Course Support Notes

SQA

National 5 Health and Food Technology Course Support Notes

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Introduction

These support notes are not mandatory. They provide advice and guidance to support the delivery of the National 5 Health and Food Technology Course. They are intended for teachers and lecturers who are delivering the Course and its Units. They should be read in conjunction with the *Course Specification*, the *Course Assessment Specification* and the *Unit Specifications* for the Units in the Course.

The Course consists of three Units and a Course assessment.

♦ Health and Food Technology: Food for Health (National 5)
  (6 SCQF credit points)
♦ Health and Food Technology: Food Product Development (National 5)
  (6 SCQF credit points)
♦ Health and Food Technology: Contemporary Food Issues (National 5)
  (6 SCQF credit points)
♦ Course assessment (6 SCQF credit points)

General guidance on the Course

Aims

The purpose of this Course is to allow learners to develop and apply practical and technological skills and knowledge and understanding to make informed food and consumer choices.

The Course has six broad and inter-related aims which allow learners to:

♦ develop knowledge and understanding of the relationships between health, food and nutrition
♦ develop knowledge and understanding of the functional properties of food
♦ make informed food and consumer choices
♦ develop the skills to apply their knowledge in practical contexts

♦ develop organisational and technological skills to make food products
♦ develop and apply safe and hygienic practices in practical food preparation

Progression into this Course

Entry to this Course 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

To create a smooth progression for learners into this National 5 Course, it is recommended that before starting the Course learners have:

♦ a basic knowledge and understanding of the relationships between food, health and nutrition
♦ a basic knowledge of practical food preparation skills and functional properties of food
♦ a basic knowledge and understanding of contemporary issues affecting consumer food choices

and are able to:

♦ demonstrate organisational skills and basic technological skills and work safely and hygienically during food preparation

Centres wishing to establish the suitability of learners without prior qualifications, and/or experiences and outcomes, may benefit from carrying out a diagnostic review of prior life and work experiences.

Experiences and outcomes
Learners who have completed relevant Curriculum for Excellence experiences and outcomes will find these an appropriate basis for doing the Course.

Skills, knowledge and understanding covered in this Course

Information about mandatory skills, knowledge and understanding is given in the National 5 Health and Food Technology *Course Assessment Specification.*

This section provides further advice and guidance about skills, knowledge and understanding that could be included in the Course.

Note: teachers and lecturers should refer to the *Course Assessment Specification* for mandatory information about the skills, knowledge and understanding to be covered in this Course.

The National 5 Health and Food Technology Course develops skills, knowledge and understanding as stated in the *Course Specification*. These may be developed in each of the Course Units; however, greater emphasis will be given to developing some of these in particular Units, as shown in Table 1 below:

Table 1   Skills, knowledge and understanding that will be developed in the Course

✓✓✓   Plenty of opportunities within the Unit
✓✓   Some opportunities within the Unit
✓   Limited opportunities within the Unit

Skills, knowledge and understanding	Food for Health	Food Product Development	Contemporary Food Issues
explaining the relationship between health, food and nutrition and application of understanding in practical contexts	✓✓✓	✓✓	✓✓
explaining the functional properties of food	✓	✓✓✓	✓
understanding current consumer issues and how to make informed consumer decisions	✓✓	✓	✓✓✓
a range of practical food preparation skills and techniques using appropriate tools and equipment	✓✓✓	✓✓✓	✓✓✓
demonstrating an understanding of safe and hygienic practices	✓✓✓	✓✓✓	✓✓✓

a range of technological skills related to food production	✓✓	✓✓✓	✓
organisational skills necessary to plan, prepare and evaluate products and processes	✓✓	✓✓✓	✓✓
solving problems related to a range of health, food, nutrition and consumer needs	✓✓	✓✓	✓✓

To enrich the delivery of the Health and Food Technology Course, it is also recommended that learners engage in learning activities where they consider and are encouraged to understand the interrelationships between cultural, social, ethical and moral issues surrounding food. This will enable learners to make informed decisions which not only promote a sustained healthy lifestyle, but also stimulate consideration of global citizenship.

Progression from this Course

This Course or its components may provide progression to:

♦ Health and Food Technology (Higher) Course or relevant component Units
♦ other SQA qualifications in health and food technology or related areas
♦ further study, employment or training

Other progression pathways are also possible including progression to other qualifications at the same or different levels.

Health and Food Technology also has applications in life, such as contributing to wellbeing and in work-related fields such as dietetics and nutrition, health promotion, and a range of opportunities within the health and food industries.

Hierarchies

Hierarchy is the term used to describe Courses and Units which form a structured sequence involving two or more SCQF levels.

It is important that any content in a Course and/or Unit at one particular SCQF level is not repeated if a learner progresses to the next level of the hierarchy. The skills and knowledge should be able to be applied to new content and contexts to enrich the learning experience. It is important to offer new and different contexts for learning to maintain their motivation and interest in the Courses. This is for centres to manage.

The Health and Food Technology Courses have been constructed to facilitate a hierarchical arrangement across the Courses from National 3 to Higher. While Units have the same titles and similar structures, the level of demand differs in terms of degree of difficulty and complexity from one level to the next. Learners undertaking the Health and Food Technology Courses within the same centre may undertake similar Outcomes simultaneously, with learners given recognition for their best achievements.

A differentiated approach may assist teachers/lecturers to plan activities and experiences. Activities covering the National 4 Health and Food Technology Course could be covered, with extension work for National 5 learners. Learners should be supported and encouraged to take an active role in their learning. Where Course activities and learning and teaching permit progress in an independent manner, teaching of mixed groups may happen more effectively.

Differentiated briefs could be used to distinguish between the levels. A more complex brief may enable the learner to demonstrate greater depth of knowledge and understanding at National 5 level.

National 5 demands more depth from the learner in subject-specific knowledge and understanding and a higher level of skill than National 4. Learners at National 5 could demonstrate a greater coherence; display some initiative and the ability to use facts to solve problems.

Differentiation between levels could also be evident via support provided. At National 4 level, there may be a mix of group work/teacher-led sessions plus some individual learning. At National 5 level, learners could be given individual tasks and take on more responsibility for their own learning. Learners might provide evidence relating to explaining and drawing conclusions from learning. Learners working at different levels may benefit from access to differentiated learning materials to allow for independent work while the teacher is teaching/providing support to others within the class.

Centres should take care to ensure that learners progressing from one level to the next are exposed to different contexts for learning and assessment to avoid repetition. This can be achieved by focusing on different product development briefs or different contemporary food issues and exposing learners to an increasing range of practical food preparation skills and contexts.

Setting varied practical tasks to allow learners to demonstrate creativity, complexity and combinations of skill may facilitate more naturally-occurring evidence.

Approaches to learning and teaching

Experiential learning in relevant contexts and supported investigation techniques should be used as the vehicle for developing knowledge, understanding and skills. The Course includes development of thinking and practical skills through problem-solving activities.

Well-planned learning and teaching activities will provide a framework which considers and meets the different learning styles of individual learners. We know that active learning often has a greater impact than passive learning; therefore the guidance provided here will focus on the learner and approaches to learning.

The subject matter of the Health and Food Technology Courses provides an ideal platform for adopting a variety of learning and teaching opportunities.

Suggested learning and teaching approaches
There are three Units and a Course Assessment in the National 5 Health and Food Technology Course. The level of demand in each Unit corresponds with the Scottish Credit and Qualifications Framework at level 5.

The three Units in the Course are:

Health and Food Technology: Food for Health (National 5)
(6 SCQF credit points)
Health and Food Technology: Food Product Development (National 5)
(6 SCQF credit points)
Health and Food Technology: Contemporary Food Issues (National 5)
(6 SCQF credit points)

The learning and teaching for the Course can be approached in a variety of ways. Units may be taught in any order. However, it is more likely to produce a better learning experience for learners if they are delivered using an integrated approach. The following diagram illustrates some alternative approaches to delivering the Units. These are not the only ways of approaching the learning and teaching opportunities within the Course.

