H6CD 75 Unit Support Notes — Product Concept to Launch in the Food and Drink Manufacturing Industry (National 5)

Contents

Introduction

These support notes are not mandatory. They provide advice and guidance on approaches to delivering and assessing the Product Concept to Launch in the Food and Drink Manufacturing Industry (National 5) Unit.

They are intended for teachers and lecturers who are delivering this Unit.

They should be read in conjunction with:

♦ the National 5 Product Concept to Launch in the Food and Drink Manufacturing Industry *Unit Specification*
♦ the National 5 Food and Drink Manufacturing Industry Course Specification
♦ the National 5 Food and Drink Manufacturing Industry *Course Support Notes*
♦ appropriate assessment support materials

General guidance on the Unit

Aims

The general aim of the Unit is to give learners an overview of the various stages and factors that need to be considered when a new food or drink product is being developed and launched.

This Unit will introduce learners to the product development process in the food and drink manufacturing industry and highlight costing and associated sustainability issues and it could be tailored to a specific food or drink manufacturer depending on geographic location.

Learners will gain an understanding of the stages involved in taking a new food or drink product from concept to launch, and an understanding of why some products are never produced. This will also give learners an insight into how these stages, which dictate what products will appear on the supermarket shelves, are influenced by consumers and retailers.

This Unit is suitable for learners who are in S4 and above to give them an insight into the industry and for those hoping to gain employment in the food and drink manufacturing industry. It is also suitable for those who are employed but wish to broaden their knowledge and skills for work in the food and drink industry.

It aims to facilitate progression to further study including into National Progression Award in Food Manufacture (SCQF level 6) and then possibly onto Higher National and degree programmes in Food Science and Technology.

Learners who complete this Unit will be able to:

1   Demonstrate an awareness of the drivers which influence the development process for a food or drink product.
2   Give an overview of the journey of a food or drink product from concept to launch.

Progression into the Unit

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:

♦   National 4 Health and Food Technology Course or relevant component Units
♦   National 4 Hospitality: Practical Cookery Course or relevant component Units
♦   National 4 Biology Course or relevant component Units

There may also be progression from National 4 Chemistry, National 4 Environmental Science, National 4 Physics or National 4 Science Courses.

In terms of prior learning and experience, relevant experiences and outcomes may also provide an appropriate basis for doing this Unit.

Adult returners that have relevant experience with in the food and drink industry relating to specific skills and understanding of the processes involved in production could be invited onto the Unit.
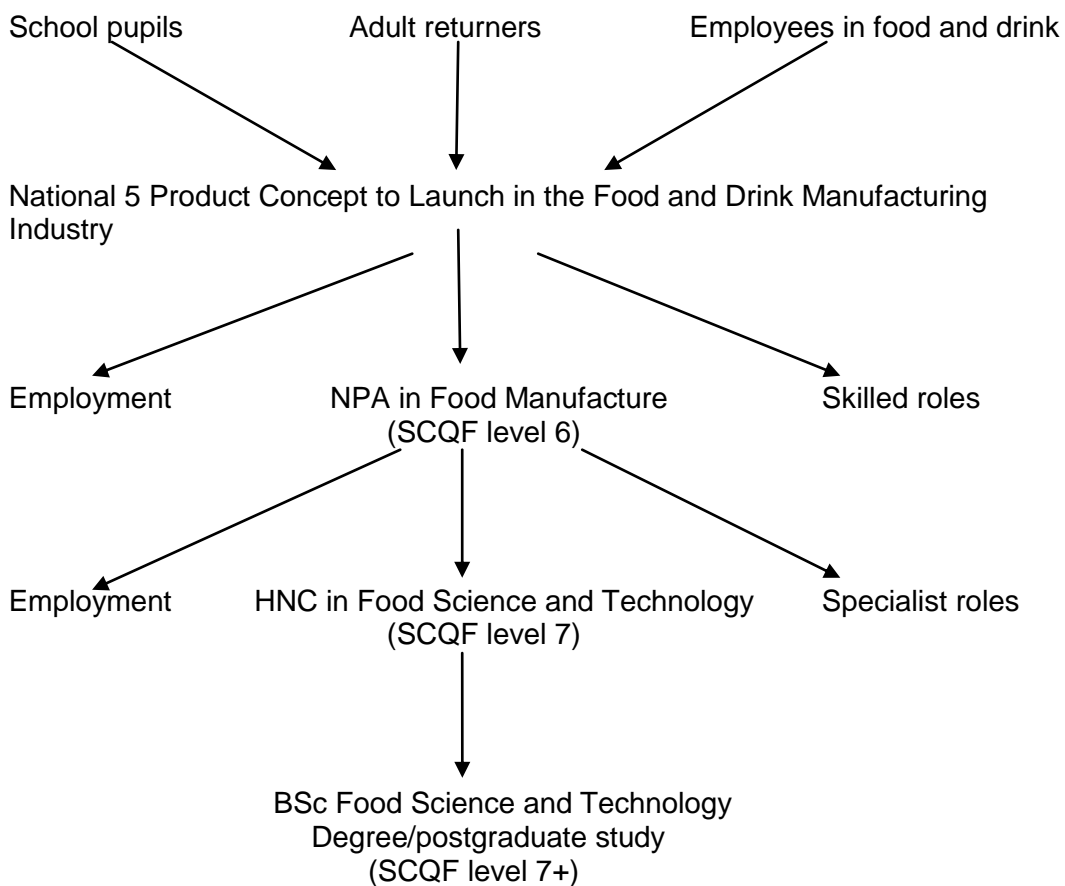
Skills, knowledge and understanding covered in this Unit

