

Draft National Unit Specification



Unit title: Health and Food Technology: Food Product Development
(National 5)

SCQF: level 5 (6 SCQF credit points)

Unit code: to be advised

Unit outline

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 creating new food products. Learners will develop an understanding of the stages involved in developing a new food product. Through a problem-solving approach, learners will manufacture a food product to meet specified needs. Learners will develop and apply knowledge and understanding of safe and hygienic food practices and techniques.

Learners who complete this Unit will be able to:

- 1 Explain a specified range of functional properties of the ingredients used in food products
- 2 Explain how new food products are developed and make a food product to meet specified needs

This Unit is a mandatory Unit of the Health and Food Technology (National 5) Course and is also available as a free-standing Unit. The Unit Specification should be read in conjunction with the *Unit Support Notes* which provides advice and guidance on delivery, assessment approaches and development of skills for learning, skills for life and skills for work. Exemplification of the standards in this Unit is given in the *National Assessment Resource*.

Recommended entry

Entry to 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 (National 4) Course or relevant component Units
- ◆ Literacy (SCQF level 4)
- ◆ Numeracy (SCQF level 4)

In terms of prior learning and experience, relevant experiences and outcomes may also provide an appropriate basis for doing this Unit. Further information on relevant experiences and outcomes will be given in the *Unit Support Notes*.

Equality and inclusion

This Unit Specification has been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners should be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence. For further information please refer to the *Unit Support Notes*.

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Standards

Outcomes and assessment standards

Outcome 1

The learner will:

- 1 Explain a specified range of functional properties of the ingredients used in food products by:**
 - 1.1 Explaining two different functional properties of three different ingredients and their function in food products.
 - 1.2 Producing one food product using three different ingredients to demonstrate their function
 - 1.3 Explaining the effect on the production of the same food product by varying the proportion or type of one of the ingredients

Outcome 2

The learner will:

- 2 Explain how new food products are developed and make a food product to meet specified needs by:**
 - 2.1 Explaining three stages of food product development
 - 2.2 Describing three food hygiene and safety controls to prevent bacterial growth during three stages of food product development
 - 2.3 Investigate three ways that a recipe could be adapted to meet specified needs
 - 2.4 Adapting and preparing one recipe to meet specified needs
 - 2.5 Conducting a sensory evaluation of the adapted food product and explain how the food product meets the specified needs

Evidence Requirements for the Unit

Assessors should use their professional judgement, subject knowledge and experience, and understanding of their learners, to determine the most appropriate ways to generate evidence and the conditions and contexts in which they are used.

Evidence for this Unit could include one or more of the following: recorded, oral/written responses, video evidence, photographic evidence and observation of skills. Evidence may be presented for individual Outcomes or it may be gathered for the Unit as a whole through combining assessment. If the latter approach is used, it must be clear how the evidence covers each Outcome and additional evidence must be provided for any standard which has not been assessed.

For Outcome 1, examples of properties of ingredients and their function in food products could include:

- ◆ aeration, emulsifying, binding or coagulation for eggs
- ◆ gelatinisation, fermentation or dextrinisation for flour
- ◆ crystallisation or caramelisation for sugar
- ◆ shortening, creaming or rubbing in for fat

For Outcome 2, examples of specified needs could be dietary needs during pregnancy or vegetarianism.

For Assessment Standard 2.2, learners could consider controls at the following stages of manufacture:

- ◆ purchase
- ◆ delivery
- ◆ storage
- ◆ preparation
- ◆ cooking of ingredients
- ◆ chilled storage/cooling
- ◆ packaging
- ◆ distribution of food product

For Assessment Standard 2.4, possible investigations could include:

- ◆ questionnaire (likes/dislikes)
- ◆ survey/online survey of supermarket products
- ◆ interviews with expert
- ◆ recipe search
- ◆ sensory testing of existing products
- ◆ market research

Exemplification of assessment will be provided in the *National Assessment Resource*. Advice and guidance on possible approaches to assessment is provided in the *Unit Support Notes*.

Development of skills for learning, skills for life and skills for work

It is expected that learners will develop broad, generic skills through this Unit. The skills that learners will be expected to improve on and develop through the Unit are based on SQA's *Skills Framework: Skills for Learning, Skills for Life and Skills for Work* and drawn from the main skills areas listed below. These must be built into the Unit where there are appropriate opportunities.

1 Literacy

1.2 Listening and talking

2 Numeracy

2.2 Money, time and measurement

3 Health and wellbeing

3.3 Physical wellbeing

5 Thinking skills

5.3 Applying

5.4 Analysing and evaluating

Amplification of these is given in SQA's *Skills Framework: Skills for Learning, Skills for Life and Skills for Work*. The level of these skills should be at the same SCQF level of the Unit and be consistent with the SCQF level descriptor. Further information on building in skills for learning, skills for life and skills for work is given in the *Unit Support Notes*.

Administrative information



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Superclass: to be advised

History of changes

Version	Description of change	Authorised by	Date

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