Example 1

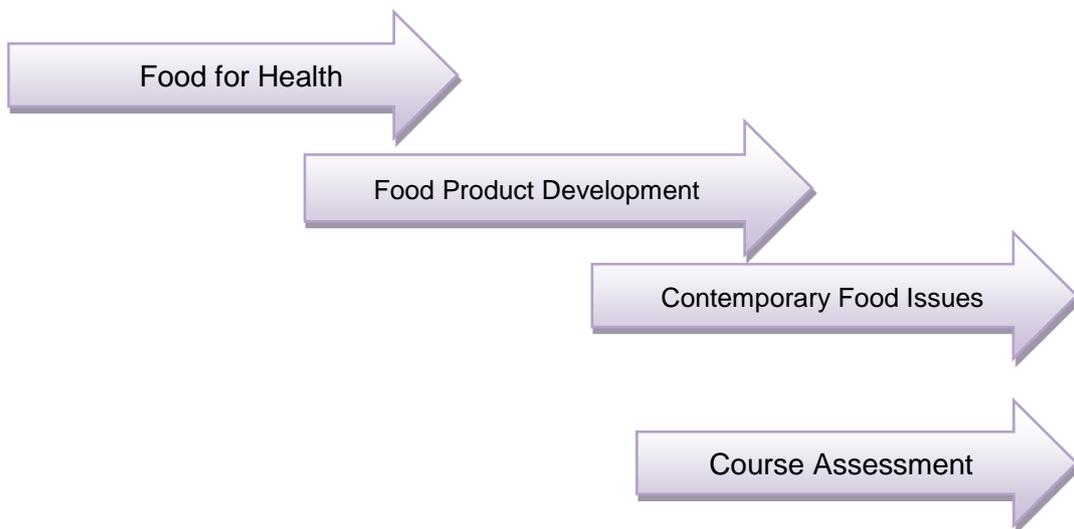In this example, the learning and teaching for Units may allow a more holistic approach to the Course if all three Units are delivered together. Common themes or topics may be identified across Units and learning and teaching structured to accommodate this. Such an approach may lead to the production of more naturally-occurring evidence.

Food for Health

Food Product Development

Contemporary Food Issues

Course Assessment
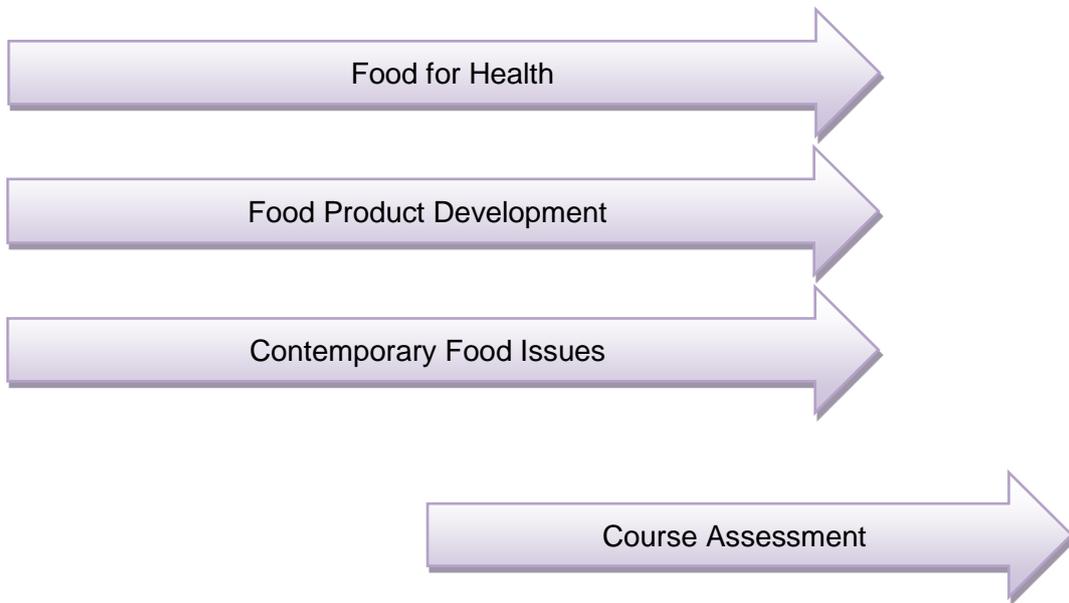
Example 2

In this example, the learning and teaching is staggered for each Unit, allowing for more consolidation and focus on an individual Unit before a new Unit is introduced.

Food for Health

Food Product Development

Contemporary Food Issues

Course Assessment

Example 3

In this third example, the learning and teaching for the *Food for Health* Unit is delivered across the duration of the Course, with the other two Units running back-to-back. This may help with the assessment loading for the Course.

Food for Health

Food Product Development		Contemporary Food Issues

Course Assessment
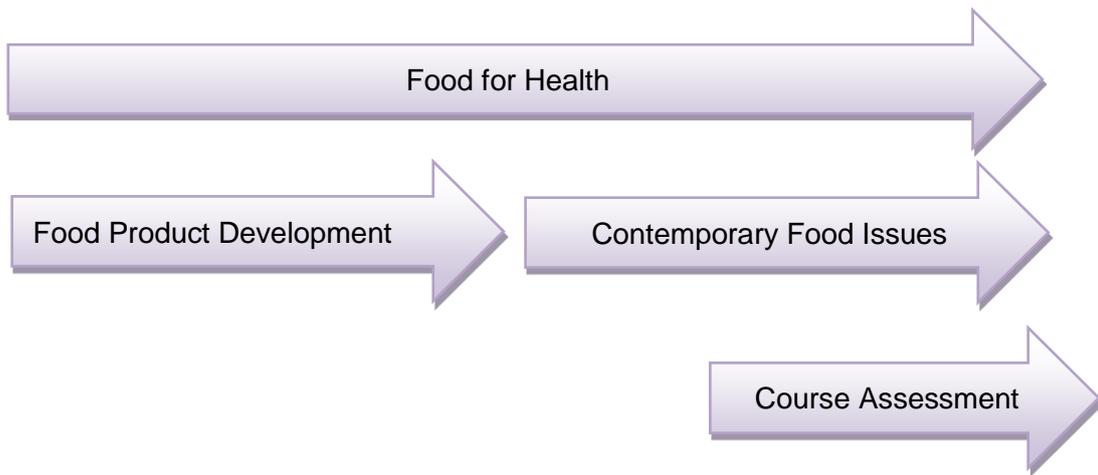
Integrated learning experiences

The subject matter of Health and Food Technology provides an ideal platform for adopting a variety of learning and teaching methods. The integration of knowledge with practical activities reinforces and applies knowledge, understanding and skills in meaningful contexts. Care should be taken during each learning activity to ensure learners are aware of what they have learned and are encouraged to consider other applications for these skills, knowledge and understanding in learning, life and work.

Safe and hygiene practices should permeate all food handling activities and, in order to be meaningful, should be integrated within all practical food activities.

In order to encourage personalisation and choice, teachers/lecturers should allow the choice of different case studies, scenarios, methods of conducting research and ways of presenting results.

Case studies or scenarios could be devised which incorporate experiences, knowledge, understanding and skills from two or three of the Units.

Guidance on learning and teaching activities

Some aspects of learning in Health and Food Technology may be better taught formally, particularly when introducing health and safety techniques and practices, or new processes. However, independence in learning can only be achieved if staged handover of responsibility for learning takes place.

Effective learning and teaching will draw on a variety of approaches to enrich the experience of learners. In particular, practical approaches to learning and teaching which provide opportunities for personalisation and choice will help to motivate and challenge learners.

Throughout this Course, local contexts could be used as a basis for learning and teaching. Other stimulus materials such as visual aids, digital or electronic images and visits to local or national food events may also help to motivate and encourage learners.

Whatever the learning and teaching approaches, they should support Curriculum for Excellence's four capacities to enable each learner to develop as a successful learner, a confident individual, a responsible citizen and an effective contributor.

Further information about possible approaches to learning and teaching for each Unit can be found in the *Unit Support Notes.*

Table 2 below suggests examples of different learning activities which can take place related to the Units and can be selected to suit particular learning styles. It also provides the opportunity for teachers/lecturers to consider where learning and assessment activities may be integrated within and between Course Units.

Table 2

Course aims	*Food for Health*	*Food Product Development*	*Contemporary Food Issues*
develop knowledge and understanding of the relationships between health, food and nutrition develop the skills to apply their knowledge in practical contexts develop organisational and technological skills to make food products make informed food and consumer choices	Mind mapping prior knowledge. Completing relationship diagrams. Carrying out practical food activities linked to dietary needs of individuals or health issues. Case study or scenarios linked to health issues and/or dietary needs. Visiting speakers, eg health promotion specialists. Visiting food preparation or catering facilities. Using of ICT — video clip or, searching websites. Using nutrition calculation software. Conducting surveys or questionnaires. Completing displays, mood boards, storyboards or collages of headlines linked to diet and health issues.	Mind mapping prior knowledge of food products which promote an aspect of health. Visiting food production or catering facilities to investigate the production of food products. Visiting local and national shows or events which promote new food products. Practical food activities linked to devising a food product to meet dietary needs of individuals or address a health issue. Using of ICT or online research of supermarkets to establish the current range of health promotion food products.	Carrying out surveys or online searches of supermarkets to establish the range of food products that meet food, health and nutrition issues. Surveying factors affecting food choices in relation to health and/or lifestyle. Group tasks, research, and presentations linked to food issues. Case studies or scenarios linked to contemporary food issues. Visits from speakers such as supermarket managers or farmers to highlight current food issues. Investigating food labelling providing health-related information or information relating to food or consumer issues.

