

GCSE

# WJEC GCSE Food and Nutrition

Approved by Qualifications Wales

## Specification

Teaching from 2025

For award from 2027

Version 2 - February 2025



This Qualifications Wales regulated qualification is not available to centres in England.

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Ready for the world.



This specification meets the requirements of the following regulatory documents published by Qualifications Wales:

- [Made for Wales GCSE Qualification Approval Criteria](#) which set out requirements for any new GCSE qualification Approved for first teaching from September 2025 and beyond.
- [Standard Conditions of Recognition](#) which contains the rules that all awarding bodies and their qualifications must meet when offering qualifications to learners in Wales.
- Approval Criteria for GCSE [Food and Nutrition](#) which sets out the subject specific requirements for GCSE Food and Nutrition qualifications from September 2025 and beyond.

# SUMMARY OF AMENDMENTS

Version	Description	Page number
2	<b>Set and marked by the centre</b> corrected to <b>Set by WJEC, marked by Centre</b> . Please note there are two instances of this change (for Unit 2 and Unit 3)	5

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# GCSE FOOD AND NUTRITION

## SUMMARY OF ASSESSMENT

<b>Unit 1: Principles of Food and Nutrition</b> <b>Digital examination: 1 hour 30 minutes</b> <b>40% of qualification</b>	<b>80 marks</b>
Questions requiring objective responses, quick-response, short and extended answers.	
<b>Unit 2: Food Investigation</b> <b>Non-examination assessment: 8 hours</b> <b>20% of qualification</b> <b>Marked by the centre and moderated by WJEC</b>	<b>40 marks</b>
Set by WJEC, marked by the Centre and moderated by WJEC. The assessment will feature two pre-released briefs which will be set by WJEC each year. Centres can choose one of the two pre-released briefs they would like learners to complete.  The pre-released briefs, which will include several tasks, will be available via the WJEC Portal.	
<b>Unit 3: Food and Nutrition in Action</b> <b>Non-examination assessment: 12 hours</b> <b>40% of qualification</b> <b>Marked by the centre and moderated by WJEC</b>	<b>80 marks</b>
Set by WJEC, marked by the Centre and moderated by WJEC. The assessment will feature two pre-released briefs which will be set by WJEC each year. Learners can choose one of the two pre-released briefs they would like learners to complete.  The pre-released briefs, which will include several tasks, will be available via the WJEC Portal.	

This is a linear qualification.

It is not tiered.

There is no hierarchy to the order the units should be taught.

Unit 1 examination will be available in the summer of the final year of study. It will be first awarded in 2027.

Unit 2 will be assessed through an externally set assignment that will be set by WJEC. Unit 2 will be based on a pre-released brief; centres can choose one of two pre-released briefs. The pre-released briefs will be available in May of the first year of study, to be completed by the summer of the final year of study. It will be first awarded in 2027. Each year, the assessment structure and tasks will stay the same, however, the pre-released briefs will change.

Unit 3 will be assessed through an externally set assignment that will be set by WJEC. Unit 3 will be based on a pre-released brief; learners can choose one of two pre-released briefs. The pre-released briefs will be available in May of the first year of study, to be completed by the summer of the final year of study. It will be first awarded in 2027. Each year, the assessment structure and tasks will stay the same, however, the pre-released briefs will change.

Qualification Approval Number: C00/4967/1

# GCSE FOOD AND NUTRITION

## 1 INTRODUCTION

### 1.1 Aims

The GCSE Food and Nutrition qualification must support learners to:

- understand the journey of food – from ‘field to fork’
- make healthy and informed food choices for themselves and others
- explain the function, nutritional benefits and sensory qualities of ingredients within a recipe
- explain the function and nutritional benefits of food and drinks in the human body
- describe the links between diet, nutrition, health and well-being
- explore the economic, environmental, ethical, and socio-cultural influences on food availability, production processes, diet, and health choices
- effectively and safely prepare, process, store, cook and serve food which contains a variety of food commodities
- explore a range of ingredients, and cooking methods and techniques, from local, national, and international cuisines
- modify existing recipes and develop their own ideas for dishes
- explore the cross-cutting curriculum theme of human rights and diversity including the contributions and cuisines of Black, Asian and minority ethnic communities and individuals
- gain an appreciation of how food connects us to the world around us
- analyse and evaluate a range of food and dishes made by themselves and others.

These aims are set out in Qualifications Wales’ Approval Criteria.

### 1.2 Curriculum for Wales

This GCSE Food and Nutrition qualification is underpinned by the Curriculum for Wales framework and has been designed to ensure that learners can continue to make progress towards the four purposes whilst studying for this qualification. Central to this design are the [principles of progression](#), along with the [statements of what matters](#) and those [subject specific skills and concepts](#) outlined in the ‘[Designing your Curriculum](#)’ section of the Health and Well-being Area of Learning and Experiences.

In developing this qualification, we have considered where there are opportunities to embed the cross-curricular themes and where there are opportunities for integral skills and cross-curricular skills to be developed. Appendix B provides a simple mapping, and information to support teachers will be provided in the Guidance for Teaching.

We have also considered where the qualification can generate opportunities for integrating the learning experiences noted on page 25. The Guidance for Teaching will include further information on integrating these learning experiences into delivery.



