GCSE Food Preparation & Nutrition Revision Plan (AQA) 2025

Food, nutrition and health		Illuminate textbook	CGP revision guide	Online links
Macronutrients - Protein • low and high biological value proteins • protein complementation • protein alternatives e.g. textured vegetable protein (TVP), soya, mycoprotein and tofu.	• the functions • main sources • effects of deficiency and excess • related dietary reference values.	3-9		Protein - Macronutrients – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Macronutrients – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) - Video - BBC Bitesize Macronutrients – CCEA test questions - GCSE Home Economics: Food and Nutrition (CCEA) - BBC Bitesize
Macronutrients – Fats • saturated fats • unsaturated fats (monounsaturated and polyunsaturated).	• the functions • main sources • effects of deficiency and excess • related dietary reference values.	10-16		Fat - Macronutrients – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Macronutrients – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) - Video - BBC Bitesize Macronutrients – CCEA test questions - GCSE Home Economics: Food and Nutrition (CCEA) - BBC Bitesize
Macronutrients – Carbohydrates • starch (polysaccharides) • sugars (monosaccharides/ disaccharides) • dietary fibre.	• the functions • main sources • effects of deficiency and excess • related dietary reference values.	16-21		Carbohydrate - Macronutrients – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Fibre - Water and fibre – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize The science behind dietary fibre | Biology – Gastro Lab Insoluble fibre - Water and fibre – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Soluble fibre - Water and fibre – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Water and fibre – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) - Video - BBC Bitesize Water and fibre – CCEA test questions - GCSE Home Economics: Food and Nutrition (CCEA) - BBC Bitesize Macronutrients – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) - Video - BBC Bitesize Macronutrients – CCEA test questions - GCSE Home Economics: Food and Nutrition (CCEA) - BBC Bitesize
Micronutrients – Vitamins Fat soluble • vitamin A • vitamin D • vitamin E • vitamin K	• the functions • main sources • effects of deficiency and excess • related dietary reference values.	22-27		Vitamin A - Micronutrients – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Vitamin D - Micronutrients – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Micronutrients – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) - Video - BBC Bitesize

				Micronutrients – CCEA test questions - GCSE Home Economics: Food and Nutrition (CCEA) - BBC Bitesize The science behind vitamins and minerals | Biology – Gastro Lab
Micronutrients – Vitamins Water soluble • B group – B1 (thiamin), B2 (riboflavin), B3 (niacin), B9 (folic acid) and B12 • vitamin C (ascorbic acid) • loss of water-soluble vitamins when cooking (B group and Vitamin C).	• the functions • main sources • effects of deficiency and excess • related dietary reference values • how preparation and cooking affects the nutritional properties of food.	22-27		Vitamin B1 - Micronutrients – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Vitamin B12 - Micronutrients – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Folate - Micronutrients – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Vitamin C - Micronutrients – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Micronutrients – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) - Video - BBC Bitesize The science behind vitamins and minerals | Biology – Gastro Lab Micronutrients – CCEA test questions - GCSE Home Economics: Food and Nutrition (CCEA) - BBC Bitesize
Antioxidant functions of vitamins • vitamin A • vitamin C • vitamin E.	The role of antioxidants in protecting body cells from damage.	22-27		Vitamin and mineral interactions - Micronutrients – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Micronutrients – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) - Video - BBC Bitesize Micronutrients – CCEA test questions - GCSE Home Economics: Food and Nutrition (CCEA) - BBC Bitesize
Micronutrients – Minerals • calcium • iron • sodium (salt) • fluoride • iodine • phosphorus.	• the functions • main sources • effects of deficiency and excess • related dietary reference values.	30-35		Calcium - Micronutrients – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Sodium - Micronutrients – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Iron - Micronutrients – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Micronutrients – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) - Video - BBC Bitesize Micronutrients – CCEA test questions - GCSE Home Economics: Food and Nutrition (CCEA) - BBC Bitesize The science behind vitamins and minerals | Biology – Gastro Lab
Water The importance of hydration and the functions of water in the diet.	• 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.	36-37		Hydration The Eatwell Guide The science behind hydration | Biology – Gastro Lab Water - Water and fibre – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Functions of water - Water and fibre – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize

	• occasions when extra fluids are needed.			Sourcing water and staying hydrated - Water and fibre – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Water and fibre – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) - Video - BBC Bitesize Water and fibre – CCEA test questions - GCSE Home Economics: Food and Nutrition (CCEA) - BBC Bitesize
Nutritional needs and health Making informed choices for a varied and balanced diet • the current guidelines for a healthy diet. • 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	• the current guidelines for a healthy diet e.g. The Eatwell Guide • 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.	38-39 45,48, 50, 51, 55, 57		What is The Eatwell Guide Food groups and the Eatwell Guide - Food and nutrition for good health – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Eight tips for healthy eating - Food and nutrition for good health – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Tips for healthy eating - Food and nutrition for good health – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Food and nutrition for good health – CCEA test questions - GCSE Home Economics: Food and Nutrition (CCEA) - BBC Bitesize Vegetarians - Vegetarians and vegans – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Reasons people may follow a vegetarian diet - Vegetarians and vegans – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Nutrients in a vegetarian diet - Vegetarians and vegans – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Healthy eating advice for vegetarians - Vegetarians and vegans – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Vegetarians and vegans – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) - Video - BBC Bitesize Vegetarians and vegans – CCEA test questions - GCSE Home Economics: Food and Nutrition (CCEA) - BBC Bitesize
Energy needs • the basal metabolic rate (BMR) and physical activity level (PAL) and their importance in determining energy requirements.	• 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:	58-61		Why is energy needed? - Energy and nutrients – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Factors influencing energy requirements - Energy and nutrients – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize

• the recommended percentage of energy intake provided by protein, fat and carbohydrates (starch and sugar).	• protein 15% • fat 35% or less • carbohydrate 50% (of which 45% from starches, lactose in milk and fruit sugars and a maximum of 5% from free sugars).			Energy balance - Energy and nutrients – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Energy values of protein, fat and carbohydrates - Energy and nutrients – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Eating well when balancing energy - Energy and nutrients – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Energy and nutrients – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) - Video - BBC Bitesize Energy and nutrients – CCEA test questions - GCSE Home Economics: Food and Nutrition (CCEA) - BBC Bitesize
How to carry out a 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.	63-67		Explore Food - Main Menu
Diet, nutrition and health • the relationship between diet, nutrition and health • the major diet related health risks.	how diet can affect health and how nutritional needs change in relation to: • obesity • cardiovascular health (coronary heart disease (CHD) and high blood pressure) • bone health (rickets and osteoporosis) • dental health • iron deficiency anaemia • Type 2 diabetes.	70-76		Obesity - Priority health issues – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Cardiovascular disease - Priority health issues – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Diabetes - Priority health issues – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Osteoporosis - Priority health issues – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Dental caries - Priority health issues – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Iron deficiency anaemia - Priority health issues – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Priority health issues – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) - Video - BBC Bitesize Priority health issues – CCEA test questions - GCSE Home Economics: Food and Nutrition (CCEA) - BBC Bitesize
Food science		**Illuminate textbook**	**CGP revision guide**	**Online links**
Cooking of food and heat transfer • the reasons why food is cooked	**Food is cooked to:** • make food safe to eat	78-84		Fun Kitchen investigates heat transfer and sauce making for AQA Conduction -Convection- Radiation-Heat Transfer

• the different methods of heat transfer.	• develop flavours • improve texture • improve shelf life • give variety in the diet. How preparation and cooking affect the appearance, colour, flavour, texture, smell and overall palatability of food. **How heat is transferred to food through:** • conduction • convection • radiation.	85-90		
Selecting appropriate cooking methods Selection of appropriate preparation, cooking methods and times to achieve desired characteristics.	how the selection of appropriate preparation and cooking methods can conserve or modify nutritive value or improve palatability: • 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.	90-101		
Functional and chemical properties of food Proteins • protein denaturation • protein coagulation • gluten formation • foam formation.	• the scientific principles underlying these processes when preparing and cooking food • the working characteristics, functional and chemical properties of proteins	105-107 114-115		
Carbohydrates • gelatinisation • dextrinisation • caramelisation.	• the scientific principles underlying these processes when preparing and cooking food • the working characteristics, functional and chemical properties of carbohydrates.	110-111 122-123 116-119		Making a white sauce using the roux method (Teacher version)

Fats and oils (lipids) • shortening • aeration • plasticity • emulsification.	• the scientific principles underlying these processes when preparing and cooking food • the working characteristics, functional and chemical properties of fats and oils.	126-127 130-131 134 135-136		The science behind fat | Biology – Gastro Lab The science behind protein | Biology – Gastro Lab The science behind carbohydrates | Biology – Gastro Lab Rubbing in fat to flour (Teacher version)
Fruit and vegetables • enzymic browning • oxidation.	the scientific principles underlying these processes when preparing and cooking food.	158		Love Food Love Science - video 3 - conducting experiement II
Raising agents • 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).	• the scientific principles underlying these processes when preparing and cooking food • the working characteristics, functional and chemical properties of raising agents.	140,141, 143,146, 149, 151		Fun Kitchen investigates how raising agents work for AQA
Food safety		**Illuminate textbook**	**CGP revision guide**	**Online links**
Food spoilage and contamination **Microorganisms and contamination** • 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.	• growth conditions for microorganisms: role of temperature, moisture, food and time • control of microorganism growth: temperature control, pH, water availability • 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 • control of enzymic action: blanching of vegetables before freezing, use of acids to prevent enzymic browning.	158-164		Food Safety | Design and Technology - Food Preparation and Nutrition Love Food Love Science - video 3 - conducting experiement II