	Devising posters or leaflets, including the use of ICT if appropriate, to promote or provide information on a given health issue. Contributing to the planning and delivery of an activity for a younger year group or primary or nursery class.		Carrying out surveys or online searches of supermarkets to identify the range of food products that use technological developments in their manufacture and/or packaging. Devising and producing 60-second news segments linked to food issues. Producing information relating to organisations which support the consumer.
develop knowledge and understanding of the functional properties of food develop and apply safe and hygienic practices in practical food preparation develop the skills to apply their knowledge in practical contexts	Mind mapping prior knowledge. Surveying or online searches of supermarkets to establish the range of food products that promote health. Investigating ingredients and food products that address current dietary advice. Practical food activities linked to healthier methods of cooking. Completing an electronic portfolio of evidence and experiences.	Mind mapping prior knowledge. Visiting food production or catering facilities to investigate the stages in the food product development process. Visiting local and/or national food events or shows which promote new food products. Watching video clips linked to food product development. Visiting speakers, such as environmental health officers or food hygiene and safety specialists who work in the food industry.	Mind mapping prior knowledge. Devising a new food product which meets the needs of, for example, a seasonal food market, a celebration or event or is influenced by environmental issues. Costing exercises for new food product. Viewing and contributing to online discussion forums. Completing electronic portfolio of evidence and experiences,

		Investigating the stages of food product development in relation to various food products using videos or social network sites.	perhaps including relevant news headlines.
		Practical food activities linked to devising food products which take account of the functional properties of food.	
		Practical food activities linked to devising food products for a specific market.	
		Carrying out sensory testing of food products. Peer- and self-evaluation of developed food products.	
		Case studies or scenarios linked to food product development.	
		Using ICT or online research of supermarkets to establish the current range of food products.	
		Completing electronic portfolio of evidence and experiences.	

Individual learning needs

♦ Support in the practical classroom to assist with food preparation
♦ food preparation equipment/aids could be used to assist in food preparation tasks
♦ support for an individual learner or group of learners to bring them up to speed in a particular skill (for example, assistance in research /ICT skills or working with others)
♦ an additional measure agreed with the learner(s) (for example, spending extra time working at home)

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

Learners can benefit from a wide range of online resources to enable them to use ICT in presenting information for assessment purposes. They may develop a blog or contribute to a teacher/lecturer-led discussion forum which can be used for naturally occurring evidence.

Where appropriate, teachers/lecturers could use technology to support not only learning and teaching but also to generate naturally occurring evidence from learning and teaching activities. For example, online testing could be used to reinforce the acquisition of the underpinning knowledge and for the purposes of assessment preparation. Learners should be encouraged to carry out web-based research, for example into food products available to address diet-related health problems, establish the current range of food products, and acquire understanding about functional properties of ingredients or contemporary food issues.

Learners could also use blogs, intranets and VLEs to reflect on their learning and to share their achievements with others. Those same means could then be used by teachers/lecturers to contribute to authenticating any investigations which learners carry out in their own time.

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. The *Course Specification* lists the skills for learning, skills for life and skills for work that learners should develop through this Course. These are based on SQA's *Skills Framework: Skills for Learning, Skills for Life and Skills for Work* and must be built into the Course where there are appropriate opportunities. The level of these skills will be appropriate to the level of the Course.

Learners should be aware of the generic skills they are learning. Below are some learning activities where these skills for learning, skills for life and skills for work may be developed concurrently with subject-specific skills. Many of the learning activities exemplified offer opportunities to develop more than one skill for learning, life and work.

The following table demonstrates how learning opportunities in this Course may contribute to the development of skills for learning, skills for life and skills for work.

Table 3

Skills for learning, skills for life and skills for work	Learning and teaching opportunities for development
1 Literacy	
1.3 Listening and talking	Learners could take part in group discussion and debate around aspects of the Course. They could also produce posters or leaflets and present these to the class. Learners may have the opportunity to listen to visiting speakers and could be encouraged to take notes.
2 Numeracy	
2.2 Money, time and measurement	Weighing and measuring of ingredients for food preparation activities is a good way to develop skills in measurement. Costing exercises and planning food preparation activities within time limits may support development of money and time skills.
3 Health and wellbeing	
3.3 Physical wellbeing	Learners will explore what makes a healthy and balanced diet for a range of individuals and groups in this Course. They could be encouraged to reflect on their own daily intake of food and consider the impact of their diet on their physical wellbeing. Learners could also develop knowledge of healthy food products and be encouraged to use this knowledge when making food choices for themselves.
4 Employability, enterprise and citizenship	
4.6 Citizenship	Learners could develop knowledge and understanding of the different dietary customs and beliefs between cultures. Ethical and moral issues surrounding food production may also be explored.
4.4 Analysing and evaluating	Learners could develop their analytical skills through working with briefs and case studies. Learners will analyse the key points in the brief and consider how to address these. Learners will also have a range of opportunities to evaluate both the products they produce, such as sensory testing, and the processes carried out.
5 Thinking skills	
5.3 Applying	Learners could develop skills in applying through developing ideas for food products to meet specified needs. In this way, learners would apply their knowledge of food, health and nutrition in practical contexts. Learners will also apply a range of research and investigation skills to consider contemporary food issues.

Learning and teaching approaches should support [Curriculum for Excellence's four capacities](#) to enable each learner to develop as a successful learner, a confident individual, a responsible citizen and an effective contributor.

Approaches to assessment

The publication, [Building the Curriculum 5](#) sets out a framework for assessment which offers guidance on approaches to recognising achievement, profiling and reporting. A shared understanding of assessment standards and expectations is essential. [Research](#) in assessment suggests that learners learn best, and attainment improves, when learners:

♦ understand clearly what they are trying to learn, and what is expected of them;
♦ are given feedback about the quality of their work, and what they can do to make it better;
♦ are given advice about how to go about making improvements;
♦ are fully involved in deciding what needs to be done next, and who can give them help if they need it.

(Ref: http://scotland.gov.uk/Publications/2005/09/20105413/54156)

A holistic approach to assessment is recommended where possible. This will enrich the assessment process for the learner, avoid duplication of assessment and provide more time for learning and teaching. Additionally it will allow Centres to manage the assessment process more efficiently.

Where naturally occurring evidence can be generated from the learning activities this is true assessment of learning. However prior planning of how to capture and retain the evidence for verification purposes should be considered.

Learners can benefit from a wide range of online resources to enable them to use ICT in presenting information for assessment purposes. They may develop a blog or on line diary or contribute to a teacher/lecturer-led discussion forum which can be used for naturally-occurring evidence. E-portfolios may enable learners to select relevant evidence to meet the assessment standards and encourage reflection, personalisation and choice.

Where appropriate and easy to access, teachers/lecturers should use technology to support not only learning and teaching but also differentiated assessment of their learners.

Assessment practice tasks could be used as a valuable learning tool, not only to prepare learners for the mode of assessment required for Unit assessment, but also to reinforce learning and inform remediation of less secure learning. Peer assessment is a good, active example of assessment as well as giving valuable experience of making value judgements.

Whatever the assessment approach used, it is important that the approach to assessment encourages personalisation and choice. Any reporting back method can be done in a manner suitable for the learner – text based, audio/electronic presentation or video evidence. There are many sources of assistive technology software available to ease text-based tasks such as reading.

Assessment should meet the varying needs of all learners and, at this level, be practically-based. It is important that learners receive regular feedback on their performance.

Authenticity

There are a number of techniques and strategies for ensuring that learner's work presented is their own. For more information, please refer to SQA's 'Guide to Assessment'.

Preparation for Course assessment

Each Course has additional time which may be used at the discretion of the teacher or lecturer to enable learners to prepare for Course assessment. This time may be used near the start of the Course and at various points throughout the Course for consolidation and support. It may also be used for preparation for Unit assessment, and towards the end of the Course, for further integration, revision and preparation and/or gathering evidence for Course assessment.

Information given in the *Course Specification* and the *Course Assessment Specification* about the assessment of added value is mandatory.

The purpose of the Course assessment is to assess added value of the Course as well as confirming attainment in the Course and providing a grade. The added value for the Course will address the key purposes and aims of the Course as defined in the Course Rationale.

In this Course assessment, added value will focus on the following:

♦ challenge — requiring greater depth or extension of knowledge and skills assessed in other Units
♦ application — requiring application of knowledge and/or skills in practical and theoretical contexts

The learner will be assessed through a combination of an assignment and a question paper. Together they will add challenge and application to the Course as the learner will integrate, extend and apply the skills, knowledge and understanding they have learned during the Course.

The purpose of the Assignment is to assess the application of knowledge, understanding and skills from across the Units through a problem-solving approach. Learners will use skills to investigate a food or consumer issue and develop food product(s). The assignment will have 50% of the available marks.