Information about skills, knowledge and understanding is given in the Skills for Work Food and Drink Manufacturing Industry *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 the most appropriate for delivery in their centres as well as what is appropriate for the career opportunities of the learners in their area.

Progression from this Unit

Progression opportunities from this Unit onto further study at this or the next SCQF level could include:

School pupils   Adult returners   Employees in food and drink

National 5 Product Concept to Launch in the Food and Drink Manufacturing Industry

Employment   NPA in Food Manufacture   Skilled roles
                           (SCQF level 6)

Employment   HNC in Food Science and Technology   Specialist roles
                           (SCQF level 7)

BSc Food Science and Technology
Degree/postgraduate study
(SCQF level 7+)

Approaches to learning, teaching and assessment

Where possible, learning should occur through interaction with others, undertaking activities and through the building of a portfolio of outcomes and evaluations. Learners may benefit from:

♦ working in small research groups
♦ basic knowledge of a science-based subject (this is not essential)
♦ presenting their findings to the class, either individually or as a group
♦ class discussion of findings
♦ working individually to produce portfolios
♦ research activities to locate and analyse information online
♦ visits from those involved in the food and drink manufacturing industry (eg manufacturing professionals, environmental health professionals or local producers)

It is recommended that evidence of practical skills demonstrated and tasks completed is gathered in individual learner portfolios. These may include outputs from group work but the majority of the evidence should be produced by each individual learner.

If learners have varied food manufacturing interests, opportunities may exist for the assessment brief to be tailored to meet individual areas of interest. Alternatively, learners could work on a single theme determined by the centre.

All activities should encourage the development of self-confidence and understanding of others. It is anticipated that discussion of learners' experiences and findings is carried out throughout the Unit and this used as a basis on which to build personal knowledge and experience, as well as to enable comparison with others regarding different food production/manufacturing areas.

Delivery of this Unit should be as practical as possible.

By adopting the learning and teaching approaches highlighted above and in the Outcomes and corresponding Evidence Requirements, this Unit will provide learners with the opportunity to develop the following essential skills for life, learning and work:

♦ time management, by meeting assignment deadlines and completion of tasks
♦ analytical and interpretative skills, by analysing data and collecting information
♦ presentation skills, by producing information to be shared with other learners
♦ independent learning, by producing individual reports and portfolios
♦ responsibility, by taking charge of their learning and producing the outcomes required
♦ confidence, by working and presenting information to classmates as well as meeting individuals from industry
♦ citizenship, by making links with industry

Where this Unit is taken as part of the Skills for Work: Food and Drink Manufacturing Industry Course, learners will be able to develop their skills and

knowledge further, thus increasing the opportunity for employment/promotion in the sector.

