XSQA

Higher National Unit specification

General information for centres

Unit title: Food Quality Management

Unit code: F8L8 35

Unit purpose: This Unit is designed to enable candidates to contribute to quality management systems in the food industry. It enables them to relate general principles of quality assurance and quality management to the specific requirements and demands of the food industry. It also provides the tools they will need to assess quality management procedures in the food industry to ensure that food processing operations are fit for purpose in terms of meeting quality and safety standards.

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

- 1 Apply principles of quality assurance and quality management to the food industry
- 2 Assess procedures to assure food quality and safety

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

*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 beneficial if candidates had some background in quality assurance and in principles of food manufacturing. This could be demonstrated by relevant practical experience or the achievement of relevant Units at SCQF level 7, such as:

- ♦ DV9T 34 Fundamentals of Quality
- ♦ F6VG 34 Food Manufacturing: Processing Practices at Ambient Temperatures
- ♦ F6VJ 34 Food Manufacturing: Processing Practices at Sub-Ambient Temperatures Practices
- F6VH 34 Food Manufacturing: Processing Practices at Elevated Temperatures

Core Skills: There are opportunities to develop the following Core Skills components in this Unit: *Written Communication* (Writing) at SCQF level 6; *Problem Solving* (Critical Thinking) at SCQF level 6; *Problem Solving* (Reviewing and Evaluating) at SCQF level 6. There is no automatic certification of these 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 within the subject area of the Group Award to which it contributes.

General information for centres (cont)

Unit title: Food Quality Management

Assessment: Assessment for the Outcomes of this Unit can be integrated and make use of case studies of actual or hypothetical organisations/situations in the food industry. Assessment can take several forms, eg candidates could present their work in the form of report(s), by making use of presentation software or by any other suitable methods. They could be given questions to help them structure their report or presentation.

Higher National Unit specification: statement of standards

Unit title: Food Quality Management

Unit code: F8L8 35

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.

Outcome 1

Apply principles of quality assurance and quality management to the food industry

Knowledge and/or Skills

- quality assurance systems in the food industry
- ♦ quality cost models

Outcome 2

Assess procedures to assure food quality and safety

Knowledge and/or Skills

- food safety, food quality and supply chain specifications
- control techniques
- ♦ data collection and storage systems

Evidence Requirements for the Unit

Candidates will need to provide written/oral evidence to demonstrate sound knowledge/skills of procedures to assure food quality by showing that they can:

- explain and justify the criteria for quality assurance and hazard analysis in a specific situation in the food industry
- construct a quality cost model which takes account of product acceptability and minimum overall costs and provide reasons to justify how each could be used in a particular situation in the food industry
- make an assessment of the impact of food quality and food safety specifications on food quality assurance in a specific situation in the food industry
- make an assessment of the impact of supply chain specifications on food quality assurance in a specific situation in the food industry

Higher National Unit specification: statement of standards (cont)

Unit title: Food Quality Management

- make an assessment of the way in which a control technique can be used in quality management in the food industry
- assess methods of data collection and storage and their importance to quality assurance of food quality and safety

Assessment Guidelines for the Unit

Assessment can take several forms and should be based on examples taken from the food industry. It can be based on case study material from one or more food processing organisations/situations. These could be actual or hypothetical or, if more than one is used, a combination of these. It may be possible for candidates to research arrangements for the management of quality assurance, including hazard analysis, in food processing organisations with which they are familiar.

Candidates could present their work in the form of report(s), by making use of presentation software or by any other suitable methods. Candidates could be given questions to help them structure their report or presentation and could be asked questions about the work they have done to clarify or supplement their presentation.

Administrative Information

Unit code:	F8L8 35
Unit title:	Food Quality Management
Superclass category:	WM
Original date of publication:	August 2009

History of changes:

Version:

Version	Description of change	Date

01

Source: SQA

© Scottish Qualifications Authority 2009

This publication may be reproduced in whole or in part for educational purposes provided that no profit is derived from reproduction and that, if reproduced in part, the source is acknowledged.