The assignment may be introduced at any time during the Course. However, learners should be given sufficient time to develop skills, knowledge and understanding required before beginning to compile assessment evidence.

The purpose of the question paper is to assess the learner's ability to integrate and apply knowledge, understanding and skills from across the Units. The question paper will have 50% of the available marks.

More detailed information can be obtained in the *Course Assessment Specification.*

Combining assessment across Units

Any pattern of integrated assessment can mirror that for integrated learning and teaching opportunities, illustrated in the section on Approaches to Learning and Teaching.

Where the Units are offered on a stand-alone basis, teachers/lecturers will have more flexibility in developing assessment approaches because there will be no requirement to relate these to the Course assessment. When, on the other hand, the Units are delivered as part of the Course, their assessment can be combined. The pattern of such integrated assessment can mirror that for integrated delivery illustrated in the 'Approaches to learning and teaching' section above.

Where possible, using an integrated approach to assessment is recommended because it will:

♦ enrich the assessment process for both learners and teachers/lecturers by bringing together elements of different Units
♦ make more sense to learners and avoid duplication of assessment
♦ ensure greater rigor in assessment
♦ allow for evidence for both Units to be drawn from a range of activities, thus making it easier to cover aspects which may not occur in a one-off assessment
♦ use assessment opportunities efficiently and reduce over-assessment
♦ be cost effective

An integrated approach to learning and teaching across the component Units of National 5 Health and Food Technology Course may be possible. Potential links between Outcomes of Units may be established, which will provide opportunities for learners to develop skills and use knowledge within one activity. A holistic approach to assessment will enrich the assessment process for the learner, avoid duplication of tasks and thus allow more emphasis on learning and teaching.

Care must be taken to ensure that combined assessments provide appropriate evidence for all Outcomes which they claim to assess.

Integrating assessment will also minimise repetition, allow more time for learning and allow centres to manage the assessment process more efficiently. When integrating assessment across Units, teachers/lecturers could use e-assessment where ever possible. Portfolios, both electronically managed or written, diaries and recording sheets may be updated by learners and may enable learners to select relevant evidence to meet Assessment Standards and encourage reflection, personalisation and choice.

Assessment evidence for individual learners should be retained for individual Outcomes as well as Units and Course assessments.

Equality and inclusion

This Course has been designed to ensure that there are no unnecessary barriers to learning or assessment. The Course takes into account the needs of all learners in that it recognises that young people achieve in different ways and at a different pace. Neither the mode nor the period of delivery is prescribed, and centres will be free to use a range of teaching methods and to draw on a range of mechanisms supporting delivery. Equality and inclusion will also be promoted by the use of a range of activities and assessment techniques which suit particular learning styles, learners' needs and prior experiences.

The following guidance should ensure that any issues relating to equality and inclusion in a health and food technology context are addressed:

♦ centres must take into account the needs of all learners who undertake the Course, perhaps by using meat-free, vegan, high-protein or low-fat food products
♦ there should be no gender, social, cultural or physical barrier for any learner embarking on studying this Course and its individual Units

Teachers/lecturers should consider the needs and characteristics of their learners when selecting food preparation or prototype development tasks, cooking methods, ingredients and recipe selection. The selection of a suitable recipe or prototype may mitigate any adverse effects on learners.

Learners could also access a wide range of food preparation equipment such as food processors or blenders, or cooking equipment such as microwaves, to allow learners to make suitable food products to meet the Outcomes. In addition, learners could make use of pre-prepared ingredients, such as chopped onions or diced carrots, or prepared components, such as sauces, to assemble food products.

The following are reasonable responses to adapting assessments:

♦ additional time allocation
♦ scribe or reader
♦ audio evidence
♦ classroom assistant available to assist with food preparation skills
♦ assistive technology
♦ adapted equipment (suction bowls, motorised can openers, food processers)

There are many sources of assistive technology software available to ease text-based tasks, such as reading text or internet searching.

Increased flexibility in relation to how centres gather evidence should allow for more freedom for centres to best meet the needs of their specific learners — thus, for example, oral evidence for a learner who is unable to write responses is acceptable, providing evidence is retained for verification purposes.

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

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

It is important that centres are aware of understand SQA's assessment arrangements for disabled learners, and those with additional support needs, when making requests for adjustments to published assessment arrangements. Centres will find more guidance on this in the assessment arrangements section of SQA's website: www.sqa.org.uk/sqa//14977.html

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 are available on SQA's website at: www.sqa.org.uk/sqa//14977.html.
♦ Building the Curriculum 3: A framework for learning and teaching
♦ Building the Curriculum 4: Skills for learning, skills for life and skills for work
♦ Building the Curriculum 5: A framework for assessment
♦ Course Specification
♦ Design Principles for National Courses
♦ *Guide to Assessment*
♦ Principles and practice papers for curriculum areas
♦ *SCQF Handbook: User Guide* and SCQF level descriptors
♦ *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*
♦ *Coursework Authenticity: A Guide for Teachers and Lecturers*

Appendix 2: Suggested resources

Name of organisation/source	Possible resources available
Food Standards Agency	Food hygiene and safety information.
British Nutrition Foundation	Information on nutrition, healthy eating, lifestyles, dietary diseases, nutritional analysis programme, sensory testing, podcasts, cooking videos, downloadable resources and more.
BBC Bitesize	Information on nutritional properties, functional properties, food product development, social and environmental issues and more.

Appendix 3: Guidance on research techniques

This grid provides an indication of the type of research technique and the complexity of research appropriate for learners at National 5 level. The list is for guidance only and is not definitive. Learners may choose to use other methods of research. It is anticipated that learners may choose to use these techniques for the purposes of investigation or testing.

Research technique	Guidance on carrying out the research to allow sufficient relevant data to be collected:	Guidance on presenting results
Questionnaire	- include a minimum of 10 respondents - choose respondents who are appropriate to the focus of the research - ask 4–7 pertinent questions	- identify the target group of respondents - display all questions and all possible answers - display all responses including nil responses - consider displaying results in table format
Survey	- use at least one suitable source of information - use source(s) of information that will provide data relevant to the focus of the research - sources could include; supermarket websites, books, magazines/periodicals, trade publications, retailers, or a mixture of these	- identify the source(s) of information - identify the information gathered from each source - display the information gathered under appropriate headings
Interviews	- use an interviewee whose expertise is appropriate to the focus of the research - ask 4–7 pertinent questions - construct questions to allow the interviewee to provide extended answers	- identify the position/job title of the interviewee - display all questions and the information

Internet/Literary search	♦ use at least one suitable source of information ♦ use source(s) of information that will provide data relevant to the focus of the research ♦ information could be gathered from a mixture of literary/web-based sources ♦ select the relevant information from each source	♦ give details of the source(s) of information ♦ identify the information gathered from each source ♦ display the relevant information gathered under appropriate headings ♦ include graphics where relevant
Costing	♦ use current cost data ♦ include the cost of all ingredients ♦ include 'like for like' data in comparative costing	♦ include sources of cost data ♦ include details of quantities and/or unit costs where appropriate ♦ display the information gathered under appropriate headings
Nutritional Analysis	♦ include all nutrients relevant to the focus of the investigation ♦ include all ingredients in the food product	♦ include the source of the data ♦ display the raw data gathered under appropriate headings ♦ include totals for each nutrient in the food product
Sensory Testing	♦ use testers whose expertise is appropriate to the focus of the research ♦ use a minimum of five testers ♦ ask for 3–4 responses based on the food product ♦ ask appropriate questions to elicit potential improvements/modifications to the food product	♦ include details of all potential solutions ♦ display all questions and all possible answers ♦ display all responses including nil responses ♦ display the key used for the testing ♦ consider displaying results in table format as this can make the data easier to read

Administrative information

Published: May 2016 (version 1.2)

History of changes to Course Support Notes

Version	Description of change	Authorised by	Date
1.1	Minor additional information inserted in Possible learning activities table for further clarity of requirements. Minor amendments to wording in Combining assessment across Units section. Wording amended to provide clarity of the requirements for levels and additional text added to table columns in Approaches to learning and teaching section.	Qualifications Manager	May 2015
1.2	Appendix 2: Suggested resources and Appendix 3: Guidance on research techniques added.	Qualifications Manager	May 2016

Unit Support Notes — Health and Food Technology: Food Product Development (National 5)

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

Introduction

These support notes are not mandatory. They provide advice and guidance on approaches to delivering and assessing the Health and Food Technology (National 5): Food Product Development Unit. They are intended for teachers and lecturers who are delivering this Unit. They should be read in conjunction with:

♦ Health and Food Technology (National 5): Food Product Development *Unit Specification*
♦ Health and Food Technology (National 5 *Course Specification*
♦ National 5 Health and Food Technology Course *Assessment Specification*
♦ National 5 Health and Food Technology Course *Support Notes*
♦ appropriate assessment support materials

General guidance on the Unit

Aims

The Food Product Development Unit is a mandatory Unit in the National 5 Health and Food Technology Course. The Unit is also available as a free-standing Unit and is designed to meet the needs of a broad range of learners who may choose to study it.

