



Higher National Unit Specification

General information

Unit title: Fermented Pastry Products (SCQF level 7)

Unit code: J3H9 34

Superclass: NA

Publication date: November 2019

Source: Scottish Qualifications Authority

Version: 01

Unit purpose

This unit is designed to enable learners to develop the knowledge, skills and techniques required to produce a range of fermented pastry products to a professional standard.

The unit is intended for learners interested in pursuing a career in professional cookery or those who wish to specialise as a pastry chef. It is suitable for learners who have some cookery experience, for example at chef de partie level and/or have completed qualifications in Professional Cookery at SCQF level 5/6.

On completion of this unit, learners could progress to other units in Professional Cookery at SCQF levels 7/8 and/or seek employment in a professional kitchen.

Outcomes

On successful completion of the unit, the learner will be able to:

- 1 Describe the main processes involved in the production of fermented pastry products and identify possible faults and appropriate remedies/preventative measures.
- 2 Describe the functionality of ingredients used in the production of fermented pastry products.
- 3 Describe how to produce pre-fermented doughs (biga, poolish, pâte fermentée, sourdough) and explain the advantages of using them.
- 4 Prepare, bake and finish a selection fermented pastry products and breads using enriched doughs, laminated doughs and straight and pre-fermented doughs.

Credit points and level

1 Higher National Unit credit at SCQF level 7: (8 SCQF credit points at SCQF level 7)

Higher National Unit Specification: General information (cont)

Unit title: Fermented Pastry Products (SCQF level 7)

Recommended entry to the unit

Learners will be expected to have some knowledge of baking and finishing techniques as applied to pastry products. This could be achieved by completion of qualifications in cookery/pastry at SCQF level 5/6 and/or relevant industrial experience.

Core Skills

Opportunities to develop aspects of Core Skills are highlighted in the support notes for this unit specification.

There is no automatic certification of Core Skills or Core Skill components in this unit.

Context for delivery

If this unit is delivered as part of a group award, it is recommended that it should be taught and assessed within the subject area of the group award to which it contributes.

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.

Further advice can be found on our website www.sqa.org.uk/assessmentarrangements.

Higher National Unit Specification: Statement of standards

Unit title: Fermented Pastry Products (SCQF level 7)

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 SQA.

Where evidence for outcomes is assessed on a sample basis, the whole of the content listed in the knowledge and/or skills section must be taught and available for assessment. Learners should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

Outcome 1

Describe the main processes involved in the production of fermented pastry products and identify possible faults and appropriate remedies/preventative measures.

Knowledge and/or skills

- ◆ Definitions of terms used in the production of fermented pastry products
- ◆ Temperatures required for the development of fermented dough
- ◆ Calculation of desired dough temperature
- ◆ Faults that can occur in dough and baked fermented pastry products
- ◆ Equipment required for the production of fermented pastry products
- ◆ Environments in which dough will develop to produce the finished product

Outcome 2

Describe the functionality of ingredients used in the production of fermented pastry products.

Knowledge and/or skills

- ◆ Composition of wheat kernels
- ◆ Characteristics and uses of flours
- ◆ The variety of ingredients used in fermented doughs
- ◆ Characteristics and uses of fresh and dried yeast
- ◆ Use of soakers

Outcome 3

Describe how to produce pre-fermented doughs (biga, polish, pâte fermentée, sourdough) and explain the advantages of using them.

Knowledge and/or skills

- ◆ Creation and maintenance of pre-fermented doughs (biga, polish, pâte fermentée, sourdough)
- ◆ Development and perpetuation of a sourdough culture
- ◆ Advantages of using pre-fermented dough

Higher National Unit Specification: Statement of standards (cont)

Unit title: Fermented Pastry Products (SCQF level 7)

Outcome 4

Prepare, bake and finish a selection fermented pastry products and breads using enriched doughs, laminated doughs and straight and pre-fermented doughs.

