



GCSE AQA Food Preparation & Nutrition Course/Exam Content

GCSE Food Preparation and Nutrition is an exciting and creative course which focuses on practical cooking skills to ensure students develop a thorough understanding of nutrition, food provenance and the working characteristics of food materials. This qualification focuses on nurturing students' practical cookery skills to give them a strong understanding of nutrition.

Food preparation skills are integrated into five core topics:

- Food, nutrition and health
- Food science
- Food safety
- Food choice
- Food provenance

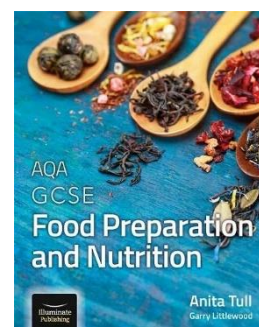
The GCSE is assessed in three parts:

Food Investigation (NEA1)	Food Preparation Assessment (NEA2)	Written Exam: 1 hour 45 minutes
30 marks 15% of the total GCSE	70 marks 35% of the total GCSE	100 marks 50% of the total GCSE
Yr 11 Sept - Nov	Yr 11 Dec - Apr	17th June 2025 PM

Text Books/Revision Materials:

We follow the *AQA GCSE Food Preparation and Nutrition Book* by Anita Tull, which is available to purchase through Amazon, however we have purchased the free online version of the book. Please ask your teacher for the log in details.

<https://www.illuminate.digital/aqafood/>



Other revision materials:

- [GCSE Food Preparation & Nutrition - AQA Revision Guide: perfect for the 2024 and 2025 exams : CGP Books: Amazon.co.uk: Books](#)
- [AQA GCSE Food Preparation & Nutrition: Revision Guide : Tull, Anita: Amazon.co.uk: Books](#)
- [New GCSE Food Preparation & Nutrition AQA Exam Practice Workbook \(CGP GCSE Food 9-1 Revision\) : CGP Books, CGP Books: Amazon.co.uk: Books](#)

- [GCSE Food Preparation & Nutrition AQA Revision Question Cards: for the 2025 and 2026 exams \(CGP AQA GCSE Food Prep\) : CGP Books, CGP Books: Amazon.co.uk: Books](#)

The written exam paper covers the following content:

Questions

- Multiple choice questions (20 marks)
- Five questions each with a number of sub questions (80 marks)

Food, Nutrition and Health (3.2)		
3.2.1 Macronutrients		
<ol style="list-style-type: none"> 1. Protein 2. Fats 3. Carbohydrates 		
	Content	Students must know and understand
Protein	<ul style="list-style-type: none"> • Low and high biological proteins • Protein complementation • Protein alternatives 	<ul style="list-style-type: none"> • The functions • Main sources • Effects of deficiency and excess • Related dietary reference values
Fats	<ul style="list-style-type: none"> • Saturated fats • Unsaturated fats (monounsaturated and polyunsaturated) 	<ul style="list-style-type: none"> • The functions • Main sources • Effects of deficiency and excess • Related dietary reference values
Carbohydrates	<ul style="list-style-type: none"> • Starch (polysaccharides) • Sugars (monosaccharides / disaccharides) • Dietary fibre 	<ul style="list-style-type: none"> • The functions • Main sources • Effects of deficiency and excess • Related dietary reference values
3.2.2 Micronutrients		
<ol style="list-style-type: none"> 1. Vitamins 2. Minerals 3. Water 		
	Content	Students must know and understand

Vitamins	Fat soluble <ul style="list-style-type: none"> • Vitamin A • Vitamin D • Vitamin E • Vitamin K 	<ul style="list-style-type: none"> • The functions • Main sources • Effects of deficiency and excess • Related dietary reference values
	Water soluble <ul style="list-style-type: none"> • B group – B1 (thiamin), B2 (riboflavin), B3 (niacin), folic acid, B12 • Vitamin C (ascorbic acid) • Loss of water-soluble vitamins when cooking (B group and Vitamin C). 	<ul style="list-style-type: none"> • The functions • Main sources • Effects of deficiency and excess • Related dietary reference values • How preparation and cooking affect the nutritional properties of food
	Antioxidant functions of vitamins <ul style="list-style-type: none"> • Vitamin A • Vitamin C • Vitamin E 	The role of antioxidants in protecting body cells from damage
Minerals	<ul style="list-style-type: none"> • Calcium • Iron • Sodium (salt) • Fluoride • Iodine • Phosphorus 	<ul style="list-style-type: none"> • The functions • Main sources • Effects of deficiency and excess • Related dietary reference values
Water	The importance of hydration and the functions of water in the diet	<ul style="list-style-type: none"> • Functions of water to eliminate waste from the body, cooling and for digestion. • How water is lost from the body. • How much water/fluid is needed each day. • Occasions when extra fluids are needed.