The GCSE Food and Nutrition qualification supports the Curriculum for Wales by:

- supporting the statements of what matters<sup>1</sup> by giving learners the opportunity to:
  - understand the factors that affect physical health and well-being that promote healthy bodies and healthy minds. This includes health-promoting behaviours such as following a balanced diet
  - develop the confidence, motivation, physical competence, knowledge and understanding that can help them lead healthy and active lifestyles which promote good physical health and well-being by studying nutrition and good health
  - enable learners to develop the critical-thinking skills necessary to consider their decision-making in terms of possible implications when preparing food, including risks, for themselves and others
  - engage critically with these social influences within their own culture that influence diet and health choices.
- supporting the principles of progression<sup>2</sup> by encouraging learners to:
  - deepen learning in a wide range of concepts within the statements of what matters across a wide range of topics and aspects of food and nutrition
  - develop their independence and agency in matters relating to nutrition and good health: resulting in a growing responsibility for their own health and well-being
  - putting what they have learned about food and nutrition into a practical context, developing conceptual knowledge
  - develop practical skills such as food preparation and cooking that also supports learners in their health and well-being.
- supporting the subject specific considerations for Food and Nutrition<sup>3</sup>. The qualification will:
  - provide opportunities for learners to understand the journey from ‘field to fork’, explore the economic, ethical and environmental influences of food availability and consider sustainability, production and processing of food
  - provide opportunities for learners to make healthy and informed food choices for themselves and others, make links between diet, nutrition, health and well-being, explore the influences of diet and health choices and explore the function and nutritional benefits of food and drinks on the human body
  - provide opportunities for learners to develop an understanding of the functional properties of food within the body and the ingredients used within a recipe
  - equip learners with the skills to effectively and safely prepare, process, store, cook and serve food, modify existing recipes and develop their own dishes, analyse and evaluate a range of food and dishes made by themselves and others, and explore the sensory qualities of ingredients within a recipe
  - provide opportunities for learners to appreciate how food connects us to the world around us, explore the contributions and cuisines of Black, Asian and minority ethnic communities and individuals, and explore a range of ingredients, cooking methods and techniques from local, national, and international cuisines, and socio-cultural influences on food availability.

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<sup>1</sup> <https://hwb.gov.wales/curriculum-for-wales/health-and-well-being/statements-of-what-matters>

<sup>2</sup> <https://hwb.gov.wales/curriculum-for-wales/health-and-well-being/principles-of-progression>

<sup>3</sup> <https://hwb.gov.wales/curriculum-for-wales/health-and-well-being/designing-your-curriculum/>

### 1.3 Prior learning and progression

Although there is no specific requirement for prior learning, the qualification is designed primarily for learners between the ages of 14 and 16 and builds on the conceptual understanding learners have developed through their learning from ages 3 – 14.

The qualification allows learners to develop a strong foundation of knowledge, skills and understanding which supports progression to post-16 study and prepares learners for life, learning and work. The qualification provides a suitable foundation for the study of Level 3 Certificate in Food Science and Nutrition. In addition, the specification provides a coherent, satisfying and worthwhile course of study for learners who do not progress to further study in this subject.

### 1.4 Guided learning hours

GCSE Food and Nutrition has been designed to be delivered within 120 – 140 guided learning hours. The qualification has been primarily designed as a 2-year programme for learners in years 10 and 11.

### 1.5 Use of language

As our understanding of diversity, equity, and inclusion evolves, so must our language. Updated terminology better reflects individual identities and fosters respect and accuracy. Language used should be specific as possible. Staying informed and adaptable is crucial, as inclusive language promotes dignity and equity. Recognising that language will continue to evolve, we will remain open to further amendments to ensure it accurately represents and supports all individuals. WJEC will inform centres of any amendments and the most up to date version of the specification will always be on the website.

### 1.6 Equality and fair access

The specification may be followed by any learner, irrespective of gender, ethnic, religious or cultural background. It has been designed to avoid, where possible, features that could, without justification, make it more difficult for a learner to access and achieve because they have a particular protected characteristic.

The protected characteristics under the Equality Act 2010 are age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex and sexual orientation.

Access arrangements and reasonable adjustments are made for eligible learners to enable them to access the assessments and demonstrate their knowledge and skills without changing the demands of the assessment.

Information on access arrangements and reasonable adjustments is found in the following document from the Joint Council for Qualifications (JCQ): Access Arrangements, Reasonable Adjustments: General and Vocational Qualifications. This document is available on the JCQ website ([www.jcq.org.uk](http://www.jcq.org.uk)).

We will be following the principles set out in this document and, as a consequence of provision for reasonable adjustments, very few learners will encounter a complete barrier to any part of the assessment.

## 2 SUBJECT CONTENT

### How to read the amplification

The amplification provided in the right-hand column uses the following four stems:

- 'Learners should be aware of' is used when learners need a basic knowledge of the specified content, and this does not need to be taught in detail. Teachers should refer to Guidance for Teaching documents for further guidance on the depth and breadth to which this content should be taught.
- 'Learners should know' is used when learners are required to demonstrate basic knowledge and understanding.
- 'Learners should understand' is used when learners are required to demonstrate greater depth of knowledge and understanding, application of knowledge to contexts, and evaluation and analysis of information.
- 'Learners should be able to' is used when learners need to apply their knowledge and understanding to a practical situation or demonstrate application of practical skills techniques.

The use of the word 'including' indicates that the specified content must be taught and could be subject to assessment.

The use of the words 'for example' or 'such as' indicates that the specified content is for guidance only, and alternative examples could be chosen.

### Unit 1

#### Principles of Food and Nutrition

Assessment type: Digital Examination  
40% of qualification  
80 marks

#### Overview of unit

The purpose of this unit is to:

- develop knowledge and understanding of food and nutrition and food preparation and cooking.

