

**HOME ECONOMICS:
HEALTH AND FOOD TECHNOLOGY**
Intermediate 1

Second edition – published September 2006

**NOTE OF CHANGES TO ARRANGEMENTS
SECOND EDITION PUBLISHED SEPTEMBER 2006**

COURSE TITLE Home Economics: Health and Food Technology
(Intermediate 1)

COURSE NUMBER: C118 10

NATIONAL COURSE SPECIFICATION: AMENDMENTS MADE TO 'THE
SCOTTISH DIET' REFERENCES. FORMAT
UPDATED TO FIT WITH SQA GUIDELINES.

National Unit Specification: 'Scottish Dietary Targets 2005' amended to Scottish
Dietary Targets. Format updated to fit with SQA guidelines.

National Course Specification

HOME ECONOMICS: HEALTH AND FOOD TECHNOLOGY (INTERMEDIATE 1)

COURSE NUMBER C118 10

COURSE STRUCTURE

This course has three mandatory units, as follows:

<i>D9NT 10</i>	<i>Food for Health (Int 1)</i>	<i>1 credit (40 hours)</i>
<i>D9NV 10</i>	<i>Food Product Development (Int 1)</i>	<i>1 credit (40 hours)</i>
<i>D9NW 10</i>	<i>Food Technology (Int 1)</i>	<i>1 credit (40 hours)</i>

In common with all Courses, this Course includes 40 hours over and above the 120 hours for the component Units. This may be used for induction, extending the range of learning and teaching approaches, support, consolidation, integration of learning and preparation for external assessment. This time is an important element of the Course and advice on its use is included in the Course details.

It is recommended that Units be taught concurrently and advice on this can be found in the section on 'Approaches to Learning and Teaching'.

Administrative Information

Publication date: September 2006

Source: Scottish Qualifications Authority

Version: 02

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Additional copies of this course specification (including unit specifications) can be purchased from the Scottish Qualifications Authority for £7.50. **Note:** Unit specifications can be purchased individually for £2.50 (minimum order £5).

National Course Specification: general information (cont)

COURSE Home Economics: Health and Food Technology
(Intermediate 1)

RECOMMENDED ENTRY

While entry is at the discretion of the centre, candidates will normally be expected to have attained one of the following:

- Standard Grade Home Economics at Foundation level
- Access 3 units in Home Economics: Health and Food Technology
- Access 3 units or Standard Grade at Foundation level in a relevant subject

The course is also suitable for 'new starts' and adult returners with appropriate prior experience.

CORE SKILLS

This course gives automatic certification of the following:

Complete core skills for the course	Problem Solving	Int 1
Additional core skills components for the course	None	

For information about the automatic certification of core skills for any individual Unit in this Course, please refer to the general information section at the beginning of the Unit.

Additional information about core skills is published in the *Catalogue of Core Skills in National Qualifications* (SQA, 2001).

National Course Specification: course details

COURSE Home Economics: Health and Food Technology
(Intermediate 1)

RATIONALE

Home Economics is concerned with using and managing resources for the benefit of individuals, the family and society. This Course aims to develop candidates' personal effectiveness in using and managing resources in the context of Health and Food Technology. These experiences will enhance opportunities for further study or employment.

Health and Food Technology involves the acquisition of knowledge and the development of cognitive, organisational, technological, scientific, creative, aesthetic and social skills. The disciplined study of the inter-relationships of these areas is one of the major contributions the subject makes to the curriculum. In planning and making a range of food products to meet specified needs, candidates will be required to integrate knowledge, understanding and skills in a number of ways, for example:

- linking knowledge of food with an understanding of people's sensory and physical needs
- showing an understanding of how key constraints, such as time, effort, skill level and available resources, impact on the way in which practical activities are carried out
- showing imagination and creativity in the preparation and production of food and evaluating the finished products

The acquisition and the development of skills are integrated in delivery of the course content within the component Units.

The requirement to identify and respond to needs promotes the development of technological capability. In its report, *A Framework for Technology Education in Scottish Schools: A Statement of Position*, the Scottish Consultative Council on the Curriculum (Scottish CCC, 1996) states:

'A broadly-based technological component in the curriculum does do much to "privilege the practical" and to redress the imbalance in many young people's educational experience between the acquisition of knowledge, skills and attitudes, and their application to meeting and solving practical problems. Including technology in the curriculum improves the status and attractiveness of the practical and commercial activities which are the heart of industry and business, and helps all young people to recognise the personal satisfaction and enjoyment that can be derived from active participation.'

Home Economics in the context of Health and Food Technology provides opportunities 'to identify and address people's needs and wants for food and health care' (Scottish CCC), through practical activities which provide realistic insights to applications in the home and community.

Specialist craft skills and organisational skills are fundamental to health and food technology. The craft skills include the process and manipulative skills concerned with:

- food preparation
- food production

National Course Specification: course details (cont)

COURSE Home Economics: Health and Food Technology (Intermediate 1)

The organisational skills include the ability to plan, make judgements and establish priorities in relation to available resources and make an evaluation of the suitability of the product to the end user. Importantly, these skills also include the ability to work effectively as an individual, and as a member or leader of a team.

These skills enable candidates to participate effectively in technological and enterprising activity.

“The publication of the *Scottish Diet Action Plan in 1996* highlighted that “home economics programmes have a particularly vital role to play in promoting healthy eating among young people and in the prevention of diet-related disease”. While the need for practical meal making and food shopping skills is highlighted once more in *Eating for Health: Meeting the Challenge* (Scottish Executive, 2004). Health and Food Technology provides an opportunity to develop candidates’ practical food skills as well as promoting an awareness of diet-related health issues”

An important part of Health and Food Technology is to develop standards in relation to a safe working environment. For example, candidates are encouraged to take responsibility for health and safety in the use of products and equipment which carry potential risks. These standards are also applied in industry to minimise the possibilities of food contamination and food poisoning and are, therefore, transferable.