3.2.3 Nutritional Needs & Health

1. Making informed choices for a varied and balanced diet
2. Energy needs
3. How to carry out nutritional analysis
4. Diet, nutrition and health

	Content	Students must know and understand
Making informed choices for a	<ul style="list-style-type: none"> • The current guidelines for a healthy diet. 	<ul style="list-style-type: none"> • The current guidelines for a healthy diet e.g. Eatwell guide.

varied and balanced diet	<ul style="list-style-type: none"> • Portion size and costing when meal planning. • How peoples' nutritional needs change and how to plan a balanced diet for different life stages. • How to plan a balanced meal for specific dietary groups. • How to maintain a healthy body weight throughout life. 	<ul style="list-style-type: none"> • Nutritional needs for the following life stages: young children, teenagers, adults and the elderly. • How to plan a balanced meal for specific dietary groups: vegetarian and vegan, coeliac, lactose intolerant and high fibre diets.
Energy needs	<ul style="list-style-type: none"> • The basal metabolic rate (BMR) and physical activity level (PAL) and their importance in determining energy requirements. • The recommended percentage of energy intake provided by protein, fat and carbohydrates (starch and sugar). 	<ul style="list-style-type: none"> • Factors which affect the BMR, such as age, gender and PAL. Their importance in achieving energy balance. • The percentage of recommended energy sources from nutrients: <ul style="list-style-type: none"> • Protein 15% • Fat 35% or less • Carbohydrates 50% (of which 45% from starches, lactose in milk and fruit sugars and maximum of 5% from free sugars).
How to carry out nutritional analysis	How to plan and modify recipes, meals and diets to reflect the nutritional guidelines for a healthy diet.	How to use current nutritional information and data e.g. food tables, nutritional analysis software to calculate energy and nutritional value.
Diet, nutrition and health	<ul style="list-style-type: none"> • The relationship between diet, nutrition and health • The major diet related health risks 	<p>How diet can affect health and how nutritional needs change in relation to:</p> <ul style="list-style-type: none"> • Obesity • Cardiovascular health (coronary heart disease (CHD) and high blood pressure) • Bone health (rickets and osteoporosis) • Dental health • Iron deficiency anaemia • Type 2 diabetes

Food Science (3.3)

3.3.1 Cooking of food and heat transfer

1. Why is food cooked and how heat is transferred to food
2. Selecting appropriate cooking methods

	Content	Students must know and understand
<p>Why is food cooked and how heat is transferred to food</p>	<p>The reasons why food is cooked The different methods of heat transfer.</p>	<p>Food is cooked to:</p> <ul style="list-style-type: none"> • Make food safe to eat • Develop flavours • Improve texture • Improve shelf life • Give variety in the diet. <p>How preparation and cooking affect the appearance, colour, flavour, texture, smell and overall palatability of food.</p> <p>How heat is transferred to food through:</p> <ul style="list-style-type: none"> • Conduction • Convection • Radiation
<p>Selecting appropriate cooking methods</p>	<p>Selection of appropriate preparation, cooking methods and times to achieve desired characteristics</p>	<ul style="list-style-type: none"> • How the selection of appropriate preparation and cooking methods can conserve or modify nutritive value or improve palatability: <ul style="list-style-type: none"> • Water based: steaming, boiling, simmering, blanching, poaching, braising • Dry methods: baking, roasting, grilling, dry frying • Fat based: shallow frying, stir fry • How preparation and cooking affect the appearance, colour, flavour, texture, smell and overall palatability of food e.g. the use of marinades to denature protein