The unit will be based on the following areas of content:

- 1.1 Food commodity groups
- 1.2 Nutrients for a balanced diet
- 1.3 Diet and health
- 1.4 Cooking food
- 1.5 Food spoilage
- 1.6 From field to fork

**Areas of content****1.1 Food commodity groups**

In this topic learners will gain knowledge, understanding and skills in the following areas:

**1.1.1 Food commodity groups**

Section	Amplification
<b>1.1.1</b> Food commodity groups	<p>Learners should know examples from the food commodity groups, including:</p> <ul style="list-style-type: none"> <li>• carbohydrate foods, including fibre, starch and sugar,</li> <li>• dairy foods and alternatives</li> <li>• fats and oils</li> <li>• fruits and vegetables</li> <li>• protein foods including eggs, fish, meat and plant-based alternatives.</li> </ul> <p>Learners should understand the:</p> <ul style="list-style-type: none"> <li>• nutritional value of the food commodity groups</li> <li>• functions and characteristics of the food commodity groups.</li> </ul> <p>Learners should be aware of:</p> <ul style="list-style-type: none"> <li>• storage options relating to the food commodity groups</li> <li>• the origins of the food commodity groups.</li> </ul>

## 1.2 Nutrients for a balanced diet

In this topic learners will gain knowledge, understanding and skills in the following areas:

1.2.1 Macronutrients

1.2.2 Micronutrients

1.2.3 A balanced diet

Section	Amplification
<p>1.2.1 Macronutrients</p>	<p>Learners should know the role of macronutrients, including:</p> <ul style="list-style-type: none"> <li>• carbohydrates</li> <li>• fat</li> <li>• protein.</li> </ul> <p>Learners should understand, for each macronutrient:</p> <ul style="list-style-type: none"> <li>• functions</li> <li>• sources</li> <li>• effects of deficiency or excess.</li> </ul>
<p>1.2.2 Micronutrients</p>	<p>Learners should know the role of micronutrients, including:</p> <ul style="list-style-type: none"> <li>• minerals: calcium, iron, potassium and magnesium</li> <li>• vitamins: fat soluble vitamins A, D, E and K. Water soluble vitamins B1, B2, B3, B12, B9 and C.</li> </ul> <p>Learners should understand, for each micronutrient:</p> <ul style="list-style-type: none"> <li>• functions</li> <li>• sources</li> <li>• effects of deficiency or excess.</li> </ul>
<p>1.2.3 A balanced diet</p>	<p>Learners should understand:</p> <ul style="list-style-type: none"> <li>• the importance of fibre and water in a balanced diet</li> <li>• the complementary actions of nutrients.</li> </ul> <p>Learners should know how to calculate energy and nutritional values in food.</p> <p>Learners should be aware of:</p> <ul style="list-style-type: none"> <li>• The Eatwell Guide and its recommendations to achieve a balanced diet</li> <li>• the importance of determining energy requirements based on levels of physical activity.</li> </ul>

### 1.3 Diet and health

In this topic learners will gain knowledge, understanding and skills in the following areas:

1.3.1 How nutritional needs change over the life stages

1.3.2 Dietary needs and nutritional deficiencies

1.3.3 Other factors affecting food choices

Section	Amplification
<p>1.3.1</p> <p>How nutritional needs change over the life stages</p>	<p>Learners should understand how nutritional needs change over the life stages, including:</p> <ul style="list-style-type: none"> <li>• infancy</li> <li>• childhood</li> <li>• adolescence</li> <li>• adulthood</li> <li>• later adulthood.</li> </ul> <p>Learners should be aware of the daily recommended intake of nutrients over the life stages.</p>
<p>1.3.2</p> <p>Dietary needs and nutritional deficiencies</p>	<p>Learners should understand the nutritional needs of individuals with specific dietary needs or nutritional deficiencies, such as:</p> <ul style="list-style-type: none"> <li>• anaemia</li> <li>• cardiovascular disease</li> <li>• coeliac disease</li> <li>• food intolerances and allergies</li> <li>• type 2 diabetes.</li> </ul> <p>Learners should be aware of current trends relating to dietary issues in Wales.</p>
<p>1.3.3</p> <p>Other factors affecting food choices</p>	<p>Learners should know factors that affect food choices, including:</p> <ul style="list-style-type: none"> <li>• cultural influences</li> <li>• food availability</li> <li>• levels of physical activity</li> <li>• lifestyle</li> <li>• personal preferences</li> <li>• religious beliefs</li> <li>• socio-economic influences.</li> </ul> <p>Learners should understand the impact of food choices on:</p> <ul style="list-style-type: none"> <li>• animal welfare</li> <li>• energy balance</li> <li>• environmental sustainability</li> <li>• health and wellbeing</li> <li>• society.</li> </ul> <p>Learners should be aware of:</p> <ul style="list-style-type: none"> <li>• the contributions cultural influences have had on the food we eat in Wales, including from Black, Asian and minority ethnic communities and individuals</li> <li>• emerging trends in relation to lifestyle choices</li> <li>• unequal distribution of food locally, nationally and internationally.</li> </ul>

## 1.4 Cooking food

In this topic learners will gain knowledge, understanding and skills in the following areas:

1.4.1 Why we cook food

1.4.2 Methods of heat transfer

1.4.3 Cooking methods

Section	Amplification
1.4.1 Why we cook food	<p>Learners should know the reasons why we cook food, including:</p> <ul style="list-style-type: none"> <li>to improve safety</li> <li>to increase shelf life of food</li> <li>to improve digestibility and palatability.</li> </ul>
1.4.2 Methods of heat transfer	<p>Learners should understand how heat is transferred when cooking food, including:</p> <ul style="list-style-type: none"> <li>conduction</li> <li>convection</li> <li>radiation.</li> </ul> <p>Learners should be aware that some dishes rely on more than one method of heat transfer.</p>
1.4.3 Cooking methods	<p>Learners should understand the effects of a selection of cooking methods, including:</p> <ul style="list-style-type: none"> <li>dry methods</li> <li>fat based</li> <li>water based.</li> </ul> <p>Learners should be aware of:</p> <ul style="list-style-type: none"> <li>cooking methods introduced from other cultures, including from Black, Asian and minority ethnic communities and cultures</li> <li>the environmental impact of cooking.</li> </ul>



## 1.5 Food spoilage

In this topic learners will gain knowledge, understanding and skills in the following areas:

1.5.1 Storage and temperature control

1.5.2 Hygiene and safety

1.5.3 Preservation

1.5.4 Food poisoning

Section	Amplification
<p>1.5.1 Storage and temperature control</p>	<p>Learners should know how to store foods correctly, including:</p> <ul style="list-style-type: none"> <li>• dry and cold storage</li> <li>• packaging and covering</li> <li>• refrigeration and freezing.</li> </ul> <p>Learners should understand the risks of not storing food correctly for themselves and others.</p> <p>Learners should know the Food Standards Agency (FSA) guidelines for storing and cooking food, including:</p> <ul style="list-style-type: none"> <li>• cooking and reheating</li> <li>• temperature control</li> <li>• use by and best before dates.</li> </ul>
<p>1.5.2 Hygiene and safety</p>	<p>Learners should understand microbiological principles when preparing, cooking and serving food, including:</p> <ul style="list-style-type: none"> <li>• personal hygiene practices and procedures</li> <li>• food safety practices and procedures</li> <li>• key temperatures for food safety, storage and cooking</li> <li>• physical, biological and chemical contamination.</li> </ul>
<p>1.5.3 Preservation</p>	<p>Learners should know preservation techniques that help keep food for longer, including:</p> <ul style="list-style-type: none"> <li>• bottling</li> <li>• canning</li> <li>• freeze-drying</li> <li>• jam making</li> <li>• pickling</li> <li>• vacuum packing.</li> </ul> <p>Learners should be aware of industrial methods of preservation used in food production.</p>
<p>1.5.4 Food poisoning</p>	<p>Learners should know:</p> <ul style="list-style-type: none"> <li>• the types of food poisoning bacteria, including <i>Campylobacter</i>, <i>Salmonella</i>, <i>E-coli</i>, <i>Staphylococcus</i>, <i>Norovirus</i> and <i>Listeria</i></li> <li>• the symptoms commonly associated with food poisoning.</li> </ul> <p>Learners should be aware of the risks and consequences of inadequate or unacceptable food hygiene practices.</p>

## 1.6 From field to fork

In this topic learners will gain knowledge, understanding and skills in the following areas:

1.6.1 Food origin

1.6.2 Food and the environment

1.6.3 Primary and secondary food processing

Section	Amplification
1.6.1 Food origin	<p>Learners should know the methods used to source the food we eat, including foods that are:</p> <ul style="list-style-type: none"> <li>• caught</li> <li>• grown</li> <li>• reared.</li> </ul> <p>Learners should be aware of:</p> <ul style="list-style-type: none"> <li>• developments in producing food</li> <li>• trends in the availability of Welsh produce.</li> </ul>
1.6.2 Food and the environment	<p>Learners should know the methods used to transport food on a local, national and international scale including, refrigerated transport, insulated containers, shipping containers and air freight.</p> <p>Learners should understand the environmental impacts associated with food production, including:</p> <ul style="list-style-type: none"> <li>• food miles</li> <li>• intensive farming</li> <li>• extensive farming.</li> </ul> <p>Learners should be aware of the availability of seasonal foods and issues relating to food security.</p> <p>Learners should understand the advantages and disadvantages of buying food locally.</p>
1.6.3 Primary and secondary food processing	<p>Learners should understand:</p> <ul style="list-style-type: none"> <li>• the primary stages of food processing and production, including: <ul style="list-style-type: none"> <li>• harvesting and cleaning</li> <li>• treating</li> <li>• packaging</li> </ul> </li> <li>• processing methods to change primary food products into secondary food products, including: <ul style="list-style-type: none"> <li>• flour to bread</li> <li>• fruit to jams, jellies and juices</li> <li>• milk to cheese and yoghurt.</li> </ul> </li> </ul> <p>Learners should be aware of:</p> <ul style="list-style-type: none"> <li>• the effects of processing foods on: <ul style="list-style-type: none"> <li>• nutritional value</li> <li>• sensory qualities</li> <li>• shelf life of food.</li> </ul> </li> </ul>

## Unit 2

### Food Investigation

Non-examination assessment: 8 hours  
 Marked by the centre and moderated by WJEC  
 20% of qualification  
 40 marks

### Overview of unit

The purpose of this unit is to:

- apply knowledge and understanding of the working characteristics, functions and chemical properties of ingredients in a recipe.