Through the study of Health and Food Technology, candidates will acquire knowledge which may influence the quality of their lives; they will develop and use practical and organisational skills; they will develop handling information skills; and develop a capacity to solve problems using a range of technological and other resources.

AIMS

- 1 To develop an understanding of and give practice in the use of principles underlying the critical choice, and the safe and informed use of equipment, materials and procedures.
- 2 To provide meaningful experiences and opportunities to develop creative, aesthetic and specialist craft skills.
- 3 To develop in candidates organisational skills and technological capability necessary to meet some of the needs of individuals within a rapidly changing society.

National Course Specification: course details (cont)

COURSE Home Economics: Health and Food Technology (Intermediate 1)

COURSE CONTENT

The course content is listed below under the headings of the component units.

<i>Food for Health</i>	<p>Candidates will demonstrate knowledge and understanding in the following areas:</p> <ul style="list-style-type: none">• Scottish dietary targets• the effect on health of following the Scottish dietary targets• functions and food sources of the main nutrients <p>Candidates will demonstrate knowledge and understanding of the following areas through practical activity:</p> <ul style="list-style-type: none">• guidelines for a healthy diet• practical applications which show ways of meeting current dietary targets:<ul style="list-style-type: none">– to reduce intake of: fat; sugar; salt– to increase intake of: fruit and vegetables; bread; breakfast cereals; total complex carbohydrate (fruit and vegetables, bread, breakfast cereals, rice, pasta, potatoes); fish (especially oily fish)– selecting healthy methods of cooking and use food preparation techniques which promote the retention of nutrients.• practical applications which show ways of meeting the needs of a specific situation• safe personal hygiene practices when handling food• hygiene considerations and practices for food preparation areas• sensory evaluation of food under the headings of taste, texture and appearance
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National Course Specification: course details (cont)

COURSE Home Economics: Health and Food Technology (Intermediate 1)

UNIT	CONTENT
<i>Food Technology</i>	<p>Candidates will demonstrate knowledge and understanding in the following areas:</p> <ul style="list-style-type: none">• recent technological developments in food production• recent technological developments in food preparation and cooking and their effects on lifestyle <p>Candidates will demonstrate knowledge and understanding of the following areas through practical activity:</p> <ul style="list-style-type: none">• a comparison of dishes manufactured using recent technological developments in food production with those made using fresh ingredients in terms of cost, time and sensory qualities• the use of recent technological developments in food preparation and cooking• safe personal hygiene practices when handling food• hygiene considerations and practices for food preparation areas• comparison of food products in terms of time for preparation and cooking, cost and sensory qualities of taste, texture and appearance

National Course Specification: course details (cont)

COURSE Home Economics: Health and Food Technology (Intermediate 1)

UNIT	CONTENT
<p><i>Food Product Development</i></p>	<p>Candidates will demonstrate knowledge and understanding in the following areas:</p> <ul style="list-style-type: none"> • the functions of ingredients in food products • safe personal hygiene practices when handling food • hygiene considerations and practices for food preparation areas • conditions for bacterial growth (time, moisture, food, warmth, pH level) • methods of avoiding contamination and cross contamination • safe and healthy practices for food storage <p>Candidates will demonstrate knowledge and understanding of the following areas through practical activity:</p> <ul style="list-style-type: none"> • the functions of ingredients in food products • identification of specific needs from a given design brief • drawing up of a specification • choice of dishes from a given range to meet specified needs • planning of a logical sequence of work • safe personal hygiene practices when handling food • sensory evaluation of food under the headings of taste, texture and appearance

National Course Specification: course details (cont)

COURSE Home Economics: Health and Food Technology (Intermediate 1)

Taking Units as part of a Course has a number of advantages:

- in 160 hours it is possible to bring together process skills, knowledge and understanding, and apply these in an integrated way and in less familiar or more complex situations
- there are opportunities to develop specialist skills and transferable skills to a higher level and candidates can achieve a wider perspective and understanding of the context being studied
- external assessment gives credibility and value to the end user of the award

ASSESSMENT RATIONALE

To gain the award of the Course, the candidate must achieve all the unit assessments as well as the external assessment. External assessment will provide the basis for grading attainment in the Course award.

When Units are taken as component parts of a Course, candidates will have the opportunity to demonstrate achievement beyond that required to attain each of the unit outcomes. This attainment may, where appropriate, be recorded and used to contribute towards course estimates, and to provide evidence for appeals. Additional details are provided, where appropriate, with the exemplar assessment materials. Further information on the key principles of assessment are provided in the paper, *Assessment*, published by HSDU in May 1996.

INTERNAL ASSESSMENT

The internal assessment for all Units in this Course combines both practical and theoretical activities. The unit assessment has been designed to sample across the outcomes ensuring that the total internal assessment time for each Unit is less than 1 hour and 30 minutes.

The internal assessment for each Unit is detailed below:

Food for Health

- Outcomes 1 and 3 - Short/restricted response questions
- Outcomes 2 and 4 - Practical exercise
- Outcome 5 - Practical exercise

The assessment of outcome 5 can be integrated with the assessment of outcomes 2 and 4

Food Product Development

- Outcomes 1 and 3 - Short/restricted response questions
- Outcome 2 - Practical exercise
- Outcome 4 - Design activity

Food Technology

- Outcome 1 - Investigation
- Outcomes 2 and 4 - Practical exercise
- Outcome 3 - Short/restricted response questions

National Course Specification: course details (cont)

COURSE Home Economics: Health and Food Technology
(Intermediate 1)

The internal and external assessments are linked in that the knowledge and skills developed in the Units are sampled and extended in the external assessment, allowing the candidate to demonstrate performance at all grades.