Knowledge and/or skills

- ◆ Methods and techniques used in the production of:
 - Straight and pre-fermented doughs
 - Enriched doughs
 - Laminated doughs
- ◆ Creation of doughs by hand and machine
- ◆ The use of specialised equipment
- ◆ Manipulation of dough to create a variety of shapes
- ◆ The use of additional ingredients to give flavour, texture and enhance the finish of products
- ◆ Control of baking processes
- ◆ Cooling and storage of baked products
- ◆ Safe and hygienic working practices
- ◆ Organisational skills

Higher National Unit Specification: Statement of standards (cont)

Unit title: Fermented Pastry Products (SCQF level 7)

Evidence requirements for this unit

Learners will need to provide evidence to demonstrate their knowledge and/or skills across all outcomes. Written/oral, product and performance evidence is required for this unit. Observational checklists, completed by the lecturer, and logbooks/portfolios compiled by the learner should be used to record evidence.

Outcomes 1, 2 and 3 — Learners are required to:

- ◆ Define the terms the following terms in relation to the production of fermented pastry products:
 - Weighing
 - Mixing
 - Autolyse
 - Primary bulk fermentation
 - Folding
 - Dividing
 - Pre-shaping
 - Bench rest
 - Shaping
 - Final fermentation
 - Finishing
 - Baking
 - Cooling
- ◆ Identify the temperatures required for the development of a dough and show how to calculate a desired dough temperature
- ◆ Identify the faults that can occur in doughs and baked fermented products and explain how these may be remedied or prevented
- ◆ Identify a wide variety of equipment used in the production of fermented pastry products
- ◆ Describe the environment required for the production of fermented pastry products
- ◆ Describe the composition of a wheat kernel
- ◆ Describe the characteristics of three types of flour used in the production of fermented pastry products
- ◆ Explain the use of various ingredients in the production of fermented doughs, ie:
 - Water
 - Salt
 - Sugar
 - Eggs
 - Milk
 - Fats
- ◆ Explain the considerations for using fresh and dried yeast
- ◆ Explain the use of soakers
- ◆ Describe the principal of yeast development within a dough
- ◆ Describe how to create and maintain pre-fermented doughs (ie biga, poolish, pâte fermentée, sourdough)
- ◆ Describe how to develop and perpetuate a sourdough
- ◆ State the advantages of using pre-ferments in fermented pastry products

Higher National Unit Specification: Statement of standards (cont)

Unit title: Fermented Pastry Products (SCQF level 7)

Outcome 4 — Learners are required to:

- ◆ Using either straight dough, pre-fermented dough (biga, poolish, pâte fermentée, sourdough) or a combination of both:
 - Prepare, bake and finish three different varieties of bread roll
 - Prepare, bake and finish three different varieties of bread loaf
- ◆ Prepare, bake and finish two different products using bun dough
- ◆ Prepare, bake and finish two different products using savarin dough
- ◆ Prepare, bake and finish two different products using brioche dough
- ◆ Prepare, bake and finish two different varieties of Danish pastry
- ◆ Prepare, bake and finish two different varieties croissant

Learners must demonstrate the use of the following techniques when preparing, baking and finishing their fermented pastry products and breads:

- ◆ Weighing
- ◆ Hand mixing and machine mixing
- ◆ Autolyse
- ◆ Primary bulk fermentation
- ◆ Folding
- ◆ Dividing
- ◆ Pre-shaping
- ◆ Bench rest
- ◆ Shaping by braiding
- ◆ Final fermentation
- ◆ Finishing
- ◆ Baking, including baking with steam
- ◆ Cooling

The following pre-fermented dough should be used on at least one occasion:

- ◆ Biga
- ◆ Poolish
- ◆ Pâte fermentée

The following finishing techniques should be used on at least one occasion:

- ◆ Egg glaze
- ◆ Fondant glaze
- ◆ Jam glaze
- ◆ Scoring
- ◆ Dusting with flour
- ◆ Garnishing with seeds
- ◆ Garnishing with nuts
- ◆ Garnishing with fruit
- ◆ Garnishing with herbs

All items should be produced to a commercially acceptable standard. Learners must also demonstrate good organisational skills and comply with current hygiene, health and safety legislation throughout the practical activities.