The general aim of this Unit is to allow learners to develop knowledge and understanding of the functional properties of ingredients in food and their use in developing new food products. Learners will develop an understanding of the stages involved in developing food products and, through a problem-solving approach, produce food products to meet specified needs. Learners will also develop and apply knowledge and understanding of safe and hygienic food practices.

Learners who complete this Unit will be able to:

1   Explain how food products are developed
2   Develop a food product to meet specified needs

Progression into this Unit

Entry into 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:

♦   Health and Food Technology Course (National 4) or relevant component Units

An interest in food, nutrition or health as well as prior experience of developing practical cookery skills would be an advantage. Centres wishing to establish the suitability of learners without prior qualifications and/or experiences and outcomes may benefit from carrying out a diagnostic review of prior life and work experience.

Skills, knowledge and understanding covered in the Unit

Information about skills, knowledge and understanding is given in the National 5 Health and Food Technology 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 most appropriate for delivery in their centres.

Examples of suitable contexts in which the skills, knowledge and understanding for this Unit could be developed are detailed in the sections entitled: 'Approaches to Learning and Teaching' and 'Approaches to Assessment'.

Progression from this Unit

Achievement in this Unit could provide a progression route to the following courses or Units:

♦ Health and Food Technology (Higher), or relevant component Units
♦ National Certificate Courses at SCQF level 5
♦ Further study, employment and/or training

Approaches to learning and teaching

This Unit is designed to provide flexibility and choice for both the learner and delivering centre. Approaches to learning and teaching should enhance opportunities for all learners to achieve their full potential, whether working in a whole-class, small group or supported self-study situation.

It is good practice to use a variety of methods so that learners' interest and motivation are maintained and individual preferences for different learning styles are promoted. When delivering the Unit content, account should be taken of the prior knowledge that learners may have.

Tasks should be open to allow for personalisation and choice as well as enabling learners to work at a suitable pace with appropriate support. Discussion groups or personal investigation and research are excellent ways of promoting some independence in learning. Visits and guest speakers bring commerce and employment experiences to the Course delivery.

ICT can play an important role in the design and learning and teaching approaches within the new National Courses and Units by supporting integration and learners' personalisation and choice. While it is important not to introduce new, additional ICT skills or knowledge, learners may be using ICT in working towards their assessment.

Centres should set varied practical tasks to allow learners to experience challenge and enjoyment in a range of practical food contexts. The range of food preparation/cooking equipment used could include:

- ♦ Food processor — Microwave
- ♦ Pressure cooker — Health grill
- ♦ Steamer — Bread maker
- ♦ Electric whisk — Blender/juicer

Some examples of possible learning activities are given in the table which follows. Please note, these are examples only and learning and teaching for this Unit can be approached in other ways.

Outcome	Possible learning and teaching approaches
Explain how food products are developed	In this Unit, practical activities may be used to explore and exemplify the functional properties of ingredients in food. Learners could make food products to experiment with and demonstrate functional properties of ingredients and experiment with different ingredients or changing quantities or ratios of ingredients. Learners could then discuss and explain the effects of these changes on the food products made. For example, learners could consider the functional properties of eggs, flour, sugar and fat: ♦ functional properties of eggs may include aeration (meringues and whisked sponges); emulsifying (mayonnaise); binding (cake-making) and coagulation (egg custard) ♦ functional properties of flour could include gelatinisation (sauce making); fermentation (bread making) and detrixinisation (browning on surface of baked or toasted flour products) ♦ functional properties of sugar could include crystallisation and caramelisation (confectionery) ♦ functional properties of fat could include shortening (pastry and shortbread); creaming (creamed sponge) and rubbing in (pastry and some cakes) Learners could explore the range of food products which make use of the functional properties of these ingredients by making the products or examining existing products. Practical activities and results could be recorded to allow discussion of: ♦ factors that affect finished results of one recipe ♦ the number of functional properties illustrated in one food product Learners could explore the stages of food product development and encouraged to undertake some investigative work into the stages. Learners could work in pairs or small groups to explore a stage of development then share their findings with the rest of the class. Learners could work with prompt cards about the stages of development and be encouraged to put them into the correct order and briefly describe the purpose of each stage in making food products. An activity could focus on the commercial production of one food product, taking learners through each stage of product development. Learners may also benefit from visiting a food manufacturer or listening to guest speakers to put their learning into a real-life context.

Develop food products to meet specified needs	In the learning and teaching for this Outcome, there are good opportunities for learners to undertake some investigative work. Learners could consider the range of existing food products which address specific needs, such as health foods or gluten-free ranges. Learners could consider how well the existing ranges meet these needs and/or if there are any gaps in the market for a particular need. Learners could then generate a range of ideas for their own food products and display their work using story-boards or mood-boards. Suitable investigative techniques might include: ♦ questionnaires to establish like and dislikes for flavours or potential ingredients ♦ online surveys of similar products already available ♦ interviews with an expert such as school meals supervisor or food product development expert ♦ sensory testing of a given range of products ♦ market research Learners could choose an idea to take forward to practical testing. Learners would establish the recipe and resources required to make the final product. They could produce a sketch of the proposed solution and a food order and plan of work to complete the production of the proposed solution. Learners could also work to given briefs to develop food products and comment on the finished products against key points in the briefs. Learners could also identify points of food hygiene and food safety that are relevant to the manufacture of the food product. They could then go on to manufacture the proposed solution and use this as a basis for sensory testing and evaluation. Learners could also be encouraged to examine existing products and comment on their suitability for specific needs. Learners could complete sensory testing to assess the food product in terms of appearance, flavour and taste, texture and overall acceptability. They could complete an account which describes how the chosen product meets the needs within the given scenario and suggest adaptations or improvements that could be made as a result of feedback given from sensory testing. Learners could then give feedback to the class. The importance of food safety and hygiene should be emphasised and learners could produce leaflets or posters about a particular issue and display these.

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

Information about developing skills for learning, skills for life and skills for work in this Unit is given in the relevant *Course Support Notes*.

Approaches to assessment

All of the Outcomes and Assessment Standards in a Unit must be covered in the assessment of a Unit.

Approaches to the assessment of Units when they form part of a Course may differ from approaches to assessing the same Unit when delivered free-standing. Where Units are delivered on a stand-alone basis, teachers/lecturers will have more flexibility to develop approaches to delivering and assessing Units which are not related to Course assessment.

Evidence may be gathered in a variety of forms that best suit the needs of the learner and individual centres. It is recommended that assessors use their professional judgement to determine the most appropriate way to generate evidence.

Authenticity
There are a number of techniques and strategies for ensuring that learners present work which is their own. For more information, please refer to SQA's 'Guide to Assessment'.

Opportunities for assessment and evidence gathering in this Unit

Outcome	Possible approaches to assessment
1 Explain how food products are developed	Evidence can be gathered in a variety of forms that best suit the needs of the learner and individual centres. It is recommended that assessors use their professional judgement to determine the most appropriate way to generate evidence. Learners could explain a range of different functional properties of food and their uses in food products, such as: ♦ Adding air ♦ Binding ♦ Glazing ♦ Thickening Learners may explain the functional properties via verbal feedback, a written report, completion of a pro forma, short/restricted response questions, or undertaking a presentation to the class. Learners could provide evidence of their ability to explain the stages of food product development through a short question paper or through a poster, for example. Stages explained could include: ♦ Concept generation ♦ Concept screening ♦ Prototype production ♦ Product testing ♦ First production run ♦ Marketing plan ♦ Product launch

| 2 Develop food products to meet specified needs | Teachers/lecturers could provide learners with a brief for this Outcome. Allowing learners to select from a range of briefs will allow for personalisation and choice. Learners could present their ideas for food products on a story-board or moodboard, or produce a leaflet.

Safe and hygienic practice should be evident during all food preparation and cooking activities. Evidence could be collated via video footage, written report, completion of a proforma, power point presentation, teacher observational checklist or photographic evidence.

At National 5, explanations of the suitability of the food product for the needs of the brief could be oral or written feedback, possibly via completion of a proforma. The results of sensory testing activities could also be recorded here. |
|---|---|

Combining assessment within Units

All Units are internally assessed against the requirements shown in the *Unit Specification*. Each Unit can be assessed on an individual Unit-by-Unit basis or via the use of a combined assessment.

Potential links between the Assessment Standards of this Unit may be established, which will provide opportunities for learners to demonstrate skills and use knowledge within one assessment activity. A holistic approach to assessment will enrich the assessment process for the learner, avoid duplication of tasks and thus allow more emphasis on learning and teaching. Care must be taken to ensure that combined assessments provide appropriate evidence for all Outcomes which they assess.

