



Higher National Unit specification

General information for centres

Unit title: Food Industry Practices: An Introduction

Unit code: F6VE 34

Unit purpose: This Unit, which includes practical work, is designed to introduce candidates to the main processing methods used in the food industry. It will enable candidates to become familiar with the key aspects of food manufacturing and provide them with the background context for further study of food manufacturing.

On completion of the Unit the candidate should be able to:

- 1 Conduct food processing operations used in the food industry.
- 2 Explain factors which affect the choice of food processing methods.

Credit points and level: 1 HN 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 Access 1 to Doctorates.*

Recommended prior knowledge and skills: Access to this Unit will be at the discretion of the centre.

Core Skills: There are opportunities to develop the Core Skills component of *Communication: Written Communication (Writing)* at SCQF level 5 and *Working with Others (Working Co-operatively with Others)* at SCQF level 5 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

Context for delivery: If this Unit is delivered as part of a Group Award, it is recommended that it should be taught and assessed in the subject area of the Group Award to which it contributes. This Unit is a mandatory Unit in the HNC in Food Science and Technology. It is recommended that it should be taught and assessed within this Group Award. It is complementary to the Unit F6VF 34 *Food Industry Principles: An Introduction* and it is recommended that both Units are taught during the early stages of the Group Award.

Assessment: This Unit could be assessed in a variety of ways. For example, assessment could consist of a report on the processing methods used for three different types of food. The report could cover the three main methods of food processing and would be supplemented with an observation checklist relating to the practical work undertaken as part of the Unit.

General information for centres (cont)

Higher National 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.

Please refer to *Knowledge and/or Skills for the Unit* and *Evidence Requirements for the Unit* after the Outcomes.

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

Conduct food processing operations used in the food industry

Knowledge and/or Skills

- ◆ Ambient temperatures
- ◆ Sub-ambient temperatures
- ◆ Elevated temperatures
- ◆ Advantages and disadvantages of different methods

Outcome 2

Explain factors which affect the choice of food processing methods

Knowledge and/or Skills

- ◆ Consumer preferences
- ◆ Costs
- ◆ Preservation
- ◆ Safety
- ◆ Quality

General information for centres (cont)

Higher National Unit specification: statement of standards

Evidence Requirements for the Unit

Candidates will need to provide written/oral evidence to meet all the Knowledge and/or Skills items by showing that they can explain the:

- ◆ choice of processing method used in a particular context
- ◆ method of processing used in a particular context including relevant examples of techniques and equipment used
- ◆ advantages and disadvantages of the method of food processing used in a particular context

The evidence should cover three different food processing contexts each of which makes use of a different method.

Candidates must demonstrate that they can carry out three food processing operations in accordance with safety and hygiene requirements. To ensure that candidates meet these requirements, they should be observed on all 3 occasions and a record should be kept of the observation.

Assessment Guidelines for the Unit

This Unit could be assessed in a variety of ways. For example, candidates could be asked to provide a report on processing methods used in different contexts. The evidence would explain the reasons for the choice of processing method, an explanation of what the processing method involves and a discussion of the advantages and disadvantages of the method in the particular case.

The evidence would be accompanied by observation checklists for the practical work. Candidates could refer to lessons from the practical work in their evidence.

Administrative Information

Unit code: F6VE 34
Unit title: Food Industry Practices: An Introduction
Superclass category: WM
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History of changes:

Version	Description of change	Date

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Higher National Unit specification: support notes

Unit title: Food Industry Practices: An Introduction

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 is an introductory Unit intended to introduce candidates to the main methods of food processing. It should be seen as complementary to the Unit F6VF 34 *Food Industry Principles: An Introduction*. It is designed to prepare candidates for more detailed study of each of the three main methods of food processing.

Candidates are not expected to cover all aspects of the three main methods of food processing. The aim is to ensure that they are fully aware of the three methods, what they consist of and how and why they are used. They should also understand the ethical, cultural, dietary and food safety and organic factors which have an impact on food processing methods.

Particular processing techniques can be used to exemplify each of the three main methods. Suitable examples could be:

- ◆ ambient temperatures: size reduction (for example, mayo); meat massaging/injection
- ◆ sub-ambient temperatures: freezing; cook chilling
- ◆ elevated temperatures: smoking; pasteurisation; canning (for example, pears); pickle production; jam production

Guidance on the delivery and assessment of this Unit

The Unit should be delivered in a practical context. Candidates will be expected to develop knowledge and understanding of the different methods of food processing but they should relate this knowledge and understanding to the day to day activities of the food industry. Throughout candidates should be encouraged to consider the practical implications of the material in the Unit such as the different methods of food processing that are used and the reasons why a method may be used in a particular situation. They should also consider the advantages and disadvantages of the different methods.