Higher National Unit Support Notes

Unit title: Fermented Pastry Products (SCQF level 7)

Unit support notes are offered as guidance and are not mandatory.

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

Guidance on the content and context for this unit

This unit is available as an optional unit in the Higher National Certificate in Professional Cookery at SCQF level 7 and the Higher National Diploma in Professional Cookery with Management at SCQF level 8. It can also be delivered as a stand-alone unit.

The unit will develop the knowledge and advanced technical skills needed to produce fermented pastry products to a commercially acceptable standard. This unit also will help to prepare learners for employment as a chef/pastry chef.

This unit is also intended to develop learners' creative ability; therefore, they should be encouraged to access a wide selection of traditional and on-line sources to research fermented pastry styles and trends.

Practical activities should be carried out in a realistic working environment (such as a training kitchen) or real workplace. The focus of this unit should be on practical vocational training along with related theory.

Whilst Outcomes 1, 2 and 3 are theory based, the theory of the subject matter should clearly relate to the practical activities for Outcome 4.

Opportunities should be taken to integrate food hygiene and health and safety knowledge into the practical activities. Learners need to be made aware of the hazards and risks associated with working in a professional kitchen and with the use of high-risk ingredients and equipment.

Guidance on approaches to delivery of this unit

The practical activities for this unit should be delivered in realistic working environment (such as a training kitchen) or real workplace. Learners are expected to demonstrate the understanding, skills and techniques needed to produce commercially acceptable and creative fermented pastry products.

Learners should be given clear instruction and guidance for each task and have an understanding of the need to follow specifications when carrying out practical tasks. Particular emphasis should be placed on the scientific aspect of producing fermented pastry products and the need for accuracy when selecting, weighing and measuring ingredients as well as the importance of temperature control and methodical working practices.

Higher National Unit Support Notes (cont)

Unit title: Fermented Pastry Products (SCQF level 7)

The lecturer/teacher should demonstrate the selection of the correct preparation tools and techniques required to produce a range of selected products which meets the evidence requirements for this unit. All new processes and techniques should be demonstrated prior to learners undertaking practical exercises.

The production and final presentation of the required products should be covered to ensure the items meet an acceptable commercial standard. The products being produced must be of a consistent shape and size and demonstrate a high level of baking, finishing and presentation skills. Learners should use a variety of different ingredients to enhance their finished products, such as:

- ◆ Egg glaze
- ◆ Fondant glaze
- ◆ Jam glaze
- ◆ Scoring
- ◆ Dusting with flour
- ◆ Garnishing with seeds
- ◆ Garnishing with nuts
- ◆ Garnishing with fruit
- ◆ Garnishing with herbs

Throughout the practical activities, discussions concentrating on the product in terms of appearance, colour, flavour, texture and presentation should be encouraged.

Finished products should reflect current trends in relation to eating habits, seasonality and finishing techniques.

Learners should also reflect on the wide range and different styles of operation and service across the broad industry spectrum within hospitality and food service provision and not be limited to hotels and restaurants.

Learners should be encouraged to build a portfolio of specifications and photographic evidence of items produced along with theoretical information about ingredients, methods of production. Potential faults, causes, remedies and preventative measures of pastry products should also be explored.

Opportunities should be taken to integrate the required knowledge of food hygiene and health and safety while participating in practical activities. In this way, food hygiene and health and safety procedures will not only be more relevant but will be more easily understood and remembered. Learners should always be made aware of hazards and risks when working in the professional kitchen and the controls that are in place to minimise these risks. The emphasis should always be on the practice of working safely and hygienically.

Higher National Unit Support Notes (cont)

Unit title: Fermented Pastry Products (SCQF level 7)

Delivery of this unit should incorporate a wide range of approaches to teaching and learning to include:

- ◆ Teacher/lecturer demonstrations
- ◆ Practical activities
- ◆ ICT research
- ◆ Reflection and evaluation
- ◆ Structured worksheets/logbooks
- ◆ Written assessments
- ◆ Group work

Guidance on approaches to assessment of this unit

Evidence can be generated using different types of assessment. The following are suggestions only. There may be other methods that would be more suitable to learners.