DETAILS OF THE INSTRUMENTS FOR EXTERNAL ASSESSMENT

Course assessment will be external and will sample across the outcomes of the component Units. The Course Assessment allows the candidate to demonstrate the knowledge and skills developed in the Units, in an integrated manner and in a situation less familiar to the candidate. To gain a course award, candidates will be required to undertake an externally set Practical Assignment, which will be assessed using the grade descriptions below. One assignment brief will be issued annually by SQA. The assignment should be undertaken within 10 hours and will have an allocation of 45 marks. The brief falls into three discrete steps:

Planning – identifying the needs and choosing the activities: 20% weighting

Implementing – carrying out the practical assignment: 60% weighting

Evaluating – evaluation of the practical assignment: 20% weighting

The implementing step of the practical assignment will be assessed internally, with external moderation. The planning and evaluating steps will be externally assessed. There will be no written examination at Intermediate 1 level.

Candidates will be required to complete proforma containing this evidence to submit to the Scottish Qualifications Authority for external assessment. All proforma, including a candidate and teacher guide will be provided by the Scottish Qualifications Authority.

The assignment brief will assess the candidate's ability to:

- plan an appropriate response to the brief
- carry out a range of food preparation techniques and cookery processes appropriate to the assignment specification
- demonstrate effective use of time and resources when carrying out the practical assignment
- demonstrate an appropriate level of specialist craft skills in carrying out the practical assignment
- apply appropriate health and hygiene measures in carrying out the practical assignment
- evaluate the quality of the product for the intended user and the success of the overall plan

National Course Specification: course details (cont)

COURSE Home Economics: Health and Food Technology
(Intermediate 1)

GRADE DESCRIPTIONS

The descriptions below are of expected performances at Grade C and at Grade A. They are intended to assist candidates, teachers, lecturers and users of the certificate and to help establish standards when Practical Assignment briefs are being devised. The grade of the award will be based on the total score obtained in the Practical Assignment.

Grade C

Candidates can:

- use facts, concepts, terminology and principles, with simple explanation
- select from reference sources, information relevant to a given specification and use this information to complete a simple practical activity
- select, manage and use resources to carry out a practical activity requiring organisational skills and the use of some specialist craft skills, within a time constraint
- demonstrate a range of specialist craft skills to produce products of an acceptable standard
- evaluate the success of a practical activity, commenting on the suitability of the final solution for the end user

Grade A

Candidates can:

- use facts, concepts, terminology and principles, with detail in the explanation
- select from reference sources information relevant to a given specification and use this information to complete a more complex practical activity
- select, manage and use resources to carry out a practical activity requiring more complex organisational skills and the use of a range of specialist craft skills, within a time constraint
- demonstrate a range of specialist craft skills to produce products of a marketable standard
- evaluate the success of a practical activity, commenting on the procedure and the suitability of the final solution for the end user

National Course Specification: course details (cont)

COURSE Home Economics: Health and Food Technology
(Intermediate 1)

APPROACHES TO LEARNING AND TEACHING

Approaches to learning and teaching should provide opportunities for candidates of varying needs and abilities to acquire the knowledge and develop the skills of the Course. Approaches should be chosen which will enhance learning experiences so that candidates achieve their full potential of independence whether working in a whole-class, small group or supported self-study situation. When delivering the course content, account should be taken of prior knowledge that candidates may have. An integrated approach to learning and teaching across the component Units of the Course is recommended. Potential links between outcomes of Units can be established which will provide opportunities for candidates to develop skills and acquire knowledge within one activity. Familiarisation with the unit outcomes is essential for the planning of an integrated delivery, as is common to current practice at this level post-16.

For example, where candidates are studying the Unit Food Technology, this can provide a vehicle through which the other Units can be delivered in an integrated way. When preparing dishes to show the use of recent technological developments in food preparation and cooking, it will also be possible to meet some of the outcomes for Food Product Development and/or Food for Health. Outcome 4 in the Food Product Development Unit could provide a vehicle for delivering outcomes 2 and 4 in the Unit Food for Health.

It is good practice to use a variety of methods so that candidates' interest and motivation are maintained and individual preferences for different learning styles are considered. Teachers/lecturers will need to ensure an appropriate balance between teacher/lecturer-directed approaches and candidate-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.

Where appropriate, arrangements should be made to ensure that there will be no artificial barriers to learning. The nature of candidates' special 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 candidates and support them in the learning process.

Activities for developing organisational skills will enable candidates to plan and prepare to carry out a food related task. Within the tasks, specialist craft skills would be developed to demonstrate processes in food preparation and production. Knowledge and understanding of healthy options would be exemplified in the choice and preparation of foods and cooking methods used. Evaluative skills would be developed when appraising the product.

The relationship between the Course and relevant industry should be emphasised to provide real contexts for learning and realistic problems to solve. These opportunities will increase self esteem, confidence and motivation for candidates and improve their insight into the needs of the industry, including the skills required of those entering the job market. Entrepreneurial activities provide exciting and challenging opportunities for learning and these are greatly enhanced when they are linked with industry.

National Course Specification: course details (cont)

COURSE Home Economics: Health and Food Technology
(Intermediate 1)

Use of the additional 40 hours

The additional 40 hours of flexible time should be integrated into the course design for use at important stages of delivery.

<i>Stage</i>	<i>Explanation</i>
Candidate induction	Familiarisation with the aims and design of the Course Familiarisation with the requirements of internal assessment for the Units and external assessment of the Course Setting target deadlines for the Units, Course and assessment Presentation of work; for example, the standards expected and the importance of items to be retained for assessment Candidate commitment to meet the demands and deadlines of the Course
Preparation for external assessment	To prepare candidates for the practical assignment they should be given opportunities to carry out similar activities. It is important that candidates are able to work independently and that time is allocated for candidate-teacher/lecturer review.