The unit will be based on the following areas of content:

- 2.1 The science of food
- 2.2 Planning food science experiments
- 2.3 Food science in action

### Areas of content

#### 2.1 The science of food

In this topic learners will gain knowledge, understanding and skills in the following areas:

- 2.1.1 The working characteristics of ingredients in a recipe
- 2.1.2 The functional properties of ingredients in a recipe
- 2.1.3 The chemical properties of ingredients in a recipe

Section	Amplification
<b>2.1.1</b> The working characteristics of ingredients in a recipe	<p>Learners should understand how the working characteristics of ingredients contribute to the success of a recipe.</p> <p>Learners should understand the working characteristics of ingredients in a recipe, including:</p> <ul style="list-style-type: none"> <li>• colour and appearance</li> <li>• emulsification and binding</li> <li>• foaming</li> <li>• heat transfer and cooking properties</li> <li>• texture</li> <li>• viscosity.</li> </ul> <p>Learners should be aware of the food commodity groups within ingredients in a recipe.</p> <p>Learners should be aware of:</p> <ul style="list-style-type: none"> <li>• current trends in cooking methods</li> <li>• cooking methods and techniques from local, national and international cuisines.</li> </ul>

<p><b>2.1.2</b> The functional properties of ingredients in a recipe</p>	<p>Learners should understand the functional properties of ingredients in a recipe, including:</p> <ul style="list-style-type: none"> <li>• aerating</li> <li>• binding</li> <li>• bulking</li> <li>• colouring</li> <li>• flavouring</li> <li>• glazing</li> <li>• modifying nutritional content</li> <li>• preserving</li> <li>• raising agents</li> <li>• setting</li> <li>• tenderising</li> <li>• thickening.</li> </ul> <p>Learners should understand the function of ingredients in a recipe, by:</p> <ul style="list-style-type: none"> <li>• selecting and adapting recipes</li> <li>• considering variables that affect results</li> <li>• making modifications to a recipe.</li> </ul>
<p><b>2.1.3</b> The chemical properties of ingredients in a recipe</p>	<p>Learners should understand the chemical properties of ingredients in a recipe, by:</p> <ul style="list-style-type: none"> <li>• selecting and adapting recipes</li> <li>• considering variables that affect results.</li> </ul> <p>Learners should be aware of recipes that demonstrate specific characteristics, including:</p> <p>Carbohydrates:</p> <ul style="list-style-type: none"> <li>• caramelisation</li> <li>• dextrinization</li> <li>• gelatinisation</li> <li>• Maillard reaction.</li> </ul> <p>Fats and oils:</p> <ul style="list-style-type: none"> <li>• aeration: steam, chemical and mechanical action</li> <li>• emulsification</li> <li>• plasticity</li> <li>• shortening or flakiness.</li> </ul> <p>Fruits and vegetables:</p> <ul style="list-style-type: none"> <li>• enzymic browning</li> <li>• oxidation.</li> </ul> <p>Protein:</p> <ul style="list-style-type: none"> <li>• complementary actions</li> <li>• coagulation</li> <li>• denaturation: acid, heat and mechanical action</li> <li>• foam formation</li> <li>• gelation</li> <li>• gluten formation</li> <li>• Maillard reaction</li> <li>• stabilisation</li> <li>• viscosity.</li> </ul>

## 2.2 Planning a food science experiment

In this topic learners will gain knowledge, understanding and skills in the following areas:

2.2.1 Planning a food investigation

2.2.2 The role of variables in a food experiment

2.2.3 Testing sensory qualities

Section	Amplification
<p>2.2.1 Planning a food investigation</p>	<p>Learners should understand the stages of a food investigation plan, including:</p> <ul style="list-style-type: none"> <li>research question</li> <li>developing a hypothesis</li> <li>identifying variables</li> <li>experimental controls</li> <li>equipment required</li> <li>collecting results</li> <li>analysing results</li> <li>presenting investigation results</li> <li>drawing conclusions</li> <li>evaluating results.</li> </ul> <p>Learners should be aware of sustainability practices to prevent food waste when conducting a food investigation.</p>
<p>2.2.2 The role of variables in a food experiment</p>	<p>Learners should understand the role of variables in a food experiment, including:</p> <ul style="list-style-type: none"> <li>cooking methods</li> <li>cooking times</li> <li>ingredients</li> <li>preparation methods</li> <li>quantities</li> <li>temperatures.</li> </ul> <p>Learners should understand how to modify variables within a food experiment to test a hypothesis.</p> <p>Learners should be aware of the complimentary actions of ingredients in a recipe.</p>
<p>2.2.3 Testing sensory qualities</p>	<p>Learners should understand the sensory qualities of food, including:</p> <ul style="list-style-type: none"> <li>appearance</li> <li>aroma</li> <li>flavour</li> <li>texture</li> <li>viscosity.</li> </ul> <p>Learners should be aware of how to apply sensory descriptors appropriately.</p> <p>Learners should be aware of how to test sensory qualities, such as:</p> <ul style="list-style-type: none"> <li>discrimination tests</li> <li>preference tests</li> <li>star diagrams.</li> </ul>

## 2.3 Food science in action

In this topic learners will gain knowledge, understanding and skills in the following areas:

**2.3.1** Conducting a food investigation

**2.3.2** Collecting, analysing and presenting results

**2.3.3** Reflection and evaluation

Section	Amplification
<b>2.3.1</b> Conducting a food investigation	<p>Learners should be aware of food hygiene and safety practices and procedures when conducting a food experiment, including:</p> <ul style="list-style-type: none"> <li>personal hygiene</li> <li>safe working practices</li> <li>the safe preparation, cooking, and storage of food.</li> </ul> <p>Learners should be able to:</p> <ul style="list-style-type: none"> <li>follow the stages of their food experiment plan</li> <li>conduct a food experiment to test a hypothesis based on a research question</li> <li>modify variables within a food experiment to achieve different results.</li> </ul>
<b>2.3.2</b> Collecting, analysing and presenting results	<p>Learners should understand suitable methods used to collect results when testing a hypothesis, such as:</p> <ul style="list-style-type: none"> <li>observations</li> <li>measurements</li> <li>testing, including sensory quality testing, using sensory descriptors.</li> </ul> <p>Learners should be aware of the importance of validity and reliability when collecting results.</p> <p>Learners should be able to present results for analysis, using methods such as:</p> <ul style="list-style-type: none"> <li>annotated photographs/illustrations</li> <li>bar/pie charts</li> <li>star diagrams</li> <li>tables.</li> </ul> <p>Learners should understand how to analyse the results of their food experiment.</p>
<b>2.3.3</b> Reflection and evaluation	<p>Learners should be able to reflect on their food experiment, including:</p> <ul style="list-style-type: none"> <li>drawing conclusions</li> <li>evaluating results.</li> </ul>