Centres are reminded that prior verification of centre-devised assessments would help to ensure that the national standard is being met. Where learners experience a range of assessment methods, this helps them to develop different skills that should be transferable to work or further and higher education.

Outcomes 1, 2 and 3 could be assessed using a pro forma, and or an assignment and should be conducted in class and or independent study.

An open-book supervised assessment based on short answer questions or oral questioning could also be used to assess learners' knowledge and understanding of the processes, skills and techniques covered in Outcome 1, 2 and 3.

Alternatively, assessment of Outcome 1, 2 and 3 could be integrated with the practical outcome; with learners gathering information in a logbook/portfolio on the products they will be producing as part of their preparation for the practical exercises and using the information as the basis for oral questioning/discussion to test their knowledge.

Outcome 4 should be continually assessed using performance evidence where learners will produce, bake and finish a prescribed range of fermented pastry products. Each practical activity should have a suitable brief that gives learners guidance on the requirements of the assessment and the time allocated for completion.

There should be evidence of assessment for all of the knowledge and skills and evidence requirements across the outcomes; however, the knowledge and skills and evidence requirements demonstrated during the production of the fermented pastry items do not need to be assessed on every occasion.

Lecturers should use observational checklists covering the knowledge and skills and evidence requirements to record evidence of learners' performance.

All written work should contain a declaration of validity that the content is the learners own work unless cited otherwise. Submissions should be signed and dated by the learner. Digital submissions should be encouraged through centre's VLE using plagiarism software.

Higher National Unit Support Notes (cont)

Unit title: Fermented Pastry Products (SCQF level 7)

Opportunities for e-assessment

E-assessment may be appropriate for some assessments in this unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or social software. Centres which wish to use e-assessment must ensure that the national standard is applied to all learner evidence and that conditions of assessment as specified in the evidence requirements are met, regardless of the mode of gathering evidence. The most up-to-date guidance on the use of e-assessment to support SQA's qualifications is available at www.sqa.org.uk/e-assessment.

Opportunities for developing Core and other essential skills

The delivery of this unit and subsequent assessment will provide learners with the opportunity to develop the Core Skills of *Communication, Numeracy, Information and Communication Technology (ICT)* and *Problem Solving*.

Communication: Written Communication (Reading) at SCQF level 6

This Core Skills component will be developed in the work for all outcomes. Written Communication (Reading) at SCQF level 6 involves identifying significant information and supporting details in a written communication of non-fiction. This would fit with the requirements for all outcomes where learners will read, understand and evaluate a variety of written information, to investigate the fermentation process, research trends/styles in the production of fermented pastry items and use this information to complete their logbooks/worksheets. In addition, when learners follow detailed written instructions in recipes to produce the pastry items for Outcome 4 they will be further developing this Cores Skills component.

Communication: Written Communication (Writing) at SCQF level 5

This Core Skills component could be developed in the work for all outcomes. Written Communication (Writing) at SCQF level 5 involves producing straightforward but detailed written communication. This would fit with the requirements for all outcomes when learners will complete logbooks/worksheets to demonstrate their understanding of the fermentation process, record the methods and skills used to create the required pastry items and their identification and remedy of faults.

Numeracy: Using Number at SCQF level 6

This Core Skills component could be developed in the work for all outcomes. Using Number at SCQF level 6 involves applying a range of numerical skills in various everyday situations. This would fit with the requirements for all outcomes as learners will carry out a variety of calculations when weighting and measuring ingredients, estimating timings, calculation and measuring temperatures, etc.

Higher National Unit Support Notes (cont)

Unit title: Fermented Pastry Products (SCQF level 7)

Information and Communication Technology (ICT): Accessing Information at SCQF level 5

This Core Skills component could be developed in the work for Outcomes 1, 2 and 3. Accessing Information at SCQF level 5 involves using ICT effectively to access information within a range of straightforward tasks. This fits with the requirements for all outcomes where learners could use online sources to investigate the fermentation process, research trends/styles in the production of fermented pastry items and gather information to complete their logbooks/worksheets.