SPECIAL NEEDS

This course specification is intended to ensure that there are no artificial barriers to learning or assessment. Special needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering alternative outcomes for units. For information on these, please refer to the SQA document *Guidance on Special Assessment Arrangements* (SQA, publication code AA0645)

National Unit Specification: general information

UNIT	Food for Health (Intermediate 1)
NUMBER	D9NT 10
COURSE	Home Economics: Health and Food Technology (Intermediate 1)

SUMMARY

This unit is designed as an introduction to healthy eating. On completion of the Unit, candidates will have a knowledge and understanding of the Scottish dietary targets for and the functions of the main nutrients. Candidates will be able to prepare healthy dishes which suit the needs of specified individuals and carry out sensory evaluation on these dishes.

OUTCOMES

- 1 Demonstrate a knowledge and understanding of current dietary advice.
- 2 Select and produce a range of healthy dishes.
- 3 Demonstrate a knowledge and understanding of the main nutrients found in food.
- 4 Select and produce a range of dishes to suit the needs of specified individuals.
- 5 Carry out sensory evaluation on a variety of prepared dishes.

RECOMMENDED ENTRY

Whilst entry is at the discretion of the centre candidates would normally be expected to have attained one of the following:

- Cluster award or Units in Home Economics: Health and Food Technology at Access 3
- Standard Grade Home Economics at Foundation level
- Other relevant Home Economics Units.

Administrative Information

Superclass: NH

Publication date: September 2006

Source: Scottish Qualifications Authority

Version: 02

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National Unit Specification: general information (cont)

UNIT Food for Health (Intermediate 1)

CREDIT VALUE

1 credit at Intermediate 1 (6 SCOTCAT points*) at SCQF level 4.

**SCOTCAT points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCOTCAT points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

CORE SKILLS

This Unit gives automatic certification of the following:

Complete core skills for the unit	None	
Additional core skills components for the unit	Critical Thinking	Int 1
	Planning and Organising	Int 1

Additional information about core skills is published in the *Catalogue of Core Skills in National Qualifications* (SQA, 2001).

National Unit Specification: statement of standards

UNIT Food for Health (Intermediate 1)

Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit Specification. All sections of the statement of standards are mandatory and cannot be altered without reference to the Scottish Qualifications Authority.

OUTCOME 1

Demonstrate a knowledge and understanding of current dietary advice.

Performance criteria

- a) The Scottish dietary targets are correctly identified.
- b) An explanation of the effects on health of following each of the Scottish dietary targets is accurate.

Evidence requirements

Recorded evidence must be provided to show that the performance criteria have been met on one occasion. The proposed instrument of assessment is short/restricted response questions.

OUTCOME 2

Select and produce a range of healthy dishes.

Performance criteria

- a) The dishes selected meet current dietary advice.
- b) The food preparation and cooking methods are appropriate.
- c) The dishes are prepared to an acceptable standard.
- d) Safe and hygienic practices in food production are demonstrated.

Evidence requirements

Recorded evidence must be provided to show that each of the performance criteria has been met on one occasion. The proposed instrument of assessment is a practical exercise. Attainment could be recorded by the use of an observational checklist.

Specific advice:

- a) The dishes should meet one or more of the following criteria: use fruit and/or vegetables as the main component; low in fat; low in sugar; low in salt; high in total complex carbohydrates; use fish.
- b) Food preparation techniques/cooking methods should promote the retention of nutrients.
- c) The dishes should meet the required specification.
- d) The candidate must wear appropriate clothing, maintain a high standard of personal hygiene, maintain a clean and tidy workstation and use all equipment in a safe manner.

National Unit Specification: statement of standards (cont)

UNIT Food for Health (Intermediate 1)

OUTCOME 3

Demonstrate a knowledge and understanding of the main nutrients found in food.

Performance criteria

- a) The functions of the main nutrients are correctly identified.
- b) Food sources of the main nutrients are correctly identified.

Note on range for the outcome

Main nutrients: protein; fats; carbohydrates; vitamins – A, B group, C and D; minerals – calcium; iron.

Evidence requirements

Recorded evidence must be provided to show that the performance criteria has been met on one occasion. The proposed instrument of assessment is short/restricted response questions.

Specific advice:

- a) Candidate can identify two functions of each nutrient.
- b) Candidate can identify two food sources of each nutrient.

OUTCOME 4

Select and produce a range of dishes to suit the needs of specified individuals.

Performance criteria

- a) The dishes selected meet the needs of a given situation.
- b) The food preparation and cooking methods are appropriate.
- c) The dishes are prepared to an acceptable standard.
- d) Safe and hygienic practices in food production are demonstrated.

Evidence requirements

Recorded evidence must be provided to show that each of the performance criteria has been met on one occasion. The proposed instrument of assessment is a practical exercise. Attainment could be recorded by the use of an observational checklist.

Specific advice:

- a) The dishes chosen should be suitable for two of the following:
 - toddlers
 - teenager who is anaemic
 - pregnant women
 - teenager who takes part in sports
- b) Food preparation techniques and cooking methods should promote the retention of nutrients.
- c) The dishes should meet the required specification.
- d) The candidate must wear appropriate clothing, maintain a high standard of personal hygiene, maintain a clean and tidy workstation and use all equipment in a safe manner.

National Unit Specification: statement of standards (cont)

UNIT Food for Health (Intermediate 1)

OUTCOME 5

Carry out sensory evaluation on a variety of prepared dishes.

Performance criteria

- a) The sensory evaluation of the dishes is relevant and accurate.

Evidence requirements

Recorded evidence must be provided to show that each of the performance criteria has been met on one occasion. The proposed instrument of assessment is a practical exercise. Candidates should record results using a simple sensory evaluation sheet.

Specific advice:

- a) The dishes should be evaluated using a simple method of sensory evaluation.