3.3.2 Functional and chemical properties of food

1. Proteins

2. Carbohydrates
3. Fats and oils
4. Fruit and vegetables
5. Raising agents

	Content	Students must know and understand
Proteins	<ul style="list-style-type: none"> • Protein denaturation • Protein coagulation • Gluten formation • Foam formation 	<p>The scientific principles underlying these processes when preparing and cooking food.</p> <p>The working characteristics, functional and chemical properties of proteins.</p>
Carbohydrates	<ul style="list-style-type: none"> • Gelatinisation • Dextrinisation • Caramelisation 	<p>The scientific principles underlying these processes when preparing and cooking food.</p> <p>The working characteristics, functional and chemical properties of carbohydrates.</p>
Fats and oils	<ul style="list-style-type: none"> • Shortening • Aeration • Plasticity • Emulsification 	<p>The scientific principles underlying these processes when preparing and cooking food.</p> <p>The working characteristics, functional and chemical properties of fats and oils.</p>
Fruits and vegetables	<ul style="list-style-type: none"> • Enzymic browning • Oxidation 	<p>The scientific principles underlying these processes when preparing and cooking food.</p>
Raising agents	<ul style="list-style-type: none"> • Chemical (baking powder, bicarbonate of soda, self-raising flours which produce carbon dioxide) • Mechanical (whisking, beating, folding, sieving, creaming and rubbing in – all incorporate air into the mixture) • Steam is produced when the water in any moist mixture reaches boiling point • Biological (yeast) 	<p>The scientific principles underlying these processes when preparing and cooking food.</p> <p>The working characteristics, functional and chemical properties of raising agents.</p>

Food Safety (3.4)

3.4.1 Food spoilage and contamination

1. Microorganisms and enzymes
2. The signs of food spoilage
3. Microorganisms in food production
4. Bacterial contamination

	Content	Students must know and understand
Microorganisms and enzymes	<ul style="list-style-type: none"> • The growth conditions for microorganisms and enzymes and the control of food spoilage • Bacteria, yeasts and moulds are microorganisms • High risk foods • Enzymes are biological catalysts usually made from protein 	<p>Growth conditions for microorganisms: role of temperature, moisture, food and time</p> <p>Control of microorganism growth: temperature control, pH, water availability</p> <p>High risk foods: ready to eat moist foods, usually high in protein that easily support the growth of pathogenic bacteria and do not require any further heat treatment or cooking</p> <p>Control of enzymic action: blanching of vegetables before freezing, use of acids to prevent enzymic browning</p>
The signs of food spoilage	<ul style="list-style-type: none"> • Enzymic action • Mould growth • Yeast action 	<ul style="list-style-type: none"> • Enzymic action: ripening of bananas, browning of some fruits • Mould growth: eg on bread and cheese. Recognise the signs of mould growth on foods • Yeast action on fruits eg grapes, strawberries and tomatoes
Microorganisms in food production	The use of microorganisms in food production	<ul style="list-style-type: none"> • Moulds in the production of blue cheese • Yeasts to raise bread • Bacteria in yoghurt and cheese production
Bacterial contamination	<ul style="list-style-type: none"> • The different sources of bacterial contamination • The main types of bacteria which cause food poisoning • The main sources and methods of control of different food poisoning bacteria types • The general symptoms of food poisoning 	<p>Contamination from:</p> <ul style="list-style-type: none"> • Other contaminated foods including the following raw foods: meat, poultry, eggs, seafood and vegetables • Work surfaces and equipment • The people cooking • Pests • Waste food and rubbish • Campylobacter • E-coli • Salmonella

		<ul style="list-style-type: none"> • Listeria • Staphylococcus aureus
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3.4.2 Principles of food safety

1. Buying and storing food
2. Preparing, cooking and serving food

	Content	Students must know and understand
Buying and storing food	The food safety principles when buying and storing food.	Temperature control: <ul style="list-style-type: none"> • Freezing: -18°C • Chilling: 0 to below 5°C • Danger zone: 5 to 63°C • Cooking: 75°C • Reheating: 75°C Ambient storage Temperature danger zone Correct use of domestic fridges and freezers Date marks 'Best before' and 'use by' dates Covering foods
Preparing, cooking and serving food	The food safety principles when preparing, cooking and serving food.	<ul style="list-style-type: none"> • Personal hygiene • Clean work surfaces • Separate raw and cooked foods and use of separate utensils • Correct cooking times • Appropriate temperature control including: defrosting and reheating • Appropriate care with high-risk foods • Correct use of food temperature probes

Food Choice (3.5)

3.5.1 Factors affecting food choice

1. Factors which influence food choice
2. Food choices
3. Food labelling and marketing influences

	Content	Students must know and understand
Factors which influence food choice	To know and understand factors which may influence food choice.	The following factors in relation to food choice: <ul style="list-style-type: none"> • Physical activity level (PAL) • Celebration/occasion