Candidates should also get the opportunity to undertake practical work in pilot scale operations. They may be able to work together to undertake the practical work. They can also visit food manufacturing organisations to see for themselves the major methods of food processing and the equipment that is used in them. Candidates should be able to gain practical experience and observe examples of different methods of food processing.

Formative and summative assessment should enable candidates to analyse food processing operations and to assess the circumstances in which particular methods of processing are used.

Higher National Unit specification: support notes (cont)

Unit title: Food Industry Practices: An Introduction

There should also be some practical assessment. At this stage, the emphasis should be on ensuring that candidates undertake some practical work. This should enable candidates to begin the process of developing skills that they will need in later specialist Units on food processing methods. It will also enable them to become familiar with safety, hygiene and other requirements which are essential to the food manufacturing. Candidates should carry out work on three different methods of food processing.

In order to ensure that they meet health, safety and hygiene requirements, they should be observed while carrying out practical work. A checklist can be used to record these observations. Photographic and/or video evidence could be used to supplement the checklist.

Opportunities for developing Core Skills

Communication: Written Communication (Writing) at SCQF level 5

As part of their assessment work for this Unit, candidates are expected to explain different food processing operations and the factors that influence their use in particular contexts. Candidates could do this by producing a written report although other presentation methods could be adopted. If they do produce a written report then they will use written information to demonstrate their knowledge and understanding of relevant ideas and information. For this, they will be required to organise their material into a logical and effective structure make use of an appropriate format for a report.

Working with Others (Working Co-operatively with Others) at SCQF level 5

The opportunities to gather evidence for this Core Skill component depend on the approach used for the practical work required by this Unit. Candidates are expected to carry out food processing operations using pilot plant equipment. They could do this in groups in which case they will have to work with others to identify the requirements of the practical work and to determine what roles and responsibilities each member will task in order for the work to be completed safely and hygienically. They will also need to organise their own contribution, alter it where appropriate and make suggestions to the others for the practical work. They will also have to take actions to encourage co-operative working during the practical activity such as providing support and encouragement for others involved in the task and helping to minimise any disagreements among group members.

Open learning

This Unit could be delivered by Open Learning although candidates should have the opportunity to undertake practical work. Appropriate arrangements would need to be made for assessment and quality assurance.

Disabled candidates and/or those with additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website www.sqa.org.uk/assessmentarrangements

Unit title: Food Industry Practices: An Introduction

General information for candidates

This Unit is a mandatory Unit in the HNC in Food Science and Technology. It is designed to introduce you to food processing operations and help you to understand the basic principles which apply to all aspects of food manufacturing. It will give you the background that you need for the three specialist Units in different types of food processing methods which you will take later in your HNC.

They are:

- ◆ *Food Manufacturing: Food Processing at Ambient Temperatures*
- ◆ *Food Manufacturing: Food Processing at Sub-Ambient Temperatures*
- ◆ *Food Manufacturing: Food Processing at Elevated Ambient Temperatures.*

This is a practical Unit and you will be involved in practical work using pilot plant equipment. This will give you an understanding of the main methods of food processing as well as hands-on experience of the kind you will need when you take up employment in the food industry. You will find out about the techniques and equipment that are used in the different methods of food processing. This Unit will also enable you to consider factors which influence which method of food processing is used in a particular situation. These include things such as the preferences of the consumer and the cost of the processing method.

It is extremely important in the food industry that food processing is carried out in hygienic conditions. Health and safety are also extremely important. The practical work will emphasise how vital these factors are and you will be expected to conduct your practical work in a manner which meets all health, safety and hygiene requirements. You will be observed while you are doing it in order to ensure that you do work in accordance with them.

This Unit is closely associated with *Food Industry Principles: An Introduction* and together they provide an introduction to the food industry and all that it involves and provide the background for the remainder of the Units in your HNC.

The assessment for this Unit will require you to carry out three different food processing operations. You will, as it says above, be observed while you are doing this. You will also be required to explain the method of food processing used in a particular context including the equipment used and the advantages and disadvantages of the method in that context. You will have succeeded in meeting all the requirements of this Unit if you pass the assessments.