National Unit Specification: support notes

UNIT Food for Health (Intermediate 1)

This part of the Unit Specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

GUIDANCE ON THE CONTENT AND CONTEXT FOR THIS UNIT

Outcome 1

Reference should be made to the following:

The Scottish Diet Action Plan 1996 (Scottish Office/Department of Health) Page 79

Scottish dietary targets:

- Eat more fruit and vegetables
- Eat more bread
- Eat more breakfast cereals
- Eat more total complex carbohydrates
- Eat more oily fish
- Eat less fat
- Eat less salt
- Eat less sugar

Outcome 2

Candidates should select, or adapt, from recipe books, dishes which meet current dietary advice, i.e. use fruit and/or vegetables as the main component; low in fat; low in sugar; low in salt; high in total complex carbohydrates; use fish. The food preparation and cooking techniques should be appropriate to the recipe selected. The dish should be of an acceptable standard, i.e. the dish should be edible, attractively presented and should meet the specification of meeting current dietary advice as shown above. Safe and hygienic practices in the preparation and cooking of food should be observed at all times.

Outcome 3

Candidates should identify two functions and two sources of the main nutrients: protein; fats; carbohydrates; vitamins - A, B group, C and D; minerals - calcium; iron

Outcome 4

Candidates should select from recipe books, dishes which are suitable for two of the following; in terms of a healthy balanced diet:

- toddlers
- teenager who is anaemic
- pregnant women
- a teenager who takes part in sport

Safe and hygienic practices in the preparation and cooking of food should be observed at all times.

Food preparation techniques should promote healthy eating and the retention of nutrients, for example – scrubbing vegetables, removing thin skins from vegetables, no pre-preparation of vegetables.

Cooking methods should promote healthy eating and the retention of nutrients, for example – baking, grilling, steaming, stir-frying, and microwave cookery.

National Unit Specification: support notes (cont)

UNIT Food for Health (Intermediate 1)

The dishes should be of an acceptable standard, ie should be edible, attractively presented and should meet the specification of showing that the nutritional and health needs of the individual have been met.

Outcome 5

The candidate should carry out simple sensory evaluation on the dishes made and record the results on a sensory evaluation sheet using a 3 star ratings system under the headings of:

- Taste
- Texture
- Appearance

These ratings should be accurate and relevant to the prepared dish.

GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT

The learning and teaching approach should allow the outcomes to be achieved through candidate participation in practical activities. Theoretical aspects should form an integral part of each practical exercise. The needs and abilities of each candidate should be taken into account in terms of the support and equipment required and time should be given to allow candidates to acquire and practice skills.

Use should be made of the SQA evaluation skills pack issued January 2002.

National Unit Specification: support notes (cont)

UNIT Food for Health (Intermediate 1)

GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

Outcome 1

PC(a) The candidate should complete one short answer question to correctly identify four of the Scottish dietary targets from:

- Eat more fruit and vegetables
- Eat more bread
- Eat more breakfast cereals
- Eat more complex carbohydrates
- Eat more oily fish
- Eat less fat
- Eat less salt
- Eat less sugar

Total 2 marks

PC(b) The candidate should complete one restricted response question to explain the effects on health of following each of the Scottish dietary targets selected.

Health effects:

- Prevention of coronary heart disease
- Prevention of obesity
- Prevention of constipation, bowel cancers, diverticular disease
- Prevention of tooth decay
- Prevention of high blood pressure, strokes
- Prevention of diabetes
- Prevention of anaemia

Total 4 Marks

A 70% cut off will be applied to indicate success for the outcome.

Outcome 2

Attainment should be recorded by means of an observational checklist modelled upon performance criteria (a) – (d).

Outcome 3

The candidate can complete short answer questions based on PCs (a) and (b):

- Identifying two functions for five of the nutrients in the range 10 marks
- Identifying two food sources of each nutrient 5 marks

A 70% cut off will be applied to indicate success for the outcome.

Outcome 4

Attainment should be recorded by means of an observational checklist modelled upon performance criteria (a) – (d).

Outcome 5

PC(a) The candidate should carry out simple sensory evaluation on the dishes made and record the results using a sensory evaluation sheet using the headings of:

- Taste
- Texture
- Appearance

National Unit Specification: support notes (cont)

UNIT Food for Health (Intermediate 1)

SPECIAL NEEDS

This Unit Specification is intended to ensure that there are no artificial barriers to learning or assessment. Special needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering special alternative outcomes for units. For information on these, please refer to the SQA document *Guidance on Special Assessment Arrangements* (SQA, publication code AA0645).

National Unit Specification: general information

UNIT	Food Product Development (Intermediate 1)
NUMBER	D9NV 10
COURSE	Home Economics: Health and Food Technology (Intermediate 1)

SUMMARY

This Unit is designed as an introduction to food product development. On completion of this Unit, candidates will have an understanding of the functions of ingredients in food products. Candidates will have a knowledge of personal and kitchen hygiene rules and be able to apply these rules to avoid food contamination and cross-contamination. In the context of food product development candidates will be competent in planning, producing and evaluating products to meet the needs of a given brief.

OUTCOMES

- 1 Demonstrate a knowledge and understanding of the functions of ingredients in food products.
- 2 Prepare dishes to show the functions of ingredients in food products.
- 3 Demonstrate a knowledge and understanding of food hygiene rules in food production.
- 4 Create food products to meet the needs of a given design activity.

RECOMMENDED ENTRY

Whilst entry is at the discretion of the centre, candidates would normally be expected to have attained one of the following:

- Cluster award or Units in Home Economics: Health and Food Technology at Access 3
- Standard Grade Home Economics at Foundation level
- Other relevant Home Economics units.

Administrative Information

Superclass: NH

Publication date: September 2006

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Version: 02

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National Unit Specification: general information (cont)

UNIT Food Product Development (Intermediate 1)

CREDIT VALUE

1 credit at Intermediate 1 (6 SCOTCAT points*) at SCQF level 4.

**SCOTCAT points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCOTCAT points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

CORE SKILLS

This unit gives automatic certification of the following:

Complete core skills for the unit	None	
Additional core skills components for the unit	Critical Thinking	Int 1
	Planning and Organising	Int 1

Additional information about core skills is published in the *Catalogue of Core Skills in National Qualifications* (SQA, 2001).