Centres may opt to assess naturally occurring activities, but they must still provide appropriate evidence, eg video footage or observational checklist.

Evidence should be able to be generated and held in a variety of formats that best suit the needs of the learner and centre. Appropriate ICT systems could be used as a mechanism for recording attainment, in particular the elements of the Course that lend themselves to written work. Assessors must choose an assessment format which takes into account the needs of all learners and implement the assessment at an appropriate stage in the Unit.

Equality and inclusion

Where appropriate, arrangements should be made to ensure that there will be no artificial barriers to learning. The nature of learners' needs should be taken into account when planning learning activities and to provide alternative provision or support where necessary. This will ensure the inclusion of all learners and support them in the learning process.

Increased flexibility in relation to how centres gather evidence should allow for more freedom for centres to best meet the needs of their specific learners — thus, for example, oral evidence for a learner who is unable to write responses is acceptable, providing evidence is retained for verification purposes.

The following are reasonable responses to adapting assessments:

♦ additional time allocation
♦ scribe or reader
♦ audio evidence
♦ assistive technology
♦ adapted equipment

There is more advice and guidance about these issues in the 'Equality and inclusion' section in the National 5 Health and Food Technology *Course Support Notes.*

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 are available on SQA's website at: www.sqa.org.uk/sqa//14977.html.
♦ Building the Curriculum 4: Skills for learning, skills for life and skills for work
♦ Building the Curriculum 5: A framework for assessment
♦ Course Specification
♦ Design Principles for National Courses
♦ *Guide to Assessment*
♦ Principles and practice papers for curriculum areas
♦ *SCQF Handbook: User Guide* and SCQF level descriptors
♦ *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*
♦ *Coursework Authenticity: A Guide for Teachers and Lecturers*
♦ *SQA Guidelines on e-assessment for Schools*
♦ *SQA Guidelines on Online Assessment for Further Education*
♦ SQA e-assessment web page

Administrative information

Published: May 2015 (version 1.1)

History of changes to Unit Support Notes

Version	Description of change	Authorised by	Date
1.1	General guidance on the Unit section and Possible learning and teaching approaches table amended to read 'a basic food product' – removed plural. Possible approaches to assessment table amended due to minor word corrections for Outcome 1 and removed plural in Outcome 2. Combining assessment within Units section has minor word corrections/addition.	Qualifications Manager	May 2015

Unit Support Notes — Health and Food Technology: Contemporary Food Issues (National 5)

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

Introduction

These support notes are not mandatory. They provide advice and guidance to support the learning and teaching of the Health and Food Technology: Contemporary Food Issues (National 5) Unit. They are intended for teachers and lecturers who are delivering the Unit. They should be read in conjunction with:

♦ National 5 Health and Food Technology: Contemporary Food Issues *Unit Specification*
♦ National 5 Health and Food Technology *Course Specification*
♦ National 5 Health and Food Technology *Course Assessment Specification*
♦ National 5 Health and Food Technology *Course Support Notes*
♦ appropriate assessment support materials

General guidance on the Unit

Aims

The Contemporary Food Issues Unit is a mandatory Unit of the National 5 Health and Food Technology Course. The Unit is also available as a free-standing Unit and is designed to meet the needs of a broad range of learners who may choose to study it.

In this Unit, learners will develop knowledge and understanding of consumer food choices. They will explore factors which may affect food choices and develop knowledge and understanding of contemporary food issues. They will consider technological developments in food and organisations which protect consumer interests. They will also develop knowledge and understanding of food labelling and how it helps consumers make informed food choices.

Learners who complete this Unit will be able to:

1   Explain consumer food choices

Progression into this Unit

Entry into 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:

♦   Health and Food Technology Course (National 4) or relevant component Units

An interest in food, nutrition, consumer issues or related work experience in the health or food industries will assist successful progression through this Unit. Centres wishing to establish the suitability of learners without prior qualifications and/or experiences and outcomes may benefit from carrying out a diagnostic review of prior life and work experiences.

Skills, knowledge and understanding covered in the Unit

Information about mandatory skills, knowledge and understanding is given in the National 5 Health and Food Technology *Course Support Notes.*

If this Unit is being delivered on a free-standing basis, teachers and lecturers are free to select skills, knowledge, understanding and contexts which are most appropriate for delivery in their centres.

Examples of suitable contexts in which the skills, knowledge and understanding for this Unit could be developed are detailed in the sections entitled: 'Approaches to Learning and Teaching' and 'Approaches to Assessment'.

Progression from this Unit

This Course or its components may provide progression to:

♦ Higher Health and Food Technology, or relevant component Units
♦ National Certificate Courses at SCQF level 5
♦ Further study, employment and/or training

Approaches to learning and teaching

This Unit is designed to provide flexibility and choice for both the learner and Centre.

Approaches to learning and teaching enhance opportunities for learners of all abilities to achieve their full potential, whether working in a whole-class, small group, independently or supported situation. It is good practice to use a variety of methods so that learners' interest and motivation are maintained and individual preferences for different learning styles are considered. When delivering the Course content, account should be taken of the prior knowledge that learners may have.

Teachers/lecturers will need to ensure an appropriate balance between teacher-directed approaches and learner-centred activities. At National 5, it would be advantageous to learners if teacher demonstrations were followed by practical sessions to allow learners to practice and reinforce skills. Visits and guest speakers bring commerce and employment experiences to the course learning and teaching opportunities.

Learning and teaching approaches should allow the Outcome to be achieved through use of practical active learning techniques.

Tasks should be open to allow for personalisation and choice as well as enabling learners to work at a suitable pace with appropriate support.

Learners need to be able to practise skills through a variety of practical tasks in different contexts, linked to contemporary food issues, to enable them to demonstrate competence in the unit and to allow them to link relevant knowledge and skills in an integrated way.

Learners could develop an awareness of, and contribute to discussions about, current food issues. For example, they could explore:

♦ Fair Trade
♦ Food co-operatives
♦ Allotments/Grow your own initiatives
♦ Air Miles
♦ Seasonality
♦ Sustainability
♦ Food Aid/World Hunger
♦ Food Advertising
♦ Food Labelling

This list is not exclusive. There are other issues which may also be explored.

Centres should set varied practical tasks to allow learners to experience challenge and enjoyment in a range of practical food contexts. The range of food preparation/cooking equipment used could include:

- ◆ Food processor   Microwave
- ◆ Pressure cooker   Health grill
- ◆ Steamer   Bread maker
- ◆ Electric whisk   Blender/juicer

Some examples of possible learning and teaching activities are given in the table below. Please note, these are examples only and the learning and teaching for this Unit can be approached in different ways.

Outcome	Possible approaches to learning and teaching
Explain consumer food choices	In this Unit, there are many opportunities to develop knowledge and skills in local contexts and real-life situations. Teachers/lecturers should ensure an appropriate balance between teacher/lecturer-directed approaches and learner-centred activities. For example, it may be more appropriate to use a teacher/lecturer-directed approach to introduce a new concept or demonstrate new skills.

Practical activities may be used to reinforce concepts relating to consumer food choices. Examples of activities to consider include:

♦ experimenting with fresh foods versus convenience foods – this could generate discussion on factors such as: time to prepare; taste; cost; nutritional value and shelf life
♦ exploring the cost, quality and nutritional value of food grown locally and in season compared to imported products

Learners could, as a group, discuss and mind-map their prior knowledge of factors or issues which affect consumer food choices.

Examples of possible factors which may affect choice of food could include:

♦ Budgets
♦ Lifestyle
♦ online shopping
♦ working hours or shift patterns
♦ nutritional knowledge
♦ special dietary needs
♦ allergies
♦ foreign travel and knowledge of world cuisine
♦ likes and dislikes
♦ advertising and the media |

Learners could work in pairs and undertake some investigative work into a chosen factor. The possible effects the factor has on consumer food choices and the existing range of food products addressing the factor could be explored and presented on a moodboard or storyboard.

Contemporary food issues could include:

♦ factory farming
♦ genetic modification (GM),
♦ Fair Trade
♦ organic produce
♦ farmer's markets/allotments
♦ food labelling
♦ food miles
♦ sustainability
♦ seasonality
♦ pollution
♦ packaging
♦ recycling
♦ food aid/world hunger

There could be teacher-led and class discussion to introduce various technological developments which may affect consumer food choices. Learners could then explore a technological development of their choice and present their findings in a suitable format.