## Unit 3

### Food and Nutrition in Action

Non-examination assessment: 12 hours  
 Marked by the centre and moderated by WJEC  
 40% of qualification  
 80 marks

### Overview of unit

The purpose of this unit is to:

- plan, prepare, cook and present food using appropriate skills and techniques.

The unit will be based on the following areas of content:

- 3.1 Factors affecting food choices
- 3.2 Food planning, preparation and cooking techniques
- 3.3 Cooking for an audience and purpose

### Areas of content

3.1 Factors affecting food choices	
In this topic learners will gain knowledge, understanding and skills in the following areas:	
3.1.1 The factors that influence food and ingredient choices	
3.1.2 Making choices about food and ingredients	
Section	Amplification
3.1.1 The factors that influence food and ingredient choices	<p>Learners should understand the factors that affect food and ingredient choices, when planning and preparing meals and menus, including:</p> <ul style="list-style-type: none"> <li>• cultural influences</li> <li>• food availability and seasonality</li> <li>• levels of physical activity</li> <li>• lifestyles</li> <li>• nutritional needs across life stages</li> <li>• personal preferences</li> <li>• religious beliefs</li> <li>• sensory qualities</li> <li>• shelf life of food</li> <li>• socio-economic influences</li> <li>• specific dietary needs or nutritional deficiencies</li> <li>• emerging trends related to factors that affect food and ingredient choices</li> <li>• benefits of using locally sourced, Welsh food.</li> </ul>
3.1.2 Making choices about food and ingredients	<p>Learners should be able to consider the factors that affect food and ingredient choices to:</p> <ul style="list-style-type: none"> <li>• make informed decisions for themselves and others about food and drink</li> <li>• justify the choices for themselves and others about food and drink</li> <li>• plan and prepare food outcomes.</li> </ul>

### 3.2 Food planning, preparation and cooking techniques

In this topic learners will gain knowledge, understanding and skills in the following areas:

**3.2.1** Planning to cook

**3.2.2** Techniques for preparing, cutting and cooking food outcomes

**3.2.3** Hygiene practices and procedures

Section	Amplification
<b>3.2.1</b> Planning to cook	<p>Learners should understand the stages of a food production plan, including:</p> <ul style="list-style-type: none"> <li>• selecting a recipe (including adapting a recipe)</li> <li>• ingredients and quantities</li> <li>• timings (including contingency plans)</li> <li>• food hygiene and safety</li> <li>• sequencing</li> <li>• presenting</li> <li>• serving</li> <li>• evaluating.</li> </ul> <p>Learners should be able to produce a timed order of work to be able to cook:</p> <ul style="list-style-type: none"> <li>• a single food outcome</li> <li>• a number of food outcomes.</li> </ul>
<b>3.2.2</b> Techniques for preparing, cutting and cooking food outcomes	<p>Learners should understand:</p> <ul style="list-style-type: none"> <li>• the purpose of each of the techniques used to prepare, cut and cook food outcomes, as listed in Appendix A</li> <li>• the desired result of each technique on the food outcome.</li> </ul> <p>Learners should be able to present food in a suitable manner, reflecting the audience and purpose.</p> <p>Learners should be aware of:</p> <ul style="list-style-type: none"> <li>• locally sourced, Welsh ingredients</li> <li>• foods, ingredients and cooking methods that reflect the diverse cultural contributions, including from Black, Asian and minority ethnic communities and individuals, on the food we eat in Wales.</li> </ul>
<b>3.2.3</b> Hygiene practices and procedures	<p>Learners should understand food hygiene and safety practices and procedures when preparing, cooking, presenting and storing food.</p> <p>Learners should be able to prepare, cook and present food outcomes, using:</p> <ul style="list-style-type: none"> <li>• correct personal hygiene</li> <li>• safe working practices</li> <li>• correct food safety practices and procedures</li> <li>• correct storage and temperature control.</li> </ul> <p>Learners should be aware of guidelines for:</p> <ul style="list-style-type: none"> <li>• cooking and reheating food</li> <li>• temperature control of food</li> <li>• use by and best before dates.</li> </ul>



### 3.3 Cooking for an audience and purpose

In this topic learners will gain knowledge, understanding and skills in the following areas:

**3.3.1** Selecting and adapting recipes to produce food outcomes

**3.3.2** Selecting and using suitable preparation, cutting and cooking techniques

**3.3.3** Exploring the nutritional values of food outcomes

**3.3.4** Evaluating the success of food outcomes

Section	Amplification
<b>3.3.1</b> Selecting and adapting recipes to produce food outcomes	<p>Learners should be able to develop a food production plan based on a brief.</p> <p>Learners should be able to, when selecting a recipe, consider the:</p> <ul style="list-style-type: none"> <li>• suitability of the recipe</li> <li>• suitability for the audience and purpose</li> <li>• factors that affect food choices.</li> </ul> <p>Learners should be able to select and/or adapt a recipe for:</p> <ul style="list-style-type: none"> <li>• a single food outcome</li> <li>• a number of food outcomes.</li> </ul>
<b>3.3.2</b> Selecting and using suitable preparation, cooking and serving techniques	<p>Learners should be able to demonstrate:</p> <ul style="list-style-type: none"> <li>• a range of suitable techniques, as listed in Appendix A:               <ul style="list-style-type: none"> <li>• to prepare food outcomes</li> <li>• to cook food outcomes</li> <li>• to serve and present food outcomes</li> </ul> </li> <li>• examples of suitable preparation, knife and cooking techniques from each level of complexity (categorised as basic, medium and complex, as listed in Appendix A) as suitable for the food outcome produced</li> <li>• how to present and serve food items; food styling, garnishing, portion control.</li> </ul> <p>Learners should be aware of developments in preparation and cooking techniques.</p>
<b>3.3.3</b> Exploring the nutritional values of food outcomes	<p>Learners should be able to:</p> <ul style="list-style-type: none"> <li>• explore the nutritional value of food</li> <li>• suggest changes to ingredients and quantities to meet the needs of the audience in relation to the nutritional value of a food outcome.</li> </ul> <p>Learners should be aware of:</p> <ul style="list-style-type: none"> <li>• how to calculate the nutritional value in a food outcome</li> <li>• methods for adapting the nutritional value of food outcomes</li> <li>• how to present and serve food items; food styling, garnishing and portion control.</li> </ul>

**3.3.4**

Evaluating the success of food outcomes

Learners should be able to evaluate the success of food outcomes using the following factors:

- recipe selection
- use of ingredients and quantities
- preparation and cooking techniques used
- time management
- health, safety and hygiene
- nutritional benefits
- success of adaptations
- presenting and serving
- tasting (using sensory descriptors)
- suitability for audience and purpose.

## Opportunities for integration of learning experiences

GCSE Food and Nutrition generates opportunities for the following learning experiences to be developed (experiences will not be directly assessed):

- take part in a variety of cooking tutorials and experiences, such as practical demonstrations from teachers or professional chefs, either in person or online
- gain experience of receiving and responding to feedback
- work collaboratively when planning and preparing meals and menus
- explore the various career opportunities within the related sectors
- make appropriate use of digital technology.

The Guidance for Teaching will include further information on the opportunities provided by the qualification for teachers/centres to integrate these learning experiences into delivery.

For opportunities to develop cross-cutting themes, cross-curricular skills and integral skills, please see Appendix B.

### 3 ASSESSMENT

The Assessment Pack will include all detailed information relating to assessment.

#### 3.1 Assessment objectives and weightings

Below are the assessment objectives for this specification. Learners must:

##### **AO1**

Demonstrate knowledge and understanding of:

- food and nutrition
- preparing, cooking and presenting food.

##### **AO2**

Apply knowledge and understanding of:

- food and nutrition
- preparing, cooking and presenting food.

##### **AO3**

Analyse and evaluate different aspects of:

- food and nutrition
- preparing, cooking and presenting food (including food and dishes made by themselves and others).

##### **AO4**

Plan, prepare, cook and present dishes, using appropriate skills and techniques.

The table below shows the weighting of each assessment objective for each unit and for the qualification as a whole.

	<b>AO1</b>	<b>AO2</b>	<b>AO3</b>	<b>AO4</b>	<b>Total</b>
Unit 1	15%	15%	10%	-	40%
Unit 2	-	15%	5%	-	20%
Unit 3	-	-	5%	35%	40%
Overall weighting	<b>15%</b>	<b>30%</b>	<b>20%</b>	<b>35%</b>	<b>100%</b>

## 3.2 Overview of arrangements for non-examination assessment

### Unit 2

For this assessment, learners are required to complete a food investigation where they apply knowledge and understanding of the working characteristics, functions and chemical properties of ingredients in a recipe.

Learners are provided with a pre-released brief that will be available to centres during May of the first year of study (Year 10). Centres choose one of two briefs they would like learners to study.

For Task 1, based on the chosen brief, learners or teachers cook a control food item outcome, using a recipe, in order to develop a baseline. Research is conducted into the working characteristics, functions and chemical properties of ingredients in the recipe and a hypothesis is developed. The remaining tasks are centred around proving or disproving the hypothesis.

This non-examination assessment contributes to 20% of the overall qualification grade and will take 8 hours to complete. The assignment could be completed in several sittings due to the length of the non-examination assessment. The assignment will be marked out of a total of 40 marks.

This unit will be assessed through an externally set assignment and will be marked by the centre and moderated by WJEC.

### Unit 3

For this assessment, learners are required to plan, prepare and cook a food outcome.

Learners are provided with a pre-released brief that will be available to centres during May of the first year of study (Year 10). Learners choose one of two briefs they would like to complete for the non-examination assessment.

For Task 1, learners research and investigate the chosen task, choosing a recipe based on the brief. The rest of the assessment is based around planning, preparing and cooking the food outcome to meet the brief.

This assessment contributes to 40% of the overall qualification grade and will take 12 hours to complete. The assignment could be completed in several sittings due to the length of the non-examination assessment. The assignment will be marked out of a total of 80 marks.

This unit will be assessed through an externally set assignment and will be marked by the centre and moderated by WJEC.

## 4 MALPRACTICE

Before the course starts, the teacher is responsible for informing candidates of WJEC's regulations concerning malpractice. Candidates must not take part in any unfair practice in the preparation of work for GCSE Food and Nutrition.

Information regarding malpractice is available in our [Guide to preventing, reporting and investigating malpractice](#).