National Unit Specification: statement of standards

UNIT Food Product Development (Intermediate 1)

Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit Specification. All sections of the statement of standards are mandatory and cannot be altered without reference to the Scottish Qualifications Authority.

OUTCOME 1

Demonstrate a knowledge and understanding of the functions of ingredients in food products.

Performance criteria

- a) The functions of ingredients in food products are accurately identified and explained.

Note on range for the outcome

Functions of ingredients in food products:

- Aerating
- Binding
- Thickening
- Bulking
- Setting
- Glazing

Evidence requirements

Recorded evidence must be provided to show that the performance criteria has been met on one occasion. The proposed instrument of assessment is short/restricted response questions.

OUTCOME 2

Prepare dishes to show the functions of ingredients in food products.

Performance criteria

- a) The dishes are prepared to show the functions of ingredients in food products.
b) The dishes are prepared to an acceptable standard.
c) Safe and hygienic practices in food preparation are demonstrated.

Evidence requirements

Recorded evidence must be provided to show that each of the performance criteria has been met on one occasion. The proposed instrument of assessment is a practical exercise. Attainment could be recorded by the use of an observational checklist.

Specific advice:

- a) The dishes prepared should demonstrate four functions of ingredients in food products.
b) The dishes should meet the required specification.
c) The candidate must wear appropriate clothing, maintain a high standard of personal hygiene, maintain a clean and tidy workstation and use all equipment in a safe manner.

National Unit Specification: statement of standards (cont)

UNIT Food Product Development (Intermediate 1)

OUTCOME 3

Demonstrate a knowledge and understanding of food hygiene rules in food production.

Performance criteria

- a) Personal and kitchen hygiene rules are identified and explained.
- b) Conditions for growth of food spoilage organisms are identified and explained.
- c) Methods of prevention of contamination and cross contamination are identified and explained.
- d) Safe practices for food storage are identified and explained.

Evidence requirements

Recorded evidence must be provided to show that the performance criteria have been met on one occasion. The proposed instrument of assessment is short/restricted response questions.

OUTCOME 4

Create food products to meet the needs of a given design activity.

Performance criteria

- a) The needs of a given brief are identified.
- b) An appropriate specification is drawn up.
- c) Ideas generated are appropriate to the brief.
- d) The plan for the manufacture of the food products is realistic and shows a logical sequence of work.
- e) The food products are manufactured to an acceptable standard.
- f) The evaluation of the products is relevant and accurate.

Evidence requirements

Recorded evidence must be provided to show that the performance criteria have been met on one occasion. The proposed instrument of assessment is a design activity. Attainment could be recorded by the use of an observational checklist.

Specific advice:

- a) All the main points of the given brief are correctly identified.
- b) Specification is drawn up in measurable terms and is appropriate to the brief.
- c) Ideas should be recorded and linked to the main points of the brief.
- d) The plan for manufacture shows the stages for the preparation and manufacture of the dish(es) in a logical sequence.
- e) The dishes should meet the required specification.
- f) Candidate should record results using a sensory evaluation sheet.

National Unit Specification: support notes

UNIT Food Product Development (Intermediate 1)

This part of the Unit Specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

GUIDANCE ON THE CONTENT AND CONTEXT FOR THIS UNIT

Reference may be made to:

- British Nutrition Foundation website, www.nutrition.org.uk
- Examining Food & Nutrition - Jenny Ridgwell 1996
ISBN 0 435 42058 5
- Food Technology GCSE Design and Technology from
EDEXCEL
Published by Heinemann
ISBN 0 425 41789-4

Outcome 1

- Aerating - to make food rise/to incorporate air/to make food light
Binding - to hold ingredients together
Thickening - to change the consistency of a food product
Bulking - to give texture/to fill out a product
Setting - to form a gel/to change liquids to solids
Glazing - to give the finished product an attractive appearance

There is an expectation that centres will be undertaking some theoretical work with the candidates to cover this outcome.

Outcome 2

Candidates should carry out practical activities to show four of the following functions of ingredients in food, for example:

- Aerating - meringues, bread, cakes, pancakes
Binding - fish cakes, beef/vegetable burgers, pastry
Thickening - soups, sauces, sugar syrups
Bulking - bread, pastry, shepherd's pie, risotto
Setting - quiche, jams and jellies, blancmanges
Glazing - fruit tarts, sausage rolls, buns

This list is not prescriptive and other suitable examples are acceptable.

The dishes should be of an acceptable standard, i.e. should be edible, attractively presented and should meet the specification of showing the function of ingredients in food products.

Safe and hygienic practices in the preparation and cooking of food should be observed at all times.

National Unit Specification: support notes (cont)

UNIT Food Product Development (Intermediate 1)

Outcome 3

The importance of the following aspects of personal hygiene:

- Appropriate clothing
- Clean hands, nails
- Hair tied back or covered
- No jewellery
- Cuts covered
- No coughing or sneezing over food

The importance of the following aspects of kitchen hygiene:

- Clean worksurfaces
- Clean cloths
- Clean food preparation equipment and utensils
- Hygienic waste disposal
- No pets in food preparation areas

Conditions for the growth of food poisoning organisms:

- time
- moisture
- food
- warmth
- ph level

Methods of avoiding contamination/cross contamination:

- Good personal and kitchen hygiene
- Wash food where possible before use
- Separate or thoroughly washed utensils for raw and cooked foods
- Washing hands between touching raw and cooked foods

The importance of the following safe practices for food storage:

- Rotation of food stocks
- Correct use of refrigerators and freezers
- Correct storage of high risk foods
- Correct storage of fresh vegetables
- Correct storage of canned goods

Outcome 4

The candidate should be given a design brief appropriate to the level and the candidate's skills and abilities. From this brief the candidate should:

- Identify the main points of the brief
- Draw up a minimum of a 3-point specification which is appropriate to the brief
- Generate and record ideas appropriate to the brief
- Devise a plan for the manufacture of the food products which is realistic in terms of time and shows a logical sequence of work
- Manufacture the food products to an acceptable standard, i.e. should be edible, attractively presented and should meet the candidate's specification
- Carry out a simple sensory evaluation and record the results on a sensory evaluation sheet using a 3 star rating system under the headings of Taste, Texture, Appearance. These ratings should be accurate and relevant to the prepared food products.