Learners could investigate consumer organisations such as:

♦ Advertising Standards Authority
♦ Environmental Health Department

	♦ Trading Standards Department ♦ Food Standards Agency ♦ Which? Learners could explore the websites of these agencies and collate key information. Speakers from local organisations could visit and give real-life examples of the work carried out by these agencies. As an activity, learners could identify the statutory and voluntary labelling information on food labels. In pairs, they could produce a leaflet, poster or electronic presentation which explains: ♦ 'Traffic lights' ♦ Recycling symbols ♦ Animal welfare symbols Learners could explore current information on food labels such as: ♦ Name/description of product ♦ List of ingredients ♦ Date marking ♦ Recycling ♦ Name and address of manufacturer ♦ Weight or volume of the product ♦ Country of origin ♦ Storage instructions ♦ Instructions for use/cooking Learners could undertake practical activities such as designing suitable packaging for a food product and identifying and designing the labelling that should be included on the food product.

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

Information about developing skills for learning, skills for life and skills for work in this Unit is given in the relevant *Course Support Notes*.

Approaches to assessment and gathering evidence

All of the Outcomes and Assessment Standards in a Unit must be covered in the assessment of a Unit.

Approaches to the assessment of Units when they form part of a Course may differ from approaches to assessing the same Unit when delivered free-standing. Where Units are delivered on a stand-alone basis, teachers/lecturers will have more flexibility to develop approaches to delivering and assessing Units which are not related to Course assessment.

Evidence may be gathered in a variety of forms that best suit the needs of the learner and individual centres. It is recommended that assessors use their professional judgement to determine the most appropriate way to generate evidence.

Authenticity
There are a number of techniques and strategies for ensuring that learners present work which is their own. For more information, please refer to SQA's 'Guide to Assessment'.

Opportunities for assessment and gathering evidence in this Unit can be seen in the table below. Please note, these are examples only and evidence for this Unit can be generated and gathered in different ways.

Opportunities for assessment and gathering evidence in this Unit

Outcome	Possible approaches to assessment
Explain consumer food choices	Approaches to assessment and evidence gathering could take a variety of forms to meet the needs of a range of learners and centres. For this Outcome, learners may provide evidence in a range of ways, including recorded oral responses, written responses or electronically. Another way to collate and present information may be in the form of a poster or leaflet. Here, learners could incorporate images and written sections and make clear links between the Assessment Standards in this Outcome. Learners could then communicate their findings by giving a short presentation or talk on their poster.

Combining assessment within Units

All Units are internally assessed against the requirements shown in the *Unit Specification.* Each Unit can be assessed on an individual Unit-by-Unit basis or via the use of a combined assessment.

Potential links between the Assessment Standards of this Unit may be established, which will provide opportunities for learners to demonstrate skills and use knowledge within one assessment activity. A holistic approach to assessment will enrich the assessment process for the learner, avoid duplication of tasks and thus allow more emphasis on learning and teaching. Care must be taken to ensure that combined assessments provide appropriate evidence for all Outcomes which they claim to assess.

Centres may opt to assess naturally occurring activities, but they must still provide appropriate evidence, eg video footage or observational checklist.

Evidence should be able to be generated and held in a variety of formats that best suit the needs of the learner and centre. Appropriate ICT systems could be used as a mechanism for recording attainment, in particular the elements of the Course that lend themselves to written work. Assessors must choose an assessment format which takes into account the needs of all learners and implement the assessment at an appropriate stage in the Unit.

Equality and inclusion

Where appropriate, arrangements should be made to ensure that there will be no artificial barriers to learning. The nature of learners' needs should be taken into account when planning learning activities and to provide alternative provision or support where necessary. This will ensure the inclusion of all learners and support them in the learning process.

Increased flexibility in relation to how centres gather evidence should allow for more freedom for centres to best meet the needs of their specific learners — thus, for example, oral evidence for a learner who is unable to write responses is acceptable, providing evidence is retained for verification purposes.

The following are reasonable responses to adapting assessments:

♦ additional time allocation
♦ scribe or reader
♦ audio evidence
♦ assistive technology
♦ adapted equipment

There is more advice and guidance about these issues in the 'Equality and inclusion' section in the National 5 Health and Food Technology *Course Support Notes.*

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 are available on SQA's website at: www.sqa.org.uk/sqa//14977.html.
♦ Building the Curriculum 4: Skills for learning, skills for life and skills for work
♦ Building the Curriculum 5: A framework for assessment
♦ Course Specification
♦ Design Principles for National Courses
♦ *Guide to Assessment*
♦ Principles and practice papers for curriculum areas
♦ *SCQF Handbook: User Guide* and SCQF level descriptors
♦ *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*
♦ *Coursework Authenticity: A Guide for Teachers and Lecturers*
♦ *Research Report 4 — Less is More: Good Practice in Reducing Assessment Time*
♦ *SQA Guidelines on e-assessment for Schools*
♦ *SQA Guidelines on Online Assessment for Further Education*
♦ SQA e-assessment web page

Administrative information

Published: September 2016 (version 2.0)

History of changes to Unit Support Notes

Version	Description of change	Authorised by	Date
1.1	General guidance on the Unit section and Possible learning and teaching approaches table amended to read 'a basic food product' – removed plural. Possible approaches to assessment table amended due to minor word corrections for Outcome 1 and removed plural in Outcome 2. Combining assessment within Units section has minor word corrections/addition.	Qualifications Manager	May 2015
2.0	Amendments to content to correspond with the removal of Outcome 2 from the Unit Specification.	Qualifications Manager	September 2016

Unit Support Notes — Health and Food Technology: Food for Health (National 5)

Introduction

These support notes are not mandatory. They provide advice and guidance to support the learning, teaching and assessment of the National 5 Health and Food Technology: Food for Health Unit. They are intended for teachers and lecturers who are delivering the Unit. They should be read in conjunction with:

♦ Health and Food Technology (National 5): Food for Health *Unit Specification*
♦ National 5 Health and Food Technology Course *Specification*
♦ National 5 Health and Food Technology Course *Assessment Specification*
♦ National 5 Health and Food Technology Course *Support Notes*
♦ appropriate assessment support materials

General guidance on the Unit

Aims

The Food for Health Unit is a mandatory Unit of the National 5 Health and Food Technology Course. The Unit is also available as a free-standing Unit and is designed to meet the needs of a broad range of learners who may choose to study it.

The general aim of this Unit is to develop learners' knowledge and understanding of the relationship between food, health and nutrition. Learners will also develop knowledge and understanding of dietary needs, for individuals at various stages of life and explain current dietary. Through practical activities, the learner will produce and reflect on food products which meet individual needs.

Learners who complete this Unit will be able to:

1   Explain the relationship between health, food, and nutrition
2   Make a food product to meet dietary and health needs

Progression into this Unit

Entry into 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

An interest in food, health and nutrition may assist successful progression through this Unit. Centres wishing to establish the suitability of learners without prior qualifications may benefit from carrying out a diagnostic review of prior life and work experiences.

Skills, knowledge and understanding covered in the Unit

Information about skills, knowledge and understanding is given in the National 5 Health and Food Technology Course *Assessment Specification* and *Course Support Notes.*

If this Unit is being delivered on a free-standing basis, teachers and lecturers are free to select skills, knowledge, understanding and contexts which are most appropriate for delivery in their centres.

Examples of suitable contexts in which the skills, knowledge and understanding for this Unit could be developed are detailed in the sections entitled: 'Approaches to Learning and Teaching' and 'Approaches to Assessment'.

Progression from this Unit

Progression pathways from this Unit might include:

♦ Higher Health and Food Technology, or relevant component Units
♦ National Certificate Courses at SCQF level 5
♦ Further study, employment and/or training

Approaches to learning and teaching

This Unit is designed to provide flexibility and choice for both the learner and delivering centre. Approaches to learning and teaching should enhance opportunities for all learners to achieve their full potential, whether working in a whole-class, small group or supported self-study situation.

It is good practice to use a variety of methods so that learners' interest and motivation are maintained and individual preferences for different learning styles are promoted. When delivering the Unit content, account should be taken of the prior knowledge that learners may have.

Tasks should be open to allow for personalisation and choice as well as enabling learners to work at a suitable pace with appropriate support. Discussion groups or personal investigation and research are excellent ways of promoting some independence in learning. Visits and guest speakers bring commerce and employment experiences to the Course delivery.

ICT can play an important role in the design and learning and teaching approaches within the new National Courses and Units by supporting integration and learners' personalisation and choice. While it is important not to introduce new, additional ICT skills or knowledge, learners may be using ICT in working towards their assessment.

Centres could set varied practical tasks to allow learners to experience challenge and enjoyment in a range of practical food contexts. The range of food preparation/cooking equipment used could include:

♦ Food processor	Microwave
♦ Pressure cooker	Health Grill
♦ Steamer	Bread Maker
♦ Electric whisk	Blender/Juicer

Some examples of possible approaches to learning and teaching activities are given in the table which follows. Please note that these are examples only. The learning and teaching for this Unit may be approached in different ways.