		<ul style="list-style-type: none"> • Cost of food • Preferences • Enjoyment • Food availability • Healthy eating • Income • Lifestyles • Seasonality • Time of day • Time available to prepare/cook. <p>Students must be able to cost recipes and make modifications.</p>
Food choices	Food choice related to religion, culture, ethical and moral beliefs and medical conditions.	<ul style="list-style-type: none"> • Food choice linked to the following religions and cultures: Buddhism, Christianity, Hinduism, Islam, Judaism, Rastafarianism and Sikhism • Food choice linked to the following ethical and moral beliefs: animal welfare, fairtrade, local produce, organic, Genetically Modified (GM) foods • Food choice linked to food intolerances (gluten and lactose) and the following allergies: nuts, egg, milk, wheat, fish and shellfish.
Food labelling and marketing influences	How information about food available to the consumer, including labelling and marketing, influences food choice.	<ul style="list-style-type: none"> • Mandatory information included on food packaging in accordance with current European Union and Food Standards Agency (FSA) legislation • Non-mandatory information: provenance, serving suggestions • How to interpret nutritional labelling • How food marketing can influence food choice e.g. buy one get one free, special offers, meal deals, media influences, advertising, point of sales marketing.

3.5.2 British and international cuisines

Content	Students must know and understand
<p>Food products from British tradition and two different cuisines.</p> <p>Schools or colleges/students can select different cuisines to study</p> <p>Cuisine is defined as: ‘a style characteristic of a particular country or region where the cuisine has developed historically using distinctive ingredients, specific preparation and cooking methods or equipment, and presentation or serving techniques’</p>	<ul style="list-style-type: none"> • Distinctive features and characteristics of cooking • Equipment and cooking methods used • Eating patterns • Presentation styles • Traditional and modern variations of recipes

3.5.3 Sensory evaluation

Content	Students must know and understand
<ul style="list-style-type: none"> • Sensory testing methods • How taste receptors and olfactory systems work when tasting food 	<p>Importance of senses when making food choices: sight, taste, touch and aroma</p> <ul style="list-style-type: none"> • Preference tests: paired preference, hedonic. • Discrimination tests: triangle. • Grading tests: ranking, rating and profiling • How to set up a taste panel • Controlled conditions required for sensory testing • Evaluating how senses guide • Evaluating a wide range of ingredients and food from Britain and other countries • How to test sensory qualities of a wide range of foods and combinations

Food Provenance (3.6)

3.6.1 Environmental impact and sustainability of food

1. Food sources
2. Food and the environment
3. Sustainability of food

	Content	Students must know and understand
Food sources	Where and how ingredients are grown, reared and caught.	<p>Grown ingredients: fruits, vegetables and cereals</p> <p>Reared ingredients: meat and poultry</p> <p>Caught ingredients: fish</p>

		<p>An understanding of:</p> <ul style="list-style-type: none"> • Organic and conventional farming • Free range production • Intensive farming • Sustainable fishing • Advantages and disadvantages of local produced foods, seasonal foods and Genetically Modified (GM) foods
Food and the environment	Environmental issues associated with food.	<ul style="list-style-type: none"> • Seasonal foods • Sustainability e.g. fish farming • Transportation • Organic foods • The reasons for buying locally produced food • Food waste in the home/food production/retailers • Environment issues related to packaging • Carbon footprint
Sustainability of food	The impact of food and food security on local and global markets and communities.	<p>The challenges to provide the world's growing population with a sustainable, secure, supply of safe, nutritious and affordable high-quality food.</p> <p>Students must have an awareness of:</p> <ul style="list-style-type: none"> • Climate change • Global warming • Sustainability of food sources • Insufficient land for growing food • Availability of food • Fairtrade • Problems of drought and flooding • Genetically Modified (GM) foods • Food waste

3.6.2 Food processing and production

1. Food production

2. Technological developments associated with better health and food production

	Content	Students must know and understand
Food production	Primary and secondary stages of processing and production. how processing affects the sensory and nutritional properties of ingredients.	<ul style="list-style-type: none"> • Primary processing related to the: rearing, fishing, growing, harvesting and cleaning of the raw food material (milling of wheat to flour, heat treatment of milk, pasteurised, UHT, sterilised and micro-filtered milk) • Secondary processing related to: how the raw primary processed ingredients are processed to produce a food product (flour into bread and/or pasta, milk into cheese and yoghurt, fruit into jams) • Loss of vitamins through heating and drying • The effect of heating and drying on the sensory characteristics of milk.
Technological developments associated with better health and food production	Technological developments to support better health and food production including fortification and modified foods with health benefits and the efficacy of these.	<ul style="list-style-type: none"> • Cholesterol lowering spreads. • Health benefits of fortification. • Fortified foods: thiamine, niacin, calcium and iron added to white flour. • Folic acid and iron added to breakfast cereals. • Vitamins A and D added to fats and low-fat spreads. • The positive and negative aspects of the use of additives: colourings, emulsifiers and stabilisers, flavourings, and preservatives. • The positive and negative aspects of Genetically Modified (GM) foods.