



Higher National Unit specification

General information for centres

Unit title: Food Industry Principles: An Introduction

Unit code: F6VF 34

Unit purpose: This Unit is designed to introduce candidates to the structure of the food industry and the fundamental principles which underpin all aspects of food manufacturing. It will enable candidates to explain the structure of the food industry which provides the background context for food manufacturing. The Unit will also introduce candidates to operations associated with food processing.

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

- 1 Explain the structure of the food industry.
- 2 Explain the processes of food manufacture.

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. However, it would be helpful if candidates had good written skills, eg English at SCQF level 4 or equivalent.

Core Skills: There are opportunities to develop the Core Skills component of *Communication: Written Communication (Writing)* 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 F6VE 34 *Food Industry Practices: 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 two reports, one on the structure of the food industry and the other on the processes of food manufacture. The two could be combined into a single report if desired.

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.

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

Explain the structure of the food industry

Knowledge and/or Skills

- ◆ Flow of materials
- ◆ Distribution chain
- ◆ Retail market structure
- ◆ Supply chain partnerships
- ◆ External factors affecting the structure of the food industry

Evidence Requirements

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

- ◆ explain the main components of the food industry (ie flow of materials; distribution chain; retail market structure; supply chain partnerships) and show how they are related to each other
- ◆ explain the impact of two external factors on the structure of the food industry
- ◆ illustrate their explanation with examples drawn from the food industry
- ◆ draw conclusions on the ways in which the structure of the food industry impacts on food manufacturing

Assessment Guidelines

This Outcome could be assessed in a variety of ways. For example, candidates could be asked to research the food industry and provide a report on it. They could be given a brief outlining a template for the evidence. About one third of the evidence can be devoted to conclusions on the way in which the structure impacts on the food industry.

Higher National Unit specification: statement of standards (cont)

Unit title: Food Industry Principles: An Introduction

Outcome 2

Explain the process of food manufacture

Knowledge and/or Skills

- ◆ Preliminary operations for food processing
- ◆ Factors affecting choice of techniques
- ◆ Principles of food preservation and food storage

Evidence Requirements

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

- ◆ preliminary operations in a particular context
- ◆ factors which affect choice of techniques in each context
- ◆ principles of food preservation and food storage which apply in a particular context

The evidence should cover two different contexts which involve two or more food processing techniques

Assessment Guidelines

This Outcome could be assessed in a variety of ways. For example, candidates could be asked to provide a report on food processing operations in different contexts. They could be given contexts and asked to research the preservation techniques/preliminary operations involved. The evidence can refer to the principles of food storage which apply in each context.

It would be possible to ask candidates to complete a single report covering both Outcomes. The report may, however, have two distinct parts.

Administrative Information

Unit code: F6VF 34

Unit title: Food Industry Principles: An Introduction

Superclass category: WM

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Version	Description of change	Date

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Higher National Unit specification: support notes

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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 principles of food processing. It should be seen as complementary to the Unit F6VE 34 *Food Industry Practices: An Introduction*. It is designed to prepare candidates for the HNC in Food Science and Technology in general as well as for a more detailed study of the main methods of food processing in particular.

It would be helpful if candidates had good written communications skills, eg achieved English at SCQF level 4 or equivalent.

Outcome 1 covers the structure of the food industry. It should be considered from the point of view of an industrial manufacture. However, candidates should be aware of the influences such as retail organisations, consumer preferences, social attitudes (eg on healthy eating and obesity), cultural factors, government policy on health, ethical and environmental considerations, and allergenic materials. It should look at the size of firms (eg. agribusinesses) and different sectors of the industry so that candidates are aware of the ‘farm to fork’ approach. The flow of materials should cover primary and secondary sources of material.

Outcome 2 covers food preservation techniques and the prevention of food spoilage. Preliminary operations can include techniques such as grading, sorting, peeling, washing and blanching. This Outcome includes the principles of food preservation and food storage and candidates should be able to relate these to the various techniques.

Guidance on the delivery and assessment of this Unit

The Unit should be delivered in a practical context where candidates are encouraged to apply knowledge and understanding to contexts in the food industry. Throughout, candidates should consider the standpoint of food manufacturers and the factors which influence the decisions they make about food processing.

For Outcome 1, candidates can be encouraged to research organisations (eg food producers, retailers etc) in the food industry and work out how they fit into the structure and the factors which affect the way they operate. For Outcome 2, candidates could visit food manufacturing organisations to see preliminary operations for themselves. There may also be opportunities for candidates to undertake practical work. It may be possible to combine the two approaches — candidates could undertake research on an organisation which they are then able to visit or make contact with.

Assessment, particularly for Outcome 1, can be based on research undertaken by candidates. A considerable amount of information on organisations involved in the food industry and the industry in general is available on the internet and candidates can make use of this.

Higher National Unit specification: support notes (cont)

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This Unit could be assessed in a variety of ways, eg for both Outcomes candidates could produce a report. Candidates may provide two separate reports or combine their work into a single report. They can be given guidance or a template on the layout and structure of the evidence. The evidence should include referencing where appropriate.

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 the structure of the food industry and food processing techniques. 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. They could be asked to base their report on research which they have carried out for themselves.

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 Principles: An Introduction

General information for candidates

This Unit is a mandatory Unit in the HNC Food Science and Technology. It is designed to introduce you to the fundamental principles which underpin all aspects of food manufacturing and introduce you to operations associated with food processing. It will also give you some background to the structure of the food industry — from farm to fork — which should help to set all your studies in the HNC in a suitable context.

As part of your study of the food industry you will look at the retail market structure and supply chains as well as the flow of materials and the distribution from manufacturer to retailer. You will also look at factors affecting the food industry such as social attitudes (on healthy eating and obesity for example) and ethical and environmental considerations.

You will also be introduced to the basic principles of preliminary operations in food processing relating to food preservation and storage, as well as the factors which affect which techniques are used in which contexts.

This Unit is closely associated with the Unit *Food Industry Practices: An Introduction* and together they provide an introduction, not just to the food industry and all that it involves, but to the specialist Units in food processing which you will do later in your HNC.

The assessment for the Unit will require you to show that you can accurately explain the structure of the food industry and food processing operations. You will have to illustrate your explanations with examples. You will have succeeded in meeting all the requirements of this Unit if you pass the assessments.