Outcome	Possible learning and teaching approaches
Explain the relationship between food, health and nutrition	For this Outcome, learners could mind-map any prior knowledge of a balanced and varied diet. As a group, learners could be encouraged to share ideas about potential health benefits of a balanced and varied diet. Learners could also conduct an analysis of a day's food intake for a specified individual. They could then suggest adaptations or improvements to ensure the individual consumes the recommended daily intake of particular food types and/or nutrients.
	Learners could take part in a range of practical activities to put their learning into context. They could prepare a range of healthy food products and be encouraged to evaluate their suitability for particular health or dietary needs.
	Learners could make use of websites, news clips or adverts to explore the relationship between health, food and nutrition. These could be used to stimulate discussion about the purpose of dietary advice and who it might be targeted to. Learners could be provided with existing recipes and be encouraged to suggest and perhaps undertake possible adaptations to better meet the recommendations of current dietary advice. Learners could make a range of food products and evaluate how these might meet, or not meet, pieces of dietary advice.
	When discussing the main nutrients, learners could consider, for example, protein; fat; carbohydrate; Vitamin A, B group, C and D; Calcium; Iron plus water; and dietary fibre. Learners could engage in matching activities, linking nutrients to both their sources and their functions. Learners could produce a range of food products which are a source of these nutrients and be encouraged to describe where the nutrient is sourced from and what effects it has on health.
	Learners could make use of newspapers or the internet to consider the effects on health of a range of diet-related diseases or conditions such as obesity, heart disease or high blood pressure. Learners could work in small groups to prepare and deliver a presentation on a diet-related condition or disease, discussing its cause(s), symptoms and long-term effects. Learners could also produce information leaflets or produce a short TV advert. Learners could take part in practical activities to explore the kinds of food products which address a range of conditions or diseases. Learners could consider the effects of different ingredients and cooking methods on the food products.
Make food products to meet dietary and health needs	Learning and teaching for this Outcome gives good opportunities for teachers/lecturers to set up learning activities which enable learners to develop and practice practical and problem-solving skills and extend their knowledge base. Practical work should allow learners to develop and demonstrate related knowledge.
	When choosing food products to make, learners could be given opportunities to use their creative skills and build on particular strengths. This enhances opportunities for personalisation and choice and inclusion. This could help put the learning into a local and familiar context for learners.

Where possible, it is useful to provide opportunities for learning outside the classroom. For example, visits to a local nursery or care home or to contribute to a suitable school event.

Learners should be encouraged to reflect on their strengths and areas for improvement following feedback which could include peer assessment.

When identifying dietary and health needs of specified individuals or groups of individuals, it may be useful to provide learners with illustrated prompt cards and illustrations. Learners could then take part in matching exercises and share their findings with the group. Learners could listen to visiting speakers such as pregnant woman, a worker in a care home or a community dietician and be encouraged to share their own experiences of how the health and dietary needs of individuals and groups can differ. Groups that could be considered could include babies, children, teenagers, adults, the elderly or women during pregnancy and lactation.

When making food products to meet specified needs, learners could be presented with a range of simple case studies and existing products. These could allow learners to pick out the key points for the individual or group and consider how these might be addressed in the food products. Learners could be encouraged to suggest possible adaptations to the products to better meet the identified needs. Learners could also use case studies and identify key points to address in their own food products. Learners could be presented with a range of possible ingredients and cooking methods and tasked with selecting appropriate ingredients and cooking methods to make food products to address the needs identified. Learners could be encouraged to describe why they have selected particular ingredients or methods and encouraged to link these to the needs identified.

Learners should be made aware of the importance of safe and hygienic practice during practical activities. Learners could work in groups to identify possible safety or hygiene hazards in the work room and produce safety and hygiene awareness posters to display. This might be about the handling of foodstuffs such as eggs or raw meat, how to prevent bacteria growth through adequate storage and cooking, and standards of personal hygiene in the kitchen.

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

Information about developing skills for learning, skills for life and skills for work in this Unit is given in the relevant *Course Support Notes*.

Approaches to assessment

All of the Outcomes and Assessment Standards in a Unit must be covered in the assessment of a Unit.

Approaches to the assessment of Units when they form part of a Course may differ from approaches to assessing the same Unit when delivered free-standing. Where Units are delivered on a stand-alone basis, teachers/lecturers will have more flexibility to develop approaches to delivering and assessing Units which are not related to Course assessment.

Evidence may be gathered in a variety of forms that best suit the needs of the learner and individual centres. It is recommended that assessors use their professional judgement to determine the most appropriate way to generate evidence.

Authenticity

There are a number of techniques and strategies for ensuring that learners present work which is their own. For more information, please refer to SQA's 'Guide to Assessment'.

Some examples of possible approaches to assessment and evidence gathering are given in the table which follows. Please note, these are examples only. The assessment and evidence for this Unit may be generated and gathered in different ways.

Outcome	Possible approaches to assessment
Explain the relationship between food, health and nutrition	Approaches to assessment and evidence gathering could take a variety of forms to meet the needs of a range of learners and centres. For this Outcome, learners may provide evidence in a range of ways, including recorded oral responses, written responses or electronically. Another way to collate and present information may be in the form of a poster or leaflet. Here, learners could incorporate images and written sections and make clear links between the Assessment Standards in this Outcome. Learners could then communicate their findings by giving a short presentation or talk on their poster.
Make a food product to meet dietary and health needs	Evidence for this Outcome could be gathered in a range of ways including video footage, written reports, completion of pro-formas, observational checklists or photographic evidence. Teachers/lecturers could provide a case study or scenario for learners to work to for this Outcome. This would allow learners to complete a portfolio of evidence covering the Assessment Standards. They could explain the individual or group's dietary and health needs; select an appropriate food product to make which address these needs; and select and use appropriate ingredients and cooking methods. Learners should provide an explanation of how the product is suitable for the group or individual. The product should be made using safe and hygienic practices.

Combining assessment within Units

All Units are internally assessed against the requirements shown in the *Unit Specification.* Each Unit can be assessed on an individual Unit-by-Unit basis or via the use of a combined assessment.

Potential links between the Outcomes of this Unit may be established, which will provide opportunities for learners to demonstrate skills and use knowledge within one assessment activity. A holistic approach to assessment will enrich the assessment process for the learner, avoid duplication of tasks and thus allow more emphasis on learning and teaching. Care must be taken to ensure that combined assessments provide appropriate evidence for all Outcomes which they claim to assess.

Centres may opt to assess naturally occurring activities, but they must still provide evidence, eg video footage or observational checklist.

Evidence should be able to be generated and held in a variety of formats that best suit the needs of the learner and centre. Appropriate ICT systems could be used as a mechanism for recording attainment, in particular the elements of the Course that lend themselves to written work. Assessors must choose an assessment format which takes into account the needs of all learners and implement the assessment at an appropriate stage in the Unit.

Equality and inclusion

Where appropriate, arrangements should be made to ensure that there will be no artificial barriers to learning. The nature of learners' needs should be taken into account when planning learning activities and to provide alternative provision or support where necessary. This will ensure the inclusion of all learners and support them in the learning process.

Increased flexibility in relation to how centres gather evidence should allow for more freedom for centres to best meet the needs of their specific learners — thus, for example, oral evidence for a learner who is unable to write responses is acceptable, providing evidence is retained for verification purposes.

The following are reasonable responses to adapting assessments:

♦ additional time allocation
♦ scribe or reader
♦ audio evidence
♦ assistive technology
♦ adapted equipment

Learners could access a wide range of food preparation equipment, such as food processors or blenders, or cooking equipment such as microwaves, to allow learners to produce suitable products to meet the Outcomes. In addition, learners could make use of pre-prepared ingredients such as chopped onions or diced carrots, or prepared components such as sauces, to assemble food products.

There is more advice and guidance about these issues in the 'Equality and inclusion' section in the National 5 Health and Food Technology *Course Support Notes.*

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 are available on SQA's website at: www.sqa.org.uk/sqa//14977.html.
♦ Building the Curriculum 4: Skills for learning, skills for life and skills for work
♦ Building the Curriculum 5: A framework for assessment
♦ Course Specification
♦ Design Principles for National Courses
♦ *Guide to Assessment*
♦ Principles and practice papers for curriculum areas
♦ *SCQF Handbook: User Guide* and SCQF level descriptors
♦ *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*
♦ *Coursework Authenticity: A Guide for Teachers and Lecturers*
♦ *Research Report 4 — Less is More: Good Practice in Reducing Assessment Time*
♦ *SQA Guidelines on e-assessment for Schools*
♦ *SQA Guidelines on Online Assessment for Further Education*
♦ SQA e-assessment web page

Administrative information

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History of changes to Unit Support Notes

Version	Description of change	Authorised by	Date
1.1	General guidance on the Unit section and Possible learning and teaching approaches table amended to read 'a basic food product' – removed plural. Possible approaches to assessment table amended due to minor word corrections for Outcome 1 and removed plural in Outcome 2. Combining assessment within Units section has minor word corrections/addition.	Qualifications Manager	May 2015