Information and Communication Technology (ICT): Providing/Creating Information at SCQF level 5

This Core Skills component could be developed in the work for Outcomes 1, 2 and 3. Providing/Creating Information at SCQF level 5 involves making effective use of computing systems to process information, carrying out straightforward tasks using familiar application software and presenting information in a straightforward and appropriate format. This would fit with the requirements for Outcomes 1, 2, and 3 if learners use electronic logbooks/worksheets to record the methods and skills used to create the required pastry items and the identification and remedy of faults.

Problem Solving: Critical Thinking at SCQF level 6

This Core Skills component will be developed in the work for all outcomes. Critical Thinking at SCQF level 6 involves analysing a situation or issue, identifying the factors involved in the situation or issue, assessing the relevance of these factors to the situation or issue and developing an approach to deal with the situations or issues. This would fit with the requirements for all outcomes where learners will have to create the appropriate conditions needed to produce yeast fermented doughs, identify and use the appropriate equipment and identify and correct faults that occur with doughs and baked fermented pastry items.

Problem Solving: Planning and Organising at SCQF level 6

This Core Skills component will be developed in the work for Outcome 4. Planning and Organising at SCQF level 6 involves planning, organising and completing a task. This would fit with the requirements for Outcomes 4 where learners will plan for the production of the required pastry items by checking the recipe details, preparing their work area, selecting the appropriate tools and equipment, selecting the appropriate ingredients, methodically preparing the ingredients in the correct order and ensuring that hygiene, health and safety requirements are adhered to.

Problem Solving: Reviewing and Evaluating at SCQF level 6

This Core Skills component will be developed in the work for Outcomes 1 and 4. Reviewing and Evaluating at SCQF level 6 involves evaluating the effectiveness of all stages of the problem solving strategy and assessing or describing the relevance of the evidence, drawing conclusions and justifying them with reference to the evidence. This fits with the requirements for Outcome 1 where learners will identify possible faults and how to remedy these, and for Outcome 4 where they will use preventative measures to avoid faults occurring or apply appropriate remedies to correct any faults that occur.

History of changes to unit

Version	Description of change	Date

© Scottish Qualifications Authority 2019

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

Additional copies of this unit specification can be purchased from the Scottish Qualifications Authority. Please contact the Business Development and Customer Support team, telephone 0303 333 0330.

General information for learners

Unit title: Fermented Pastry Products (SCQF level 7)

This section will help you decide whether this is the unit for you by explaining what the unit is about, what you should know or be able to do before you start, what you will need to do during the unit and opportunities for further learning and employment.

This unit is designed to enable you to develop the knowledge, skills and techniques required to produce a range of fermented pastry products to a professional standard.

The unit is intended for those interested in pursuing a career in professional cookery or those who wish to specialise as a pastry chef. It would be beneficial if you have some cookery experience, for example at chef de partie level and/or have completed qualifications in professional cookery at SCQF level 5/6 before undertaking this unit.

Much of this unit is likely to be taught in a training kitchen, where you will be expected to display a high level of safe and hygienic working practices along with good organisational and team working skills.

You will also be expected to produce well documented information in the form of a logbook/portfolio, to detail the methods and skills used when you create the prescribed fermented pastry products and to show your understanding of the fermentation process.

Completion of this unit will also enable you to develop the following Core Skills:

- ◆ *Communication*: Written Communication (Reading) at SCQF level 6
- ◆ *Communication*: Written Communication (Writing) at SCQF level 5
- ◆ *Numeracy*: Using Number at SCQF level 6
- ◆ *Information and Communication Technology (ICT)*: Providing/Creating Information at SCQF level 5
- ◆ *Information and Communication Technology (ICT)*: Accessing Information at SCQF level 5
- ◆ *Problem Solving*: Critical Thinking at SCQF level 6
- ◆ *Problem Solving*: Planning and Organisation at SCQF level 6
- ◆ *Problem Solving*: Reviewing and Evaluation at SCQF level 6

On completion of this unit, you could progress to other units in Professional Cookery at SCQF levels 7/8 and/or seek employment in a professional kitchen.