National Unit Specification: support notes (cont)

UNIT Food Product Development (Intermediate 1)

GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT

The learning and teaching approach should allow the outcomes to be achieved through candidate participation in practical activities. Theoretical aspects should form an integral part of each practical exercise. The needs and abilities of each candidate should be taken into account in terms of the support and equipment required and time should be given to allow candidates to acquire and practice skills.

Use should be made of the SQA evaluation skills pack issued January 2002

GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

Outcome 1 The candidate should complete one restricted response question to explain the functions of ingredients in the range.

Total 6 marks

The candidate should complete one short answer question to correctly identify the functions of ingredients in the range.

Total 3 marks

A 70% cut off will be applied to indicate success for the outcome.

Outcome 2 The results should be recorded by means of an observational checklist modelled on PC (a) – (c). The dishes produced should demonstrate four out of the six functions of ingredients:

- Aerating
- Binding
- Thickening
- Bulking
- Setting
- Glazing

National Unit Specification: support notes (cont)

UNIT Food Product Development (Intermediate 1)

Outcome 3

PC(a) The candidate should complete one restricted response question on the following aspects of personal hygiene:

- appropriate clothing
- clean hands, nails
- hair tied back or covered
- no jewellery
- cuts covered
- no coughing or sneezing over food.

The candidate should complete one short answer/response question on the following aspects of kitchen hygiene:

- clean worksurfaces
- clean cloths
- clean food preparation equipment and utensils
- hygienic waste disposal
- no pets in food preparation areas.

Total 7 marks

PC(b) The candidate should identify four of the following conditions of growth of food poisoning organisms and explain two of them:

- time
- moisture
- food
- warmth
- ph level

Total 4 marks

PC(c) The candidate should complete one restricted response question on the methods to prevent contamination and cross contamination:

- personal and kitchen hygiene – as above
- wash food where possible before use
- separate or thoroughly washed utensils for raw and cooked foods
- washing hands between touching raw and cooked foods.

Total 3 marks

PC(d) The candidate should complete three short answer/restricted response questions on the following safe practices for food storage:

- rotation of food stocks
- correct use of refrigerators and freezers
- correct storage of high risk foods
- correct storage of fresh vegetables
- correct storage of canned goods.

Total 3 marks

A 70% cut off will be applied to indicate success for the outcome.

Outcome 4

Attainment should be recorded by means of an observational checklist modelled on PC (a) – (f). The observational checklist should be supplemented by recorded evidence for each performance criteria.

National Unit Specification: support notes (cont)

UNIT Food Product Development (Intermediate 1)

SPECIAL NEEDS

This Unit Specification is intended to ensure that there are no artificial barriers to learning or assessment. Special needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering special alternative outcomes for units. For information on these, please refer to the SQA document *Guidance on Special Assessment Arrangements* (SQA, publication code AA0645).

National Unit Specification: general information

UNIT	Food Technology (Intermediate 1)
NUMBER	D9NW 10
COURSE	Home Economics: Health and Food Technology (Intermediate 1)

SUMMARY

On completion of this Unit candidates should have a knowledge and understanding of recent technological developments in food production and the effects they have on lifestyle.

Candidates will be able to prepare and cook dishes making use of recent technological developments in food preparation and cooking.

OUTCOMES

- 1 Investigate recent technological developments in food production.
- 2 Compare food products manufactured using recent technological developments with those made using fresh ingredients.
- 3 Investigate the effects technological developments in food preparation and cooking have on lifestyle.
- 4 Produce a selection of dishes using recent technological developments in food preparation and cooking.

RECOMMENDED ENTRY

Whilst entry is at the discretion of the centre, candidates would normally be expected to have attained one of the following:

- Cluster award or Units in Home Economics: Health and Food Technology at Access 3
- Standard Grade Home Economics at Foundation level
- Other relevant Home Economics units.

Administrative Information

Superclass: NH

Publication date: September 2006

Source: Scottish Qualifications Authority

Version: 02

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National Unit Specification: general information (cont)

UNIT Food Technology (Intermediate 1)

CREDIT VALUE

1 credit at Intermediate 1 (6 SCOTCAT points*) at SCQF level 4.

**SCOTCAT points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCOTCAT points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

CORE SKILLS

This Unit gives automatic certification of the following:

Complete core skills for the Unit	None	
Additional core skills components for the Unit	Critical Thinking	Int 1
	Planning and Organising	Int 1

Additional information about core skills is published in the *Catalogue of Core Skills in National Qualifications* (SQA, 2001).

National Unit Specification: statement of standards

UNIT Food Technology (Intermediate 1)

Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit Specification. All sections of the statement of standards are mandatory and cannot be altered without reference to the Scottish Qualifications Authority.

OUTCOME 1

Investigate recent technological developments in food production.

Performance criteria

- a) Recent technological developments in food production are described accurately.

Evidence requirements

Recorded evidence must be provided to show that the performance criteria has been met on one occasion. The proposed instrument of assessment is an investigation covering four technological developments in food production.

OUTCOME 2

Compare food products manufactured using recent technological developments with those made using fresh ingredients.

Performance criteria

- a) Prepare or cook food products manufactured using technological developments.
- b) Produce a selection of dishes using fresh ingredients.
- c) Compare the dishes in terms of time, cost and end result.
- d) Safe and hygienic practices in food preparation are demonstrated.

Evidence requirements

Recorded evidence must be provided to show that each of the performance criteria has been met on one occasion. The proposed instrument of assessment is a practical exercise. Attainment should be recorded by the use of an observational checklist.