All cases of suspected or actual malpractice must be reported immediately to WJEC (malpractice@wjec.co.uk). If candidates commit malpractice, they may be penalised or disqualified from the examinations.

In all cases of malpractice, centres are advised to consult the JCQ booklet [Suspected Malpractice: Policies and Procedures](#).

## 5 TECHNICAL INFORMATION

### 5.1 Making entries

This is a linear qualification in which all assessments must be taken at the end of the course. Non-examination assessment units can be completed earlier in the course but must be submitted at the end of the course.

Assessment opportunities will be available in the summer series for the lifetime of this specification. Summer 2027 will be the first assessment opportunity.

A qualification may be taken more than once. Candidates must resit all examination units in the same series.

Marks for non-examination assessment (NEA) may be carried forward for the life of the specification. If a candidate resits an NEA unit (rather than carrying forward the previous NEA mark), it is the new mark that will count towards the overall grade, even if it is lower than a previous attempt (unless the mark is absent).

The entry code appears below.

	Entry code	
	English medium	Welsh medium
<b>WJEC GCSE Food and Nutrition</b>	3580QS	3580CS

The current edition of our Entry Procedures and Coding Information gives up-to-date entry procedures.

### 5.2 Grading, awarding and reporting

GCSE qualifications are reported on an eight-point scale from A\*-G, where A\* is the highest grade. Results not attaining the minimum standard for the award will be reported as U (unclassified).

## Appendix A – Preparation, knife and cooking techniques

Levels of complexity

\*\*\* Complex

\*\* Medium

\* Basic

Ready-made/prepared components used in the preparation and cooking of food outcomes are all classed as basic.

Preparation techniques:	Knife techniques:	Cooking techniques:
<ul style="list-style-type: none"> <li>• blending*</li> <li>• beating*</li> <li>• creaming**</li> <li>• crimping***</li> <li>• dehydrating**</li> <li>• folding**</li> <li>• grating*</li> <li>• hydrating*</li> <li>• juicing*</li> <li>• kneading**</li> <li>• laminating (pastry)***</li> <li>• marinating*</li> <li>• mashing*</li> <li>• measuring**</li> <li>• melting*</li> <li>• melting using bain-marie***</li> <li>• mixing**</li> <li>• piping***</li> <li>• proving*</li> <li>• puréeing**</li> </ul>	<ul style="list-style-type: none"> <li>• bâton**</li> <li>• brunoise***</li> <li>• chiffonade**</li> <li>• chopping*</li> <li>• deboning***</li> <li>• deseeding**</li> <li>• dicing**</li> <li>• filleting***</li> <li>• julienne***</li> <li>• mincing***</li> <li>• peeling*</li> <li>• segmenting***</li> <li>• slicing**</li> <li>• spatchcock**</li> <li>• trimming*</li> </ul>	<ul style="list-style-type: none"> <li>• basting*</li> <li>• baking**</li> <li>• baking blind***</li> <li>• blanching**</li> <li>• boiling*</li> <li>• braising**</li> <li>• caramelising***</li> <li>• chilling*</li> <li>• cooling*</li> <li>• deep fat frying***</li> <li>• deglazing**</li> <li>• dehydrating*</li> <li>• emulsifying***</li> <li>• foaming ***</li> <li>• freezing*</li> <li>• frying**</li> <li>• griddling**</li> <li>• grilling*</li> <li>• pickling**</li> <li>• poaching***</li> </ul>



<ul style="list-style-type: none"><li>● rolling **</li><li>● rub-in**</li><li>● shaping***</li><li>● shredding*</li><li>● sieving*</li><li>● skinning**</li><li>● tenderising*</li><li>● toasting(nuts/seeds) **</li><li>● weighing**</li><li>● whisking(aeration)***</li><li>● zesting*</li></ul>		<ul style="list-style-type: none"><li>● reduction**</li><li>● roasting**</li><li>● sautéing**</li><li>● setting**</li><li>● skimming*</li><li>● steaming**</li><li>● stir-frying**</li><li>● tempering***</li><li>● toasting*</li><li>● water-bath (sous-vide) **</li></ul>	
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## Appendix B – Opportunities for embedding elements of the Curriculum for Wales

Curriculum for Wales Strands	Unit 1	Unit 2	Unit 3
Cross-cutting Themes			
Local, National & International Contexts	✓	✓	✓
Sustainability aspect of Local, National & International Contexts	✓	✓	✓
Relationships and Sexuality Education	✓		✓
Human Rights	✓	✓	✓
Diversity	✓		✓
Careers and Work-Related Experiences	✓	✓	✓
Cross-curricular Skills – Literacy			
Listening	✓	✓	✓
Reading	✓	✓	✓
Speaking	✓	✓	✓
Writing	✓	✓	✓

Curriculum for Wales Strands	Unit 1	Unit 2	Unit 3
Cross-curricular Skills – Numeracy			
Developing Mathematical Proficiency	✓	✓	✓
Understanding the number system helps us to represent and compare relationships between numbers and quantities	✓	✓	✓
Learning about geometry helps us understand shape, space and position and learning about measurement helps us quantify in the real world	✓	✓	✓
Learning that statistics represent data and that probability models chance help us make informed inferences and decisions		✓	

Curriculum for Wales Strands	Unit 1	Unit 2	Unit 3
Digital Competence			
Citizenship	✓		
Interacting and Collaborating		✓	✓
Producing		✓	✓
Data and Computational Thinking		✓	✓
Integral Skills			
Creativity and Innovation		✓	✓
Critical Thinking and Problem Solving	✓	✓	
Planning and Organisation		✓	✓
Personal Effectiveness	✓	✓	✓