SQA acknowledges the valuable contribution that Scotland's colleges have made to the development of Higher National qualifications.

Additional copies of this Unit specification can be purchased from the Scottish Qualifications Authority. Please contact the Customer Contact Centre for further details, telephone 0845 279 1000.

Higher National Unit specification: support notes

Unit title: Food Quality Management

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 designed to enable candidates to contribute to quality management systems in the food industry. It enables them to apply general principles of quality assurance and quality management to the specific requirements and demands of the food industry. It also enables them to assess quality management procedures in the food industry to ensure that food processing operations are fit for purpose in terms of meeting quality and safety standards. This application and evaluation, allied to the knowledge and understanding which they will acquire when doing this, will place candidates in a position to contribute to quality management systems and procedures in food processing organisations.

Food quality and food safety are critical aspects of food processing. They are subject to considerable legislative controls and the consequences if things go wrong can be significant and may threaten the future existence of the organisation concerned. People who wish to work in the food industry, therefore, must be fully aware of food quality assurance and the way it is managed. This Unit, therefore, emphasises the actual approaches which the food industry takes. Throughout, candidates should relate the material in the Unit to the current situation in the food industry. In this sense, this is practically based Unit and candidates who complete it successfully should be in a position to contribute to the management of food quality assurance in food processing organisations/companies.

The HND Food Science and Technology is one award which includes this Unit. It is related to the Unit, (F8L9 35) Microbiology of Foods: Food Quality and Safety, which looks at microbiological aspects of food safety and quality and at the associated laboratory tests. Candidates should already have some background knowledge and skills eg achieved through the HN Food Science and Technology Units:

- ♦ F6VG 34 Food Manufacturing: Processing Practices at Ambient Temperatures;
- ◆ F6VJ 34 Food Manufacturing: Processing Practices at Sub-Ambient Temperatures Practices
- F6VH 34 Food Manufacturing: Processing Practices at Elevated Temperatures.

It would also be helpful if candidates were aware of the general principles of quality assurance, eg through the achievement of the Unit DV9T 34 Fundamentals of Quality. However, those who have not completed this Unit may require a brief introduction to the principles of quality management and quality assurance.

The general principles with which candidates should be familiar include: concept of quality: quality requirements; customer satisfaction; quality planning; quality control; quality assurance; quality improvement, effectiveness and efficiency.

Higher National Unit specification: support notes (cont)

Unit title: Food Quality Management

The following give some further details on each of the 2 Outcomes.

Outcome 1

Quality assurance systems in the food industry: quality manuals; quality auditing eg ISO9000 series; HACCP (Hazard Analysis and Critical Control Points); QACCP (Quality Attributes and Critical Control Points); British Retail Consortium (BRC); European Food Safety Inspection Service (EFSIS); ISO2200; Laboratory accreditation etc.

The above highlights the criteria for quality assurance and hazard analysis in the food industry. The criteria can also include the impact of current legislation on food quality management in the food industry.

Quality cost models: cost of quality assurance with respect to product acceptability; minimum overall costs.

Outcome 2

- ♦ Food safety and food quality specifications
- Supply chain specifications: purchasing, raw materials, vendor rating
- ♦ Control techniques; processing equipment; Statistical Process Control (SPC)
- ♦ Data collection and storage systems: maintenance of, and access to, quality records and data

Guidance on the delivery and assessment of this Unit

Delivery Guidance

This Unit can be delivered in the context of actual practice in the food industry. Wherever possible, candidates should relate the material to specific situations in the food industry. The Unit lends itself to a case study approach and use can be made of actual and hypothetical examples. Candidates should be encouraged to make use of any experience that they have of food processing companies. They can also be encouraged to undertake their own research into quality management approaches in the food industry.

The Unit lends itself to group work. Candidates can be allocated into small groups, eg to carry out joint investigations into different aspects of quality assurance in the food industry. Each group can report their findings back to other members of their cohort, perhaps through a group presentation. Depending on the available technology, a cohort may be able to share information through electronic arrangements such as conference, blog or wiki. Candidates should be encouraged to recognise the vital importance of quality assurance in the food industry and consider the contribution to it that they will be able to make when they take up employment in the food industry.