Specific advice:

- a) The selection of dishes uses four of the recent technological developments.
- b) Comparable dishes are made using fresh ingredients.
- c) Candidates should record results using a simple comparison sheet containing sensory evaluation, costing and timing sections.
- d) The candidate must wear appropriate clothing, maintain a high standard of personal hygiene, maintain a clean and tidy workstation and use all equipment in a safe manner.

National Unit Specification: statement of standards (cont)

UNIT Food Technology (Intermediate 1)

OUTCOME 3

Investigate the effects technological developments in food preparation and cooking have on lifestyle.

Performance criteria

- a) The effects recent technological developments in food preparation and cooking have on lifestyles are accurately explained.

Evidence requirements

Recorded evidence must be provided to show that the above performance criteria has been met on one occasion. The proposed instrument of assessment is short/restricted response questions. Attainment could be assessed by the use of marking instructions.

OUTCOME 4

Produce a selection of dishes using recent technological developments in food preparation and cooking.

Performance criteria

- a) The dishes are prepared using recent developments in food preparation and cooking.
- b) The dishes are prepared to an acceptable standard.
- c) Safe and hygienic practices in food preparation are demonstrated.

Evidence requirements

Recorded evidence must be provided to show that each of the performance criteria has been met on one occasion. The proposed instrument of assessment is a practical exercise. Attainment could be recorded by the use of an observational checklist.

Specific advice:

- a) Candidate can prepare dishes to show the use of four recent technological developments.
- b) The dishes should meet the required specification.
- c) Candidates must wear appropriate clothing, maintain a high standard of personal hygiene, maintain a clean and tidy workstation and use all equipment in a safe manner.

National Unit Specification: support notes

UNIT Food Technology (Intermediate 1)

This part of the Unit Specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

GUIDANCE ON THE CONTENT AND CONTEXT FOR THIS UNIT

Outcome 1

Reference may be made to - [British Nutrition Foundation website www.nutrition.org.uk](http://www.nutrition.org.uk)
www.foodag.com/en/additives.htm#q1
www.faia.org.uk/
www.halofoods.co.uk
www.topac.com/map.html

Candidates should select, from a bank of resource materials, information relevant to the recent technological developments in food production shown below:

- chilling/cook-chilling
- freezing
- drying
- food additives
- smart foods
- modified atmosphere packaging

While candidates will only be assessed on four of these technological developments there is an expectation that the investigations will cover all six.

Outcome 2

Candidates should select products manufactured using recent technological developments in food production and cook or prepare them as required.

Candidates should make similar products made using fresh ingredients, for example cook-chill and fresh fajitas; frozen and fresh lasagne; dried soup and fresh soup; ready made vegetarian Shepherd's pie using meat analogues and fresh Shepherd's pie

The products should be compared in terms of sensory qualities using a 3 star rating system under the headings of:

- Taste
- Texture
- Appearance

The products should also be compared in relation to cost, time of preparation and time of cooking. These results should be recorded on a simple comparison sheet.

Safe and hygienic practices in the preparation and cooking of food should be observed at all times.

National Unit Specification: support notes (cont)

UNIT Food Technology (Intermediate 1)

Outcome 3

The candidate can explain the effects on lifestyle of four recent technological developments in food preparation and cooking, as described in outcome 4, in terms of three from:

- variety in the diet
- time, energy and/or labour saving
- reduction in preparation and/or cooking skills
- changes in shopping patterns
- changes in cooking methods
- increased variety of ingredients used
- increase in leisure time

Although the candidate will only be assessed on three of the above, there is an expectation that all the effects on lifestyle will be discussed and linked to each of the technological developments in outcome 4.

Outcome 4

The candidate can prepare dishes to show the use of at least four recent technological developments in food preparation and cooking from:

- bread-maker
- ice-cream maker
- microwave oven
- juicers/drink makers
- food processor/food mixer
- steamer
- multi-cooker
- health grill/toasted sandwich maker
- hand-blender

Although the candidate will only be assessed on four of the above, there is an expectation that candidates will undertake additional practical work linked to others.

GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT

The learning and teaching approach should allow the outcomes to be achieved through candidate participation in practical activities. Theoretical aspects should form an integral part of each practical exercise. The needs and abilities of each candidate should be taken into account in terms of the support and equipment required and time should be given to allow candidates to acquire and practice skills.

Use should be made of the SQA evaluation skills pack issued January 2002

National Unit Specification: support notes (cont)

UNIT Food Technology (Intermediate 1)

GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

Outcome 1

The candidate should complete investigative work into four recent technological developments in food production from:

- chilling/cook-chilling
- freezing
- drying
- food additives
- smart foods
- modified atmosphere packaging

Satisfactory achievement of this outcome is based on the candidate accurately describing three out of the four recent technological developments.

Outcome 2

Attainment should be recorded by means of an observational checklist modelled upon performance criteria (a) – (d).

Outcome 3

The candidate should complete four restricted response questions to describe the effects on lifestyle of four recent technological developments in terms of three from:

- variety in the diet
- time, energy, and/or labour saving
- reduction in preparation and/or cooking skills
- changes in shopping patterns
- changes in cooking methods
- increased variety of ingredients used
- increase in leisure time

Total 12 marks

A 70% cut off will be applied to indicate success for the outcome.

Outcome 4

a) The candidate can prepare dishes to show the use of four recent technological developments in food preparation and cooking from:

- bread-maker
- ice-cream maker
- microwave oven
- juicers/drink makers
- food processor/food mixer
- steamer
- multi-cooker
- health grill/toasted sandwich maker
- hand-blender

Attainment should be recorded by means of an observational checklist modelled upon performance criteria (a) – (c).

National Unit Specification: support notes (cont)

UNIT Food Technology (Intermediate 1)

SPECIAL NEEDS

This Unit Specification is intended to ensure that there are no artificial barriers to learning or assessment. Special needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering special alternative outcomes for units. For information on these, please refer to the SQA document *Guidance on Special Assessment Arrangements* (SQA, publication code AA0645).