The signs of food spoilage • enzymic action • mould growth • yeast action.	• enzymic action: ripening of bananas, browning of some fruits • mould growth: e.g. on bread and cheese. Recognise the signs of mould growth on foods • yeast action on fruits e.g. grapes, strawberries and tomatoes.	158-170		Love Food Love Science - video 3 - conducting experiement II
Microorganisms in food production the use of microorganisms in food production.	• moulds in the production of blue cheese • yeasts to raise bread • bacteria in yoghurt and cheese production.	170 149		Fun Kitchen investigates different flours for bread making for AQA How It's Made: Blue Stilton Cheese
Bacterial contamination • 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.	Contamination from: • 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 • listeria • staphylococcus aureus	171-181		Bacteria Bite Business FSA Explains: Campylobacter FSA Explains: Salmonella FSA Explains: E. Coli FSA Explains: Listeria
Buying and storing food **Principles of food safety** The food safety principles when buying and storing food.	• temperature control: • 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	185-190		Food Safety | Design and Technology - Food Preparation and Nutrition
Preparing, cooking and serving food	• personal hygiene	192-199		

The food safety principles when preparing, cooking and serving food.	• 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		**Illuminate textbook**	**CGP revision guide**	**Online links**
Factors affecting food choice **Factors which influence food choice** To know and understand factors which may influence food choice.	The following factors in relation to food choice: • physical activity level (PAL) • celebration/occasion • cost of food • preferences • enjoyment • food availability • healthy eating • income • lifestyles • seasonality • time of day • time available to prepare/ cook.	202-210		Factors that influence eating habits and food choices Factors Affecting Food Choices
Food choices Food choices related to religion, culture, ethical and moral beliefs and medical conditions.	• 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)	211-215 216-219		Food allergies and intolerance: What's the difference? BBC Stories K is for Kosher | A to Z of Religion and Beliefs | BBC Teach Global warming resistant GM crops | Biology - Beneath the Lab Coat

	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.	• 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.	220-234		Food labelling | Design and Technology - Food Preparation and Nutrition Front of pack labeling - The Eatwell Guide
British and international cuisines Food products from British tradition and two different cuisines.	• distinctive features and characteristics of cooking • equipment and cooking methods used • eating patterns • presentation styles • traditional and modern variations of recipes.	237-246		
Sensory evaluation • sensory testing methods • how taste receptors and olfactory systems work when tasting food.	Importance of senses when making food choices: sight, taste, touch and aroma • 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	247-254		Sensory perception | Design and Technology - Food Preparation and Nutrition

	• how to test sensory qualities of a wide range of foods and combinations.			
Food provenance		**Illuminate textbook**	**CGP revision guide**	**Online links**
Environmental impact and sustainability of food - Food sources where and how ingredients are grown, reared and caught.	• grown ingredients: fruits, vegetables and cereals reared ingredients: meat and poultry caught ingredients: fish an understanding of: • 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.	255-262		What is Organic Farming? | Agriculture | Biology | FuseSchool What is the difference between organic and free range eggs Is intensive farming the right way to produce food? | Geography: The Big Issues BBC Look North: How sustainable is your Fish & Chips? David Attenborough Explains What We Need to Do to Stop Over-Fishing
Food and the environment environmental issues associated with food.	• 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.	263-268		Rachel Green on Seasonal Food What's the real carbon footprint of your food? | FT Food Revolution
Sustainability of food the impact of food and food security on local and global markets and communities.	the challenges to provide the world's growing population with a sustainable, secure, supply of safe, nutritious and affordable high-quality food. Students must have an awareness of: • climate change • global warming • sustainability of food sources • insufficient land for growing food	269-272		Climate Change & Food Security | Explained The difference that Fairtrade makes FSA Explains: Genetically Modified Food Global Warming 101 | National Geographic What is food insecurity? An explanation What is food security? Food waste

	• availability of food • Fairtrade • problems of drought and flooding • Genetically Modified (GM) foods • food waste.			
Food processing and production **Food production** primary and secondary stages of processing and production. how processing affects the sensory and nutritional properties of ingredients	• 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 microfiltered 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.	136 (butter) 274-283		Food production | Design and Technology - Food Preparation and Nutrition - YouTube Baked Bread: how flour is made Baked Bread: how is bread made? Perfect Pasta: what is pasta made from? Perfect Pasta: what is durum wheat? How It's Made: Milk How Cheese Is Made! | Ever Wonder? | Highlights Kids How Cheese Is Made How Yogurt is Made The Science Behind Jam How to make strawberry jam - Mary Berry Cooks: Episode 1 Preview - BBC
Technical 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.	• cholesterol lowering spreads • health benefits of fortification • fortified foods: thiamin, 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.	284-288		What is food fortification? - Food additives and fortification – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Why are foods fortified? - Food additives and fortification – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize What are food additives? - Food additives and fortification – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Types of food additives - Food additives and fortification – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize Reasons for and against the use of food additives - Food additives and fortification – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) Revision - BBC Bitesize

				Food additives and fortification – CCEA - GCSE Home Economics: Food and Nutrition (CCEA) - Video - BBC Bitesize Food additives and fortification – CCEA test questions - GCSE Home Economics: Food and Nutrition (CCEA) - BBC Bitesize