Some examples of learning and teaching activities are given in the following table:

Outcome	Approaches to learning and teaching	Approaches to assessment	Approaches to gathering evidence
Outcome 1 Demonstrate an awareness of the drivers which influence the development process for a food or drink product			
1.1 Explaining the importance of market research prior to launching new food and drink products	Only food and drink items in demand are produced and this is governed by consumer preferences. This is shown by market research. Learners could carry out their own study into product preference.	An open-book, flexible approach to assessment should be employed. This would allow learners to explore aspects of market research and consumer preferences on local or international brands.	This could be a portfolio, based on looking at a specific food or drink product or a range of items. Learners will gain an insight into the importance of market research when promoting a new or reformulated food or drink product. Poster presentation/oral presentation of the information would also be acceptable.
1.2 Giving reasons why an established food or drink product might be reformulated	Existing foods are constantly being altered, eg with less salt or no added fat in accordance with consumer trends, government recommendations, legislation changes, competitor challenges, availability of materials. Reformulated products could be investigated.	An open-book, flexible approach to assessment should be employed. This would allow the diversity of the products that have been reformulated according to demand to be investigated by learners.	This could be a portfolio, based on a particular product from a stated producer/manufacturer or a number of products from various, giving learners a wide base of knowledge. Poster presentation/oral presentation of the information would also be acceptable.
1.3 Evaluating the costing requirements necessary to ensure that a new or reformulated product is	Learners could research the costs associated with taking a new or reformulated food or drink product from concept to launch taking into account	An open-book, flexible approach to assessment should be employed. This would allow learners to expand their research into various food and drink	This could be a portfolio, focussing on a specific food or drink product or a range of items. Learners will understand why not all concept products are put into production due to the economic costs. Poster

	economically viable	ingredients, production, packaging, distribution, marketing and advertising.	manufacturing industries either locally, nationally or internationally.	presentation/oral presentation of the information would also be acceptable.
1.4	Investigating routes to market employed for a new or reformulated product	Learners will investigate how the brand leaders ensure that their products are on shelves worldwide, and how this is achieved. At the opposite end of the spectrum, learners could compare local producers, who may only distribute to a small area.	An open-book, flexible approach to assessment should be employed allowing learners to investigate various distribution strategies of producers/manufacturers and how food safety and freshness needs to be maintained.	This could be portfolio-based, looking at specific local products and comparing them to international brand leaders and examining the differences in their distribution routes. Poster presentation/oral presentation of the information would also be acceptable.

Outcome	Approaches to learning and teaching	Approaches to assessment	Approaches to gathering evidence
Outcome 2 Give an overview of the journey of a food or drink product from concept to launch			
2.1 Investigating the stages involved for a specific food or drink product from production through to launch	Learners could devise their own product and investigate how they could, if given the opportunity, take it from production to launch. Taking into account all the areas previously investigated during Outcome 1.	An open-book, flexible approach to assessment should be employed. This would give learners the scope to investigate a particular area of the food or drink industry that is of interest or of local importance.	This could be a portfolio, based on a particular producer/manufacturer or a number of industries, giving learners a wide base of knowledge. Poster presentation/oral presentation of the information would also be acceptable.
2.2 Evaluating the influence of packaging and labelling when launching a new food or drink product	Food packaging has a huge influence on its target group. For example, children's foods are brightly packaged. Learners could investigate how various packaging would affect the uptake of their concept product with consumers.	An open-book, flexible approach to assessment should be employed to give learners the opportunity to investigate different methods and to gather opinion from consumers. This could be done via a face-to-face questionnaire or through an online questionnaire.	This would form part of the portfolio produced for this Unit and would give learners the opportunity to perform some market research on the product they devised in Assessment Standard 2.1.