Higher National Unit specification: support notes (cont)

Unit title: Food Quality Management

Assessment Guidance

Assessment for this Unit can take several forms, eg can be based on case studies of actual or hypothetical food processing organisations. It would be possible, if desired, to concentrate on a single organisation for assessment purposes, although delivery should involve a range of different organisations in different parts of the food industry. It would also be possible to ask different candidates to base their assessment work on different organisations. Where candidates are familiar with an organisation, they could use it as the basis for their assessment work.

It is possible for candidates to present their assessment work in a number of different formats. Candidates could present their work in the form of a report or reports and, if desired they could be asked to adopt a suitable report format. This may be useful practice for future work in industry. They could make use of a poster presentation or use suitable presentation software. Depending on delivery methods, it may be possible for candidates to use a personal blog as a means of generating and presenting evidence for assessment.

Where oral evidence is generated, this should be recorded (eg by video) and retained.

Opportunities for developing Core Skills

Communication: Written Communication (Writing) at SCQF level 6

As part of their assessment work for this Unit, candidates are expected to present their assessment of procedures to assure food quality and safety as well their application of quality assurance principles to the food industry. One way to do this is by a written report. Candidates will be expected to present and analyse essential information in a logical and effective order. They will have to do this by using a structure which links the various points together and organises the content in a manner which distinguishes between explanation and evaluative conclusions drawn from the analysis. They will be expected to follow the conventions of report writing and ensure that their report is comprehensible to an industrial readership.

Problem Solving: Critical Thinking at SCOF level 6

Outcome 2 of this Unit requires candidates to assess quality procedures. In order to do this, they will have to identify the various factors involved such as control techniques, arrangements for product recall. The factors are all inter-related and overlap and candidates will be expected to identify the various relationships between these factors and assess the extent to which each is relevant to a specific situation in the food industry. On the basis of this they will have to determine whether the procedures are fit for purpose.

Problem Solving: Reviewing and Evaluating at SCQF level 6

Candidates are expected in this Unit, to identify and gather evidence on food quality management systems in the food industry. This may relate to actual or hypothetical situations but, whichever is used, candidates will be expected to draw conclusions based on the evidence available and how it relates to principles of quality assurance and quality management. On the basis of these conclusions, they will be expected, in a specific situation, to draw conclusions about the validity and efficacy of quality management systems and procedures in the food industry.

Higher National Unit specification: support notes (cont)

Unit title: Food Quality Management

Open learning

If this Unit is delivered by open or flexible learning, additional resources and materials will be required for candidate support, assessment and quality assurance. For information on these, please refer to SQA's website: www.sqa.org.uk.

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

General information for candidates

Unit title: Food Quality Management

This Unit is designed to enable you to contribute to quality management systems in the food industry. It does this in two main ways:

- Firstly, it enables you to explore the management of quality assurance in the food industry by applying general principles of quality assurance and quality management to the specific requirements and demands of the food industry. This includes hazard analysis such as HACCP (Hazard Analysis and Critical Control Points).
- ♦ Secondly, it enables you to assess quality management procedures. By doing this, you will be in a position to decide whether procedures in a particular case are fit for purpose in terms of meeting quality and safety standards.

This Unit is particularly important in terms of employment in the food industry as the consequences of failing to meet quality and safety standards in the industry can be severe and far-reaching. It could directly affect the health of consumers and may make it difficult for the company concerned to stay in business. When undertaking this Unit, you will look at examples of what happens in the food industry and may have the opportunity to find out what companies do for yourself. This Unit will also help you to extend your knowledge of firms in the food industry and the work that they do.

The assessment for the Unit will require you to apply quality assurance principles to the food industry and to assess procedures to assure food quality and safety. Your tutor will explain how you should present your assessment work as this could take several forms, eg you could be given case study material of a company or companies in the food industry and asked to use these as the basis for your assessment work. You will have succeeded in meeting all the requirements of this Unit if you pass the assessment.