific food and drink production/manufacturing industry. Poster presentation/oral presentation of

	particular industry of interest to learners could include cleaning and disinfection, Control of Substances Hazardous to Health (COSHH), and separation to prevent cross-contamination.	workplace.	the information would also be acceptable.
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Outcome	Approaches to learning and teaching	Approaches to assessment	Approaches to gathering evidence
Outcome 2 Identify food safety hazards and control measures			
2.1 Listing types of food safety hazards	Overview of HACCP system of food safety management in the food and drink manufacturing industry highlighting types of hazard, ie contamination, growth of micro-organisms and survival of pathogens.	An open-book, flexible approach to assessment could be employed as this could highlight that hazards differ depending on the process and product.	This could be a portfolio, based on a particular producer/ manufacturer or a number of manufacturers could be investigated giving learners a wide base of knowledge. Poster presentation/oral presentation of the information would also be acceptable.
2.2 Describing the types of contamination and giving examples of how an employee could introduce contamination to a product	Research into examples of contamination of specific food or drinks by micro-organisms, chemicals, physical matter and allergens.	An open-book, flexible approach to assessment should be employed to allow learners to investigate types of contamination associated with a range of foods and drinks and suggest how it might have occurred.	This could be a portfolio, based on a specific food or the ingredients used in that product, giving the learners the opportunity to investigate an array of products. Poster presentation/oral presentation of the information would also be acceptable.
2.3 Giving an overview of how hazards are controlled in the food and drink manufacturing industry	Investigation of types of controls, critical control points and examples of monitoring in a HACCP system used in the food and drink manufacturing industry.	An open-book, flexible approach to assessment should be employed to allow learners to appreciate that the design of the HACCP system depends on the process and product.	This could be portfolio-based. Poster/oral presentation would also be acceptable. A diagrammatic presentation could be particularly appropriate.

An exemplar checklist for use with this Unit is provided as an appendix:

Appendix 2: Exemplar Checklist

A portfolio that combines Outcomes 1 and 2 in a holistic approach would be beneficial to the delivery of this Unit. This combined approach to assessment would ensure that there will be a minimum of repetition allowing more time for learning.

By using this approach the learning needs of individuals could be catered for in the Unit.

Developing skills for learning, skills for life and skills for work

Learners are expected to develop broad generic skills as an integral part of their learning experience.

1 Literacy

1.3 Listening and talking

There would be an opportunity to develop listening and talking skills by ensuring learners work in groups and participate in transfer of information between individuals.

2 Numeracy

2.4 Information handling

Learners will be introduced to control and hazard minimising aspects of food processing and manufacture and this will highlight the numeracy required to ensure that products have a consistent quality and quantity and safety. This will include information handling.

4 Employability, enterprise and citizenship

4.1 Employability

The overall purpose of this Unit is to introduce learners to the skills and qualities required by the food and drink industry in its employees. Completion of this Unit will give learners transferable skills for employability.

5 Thinking skills

5.1 Remembering

5.2 Understanding

A knowledge and understanding of a specific food and drink processor or manufacturer will be required to complete this Unit.

E-assessment

E-assessment can play an important role in the design and delivery of National Courses and Units by supporting integration and learner personalisation and choice. While it is important not to introduce new, additional ICT skills or knowledge, it may be that learners may be using ICT in working towards their assessment.

The following methods could be used to support learning, teaching and assessment:

- ◆ online testing to reinforce learning and for formative assessment
- ◆ web-based research
- ◆ e-portfolios to support personalisation and integration
- ◆ blogs to capture learners' reflections on their learning and to contribute to authenticating any Coursework they carry out in their own time

Equality and inclusion

It is recognised that centres have their own duties under equality and other legislation and policy initiatives. The guidance given in these *Unit Support Notes* is designed to sit alongside these duties but is specific to the delivery and assessment of the Unit.

Alternative approaches to Unit assessment to take account of the specific needs of learners can be used. However, the centre must be satisfied that the integrity of the assessment is maintained and that the alternative approach to assessment will, in fact, generate the necessary evidence of achievement.

Appendix 1: Reference documents

The following reference documents will provide useful information and background.

- ◆ Assessment Arrangements (for disabled candidates and/or those with additional support needs) — various publications on SQA’s website: <http://www.sqa.org.uk/sqa/14976.html>
- ◆ *Building the Curriculum 4: Skills for learning, skills for life and skills for work*
- ◆ *Building the Curriculum 5: A framework for assessment*
- ◆ Course Specifications
- ◆ Design Principles for National Courses
- ◆ *Guide to Assessment* (June 2008)
- ◆ Overview of Qualification Reports
- ◆ *Overview of Qualification Reports*
- ◆ *Principles and practice papers for curriculum areas*
- ◆ *Research Report 4 — Less is More: Good Practice in Reducing Assessment Time*
- ◆ *Coursework Authenticity — a Guide for Teachers and Lecturers*
- ◆ *SCQF Handbook: User Guide* (published 2009) and SCQF level descriptors (to be reviewed during 2011 to 2012): www.sqa.org.uk/sqa/4595.html
- ◆ *SQA Skills Framework: Skills for Learning, Skills for Life and Skills for Work*
- ◆ *Skills for Learning, Skills for Life and Skills for Work: Using the Curriculum Tool*
- ◆ SQA Guidelines on e-assessment for Schools
- ◆ SQA Guidelines on Online Assessment for Further Education
- ◆ SQA e-assessment web page: www.sqa.org.uk/sqa/5606.html

Appendix 2: Exemplar Checklist

Learner's name: _____

Lecturer's name: _____

Date: _____

Assessment Standard	Achieved (✓) Re-assessment (x)	Re-assessment Achieved (✓) Not Achieved (x)	Date
1.1 Giving examples of legislation relating to personnel			
1.2 Giving examples of legislation relating a specific product			
1.3 Giving examples of legislation relating to a specific workplace			
2.1 Listing types of food safety hazards			
2.2 Describing the types of contamination and giving examples of how an employee could introduce contamination to a product			
2.3 Giving an overview of how hazards are controlled in food and drink manufacturing industry			

Comments: _____

Administrative information

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History of changes to Unit Support Notes

Unit details	Version	Description of change	Authorised by	Date

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