Poster presentation/oral presentation of the information would also be acceptable. |

2.3	Discussing the effects of sustainability on the food and drink production process	Sustainability of items is of high importance to industry and consumers are demanding environmentally friendly products. Learners could investigate how the use of sustainable ingredients (eg rainforest alliance products), recyclable materials and degradable packaging influences the food and drink products purchased by consumers.	An open-book, flexible approach to assessment should be employed to give learners the flexibility to investigate a particular food or drink product that is of interest or of local importance.	This could be portfolio, based on a particular producer/manufacturer or a number of industries, giving learners a wide base of knowledge on sustainability issues. Poster presentation/oral presentation of the information would also be acceptable.

An exemplar checklist for use with this Unit is provided as an appendix:
Appendix 2: Exemplar Checklist.

A portfolio that combines Outcomes 1 and 2 in a holistic approach would be beneficial to the delivery of this Unit. This combined approach to assessment would ensure that there will be a minimum of repetition allowing more time for learning.

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.

1 Literacy

1.3 Listening and talking

There would be an opportunity to develop listening and talking skills by ensuring learners work in groups and participate in transfer of information between individuals.

2 Numeracy

2.3 Information handling

Learners will be introduced to market research methods for collecting data and how to analyse this information to ensure that a food or drink produced by industry is what is required by the consumers.

3 Health and wellbeing

3.1 Personal learning

Self-directed study researching a new product from concept to launch will give learners the opportunity to broaden their personal learning and could give them the chance to make choices and changes in regard to their future job prospects.

4 Employability, enterprise and citizenship

4.1 Employability

The overall purpose of this Unit is to introduce learners to the skills and qualities required by the food and drink manufacturing industry in its employees. Completion of this Unit will give learners transferable skills for Employability, Enterprise and Citizenship.

5 Thinking skills

5.2 Understanding
5.4 Analysing and evaluating

A knowledge and understanding of a specific food and drink manufacturer will be required to complete this Unit. Analysing and applying data in working production situations will also be investigated.

E-assessment

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

The following methods could be used to support learning, teaching and assessment:

♦ online testing to reinforce learning and for formative assessment
♦ web-based research
♦ e-portfolios to support personalisation and integration
♦ blogs to capture learners' reflections on their learning and to contribute to authenticating any Coursework they carry out in their own time

Equality and inclusion

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 where 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 on SQA's website: http://www.sqa.org.uk/sqa/14976.html
♦ *Building the Curriculum 4: Skills for learning, skills for life and skills for work*
♦ *Building the Curriculum 5: A framework for assessment*
♦ Course Specifications
♦ Design Principles for National Courses
♦ *Guide to Assessment* (June 2008)
♦ Overview of Qualification Reports
♦ *Overview of Qualification Reports*
♦ *Principles and practice papers for curriculum areas*
♦ *Research Report 4 — Less is More: Good Practice in Reducing Assessment Time*
♦ *Coursework Authenticity — a Guide for Teachers and Lecturers*
♦ *SCQF Handbook: User Guide (published 2009)* and SCQF level descriptors (to be reviewed during 2011 to 2012): www.sqa.org.uk/sqa/4595.html
♦ *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*
♦ SQA Guidelines on e-assessment for Schools
♦ SQA Guidelines on Online Assessment for Further Education
♦ SQA e-assessment web page: www.sqa.org.uk/sqa/5606.html

Appendix 2: Exemplar Checklist

Learner's Name:_____

Lecturer's Name:_____

Date:_____

Assessment Standard	Achieved (✓) Re-assessment (x)	Re-assessment Achieved (✓) Not Achieved (x)	Date
1.1 Explaining the importance of market research prior to launching new food and drink products			
1.2 Giving reasons why an established food or drink product might be reformulated			
1.3 Evaluating the costing requirements necessary to ensure that a new or reformulated product is economically viable			
1.4 Investigating routes to market that are employed for a new or reformulated product			
2.1 Investigating the stages involved for a specific food or drink product from production through to launch			
2.2 Evaluating the influence of packaging and labelling when launching a new food or drink product			
2.3 Discussing the effects of sustainability on the food and drink production process			

Comments:_____

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Administrative information

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History of changes to Unit Support Notes

Unit details	Version	Description of change	Authorised by	Date

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