

# GCSE Food and Nutrition Handbook



# **Course Overview**

# **Examining Body: AQA**

Food Preparation and Nutrition equips learners with the knowledge, understanding and skills required to cook and apply the principles of food science, nutrition and healthy eating. It encourages learners to cook, enables them to make informed decisions about food and nutrition and allows them to acquire knowledge in order to be able to feed themselves and others affordably and nutritiously, now and later in life.

Food preparation skills are integrated into five core topics:

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

# **Food Preparation Skills**

Twelve skill groups have been integrated throughout the specification to show how the content can be taught through practical activities. These skills are not intended to be taught separately from the main content, but integrated within the curriculum.

# **Practical Skills and Techniques Checklist**

Learners must be able to demonstrate skills from each skill group

Skills	Techniques
Skill 1: Generic Practical Skills	Weigh and measure Prepare ingredients and equipment Select and adjust cooking times Test for readiness Judge and modify sensory properties
Skill 2: Knife Skills	Fruit and vegetables Bridge hold, claw grip, peel, slice, dice and cut into even size pieces (ie batons, julienne).  Meat, fish or alternatives Fillet a chicken breast, portion a chicken, remove fat and rind, fillet fish, slice evenly and accurately: raw and cooked meat and fish or

	alternatives (such as tofu and halloumi cheese).
Skills 3: Preparing fruit and vegetables	Mash, shred, scissor snip, scoop, crush, grate, peel, segment, de-skin, de-seed, blanch, shape, pipe, blend, juice and prepare garnishes whilst demonstrating the technical skills of controlling enzymic browning, spoilage and preventing food poisoning (wash and dry where appropriate).
Skills 4: Use of the cooker	Using the grill Use a range of foods, such as vegetables, meat, fish or alternatives such as halloumi, seeds and nuts; char/grill or toast  Using the oven Baking, roasting, casseroles and/or tagines, braising.
Skills 5: Use of Equipment	Use of blender, food processor, mixer, pasta machine, microwave oven.
Skills 6: Cooking Methods	Water based methods using the hob Steaming, boiling and simmering; blanching; poaching.
	Dry heat and fat based methods using the hob Dry frying, shallow frying, stir frying.
Skill 7: Prepare, combine and shape	Roll, wrap, skewer, mix, coat, layer meat, fish and alternatives. Shape and bind wet mixtures (such as falafels, burgers, fish cakes or meatballs) whilst demonstrating the technical skill of preventing cross contamination and handling high risk foods correctly.
Skill 8: Sauce Making	Starch based Sauce demonstrating starch gelatinisation such as: roux, all in one, blended, infused velouté or béchamel. How starch/liquid ratios affect viscosity.
	Reduction Reduction sauce to show how evaporation concentrates flavour. Eg tomato pasta sauce, curry sauce, gravy, meat sauce (including meat alternatives such as mycoprotein and textured vegetable protein) to show how evaporation concentrates flavour and changes the viscosity of the sauce.
	Emulsion  Make an emulsion sauce such as a salad dressing, demonstrating an understanding of how to stabilise an emulsion.
Skill 9: Tenderise and marinate	How acids denature protein.  Marinades add flavour and moisture when preparing vegetables, meat, fish and alternatives.
Skill 10: Skill Dough	Making a dough (bread, pastry, pasta) Use technical skills of shortening, gluten formation, fermentation (proving) for bread, pastry, pasta.

	Shaping and finishing Roll out pastry, use a pasta machine, line a flan ring, create layers (palmiers) proving and resting, glazing and finishing, such as pipe choux pastry, bread rolls, pasta, flat breads, pinwheels, pizza and calzone.
Skill 11: Raising agents	Eggs as a raising agent Create a gas-in-liquid foam, whisking egg whites, and whisking sponge.
	Chemical raising agents The use of self raising flour, baking powder, and bicarbonate of soda.
	Steam as a raising agent Use of steam in a mixture (choux pastry, batter)
	Biological raising agent Use of yeast in bread making.
Skill 12: Setting mixtures	Removal of heat Gelation: use a starch to set a mixture on chilling for layered desserts such as custard.
	Use protein Set a mixture on heating such as denatured and/or coagulated protein in eggs.

# Assessment

Exam	Non Exam Assessment (NEA)
How it's assessed  → Written exam: 1hr 45 min  → 100 marks  → 50% of GCSE	<ul> <li>How it's assessed</li> <li>→ Task 1: Written or electronic report         <ul> <li>(1,500–2,000 words) including photographic evidence of the practical investigation.</li> </ul> </li> <li>→ Task 2: Written or electronic portfolio including photographic evidence.         <ul> <li>Photographic evidence of the three final dishes must be included.</li> </ul> </li> </ul>
What is assessed	What is assessed
→ Theoretical knowledge of food preparation and nutrition from Sections 1 to 5.  Written Exam	→ Task 1: Food investigation (30 marks)  Students' understanding of the working characteristics, functional and chemical properties of ingredients.
	Practical investigations are a compulsory element of this NEA task.
Questions (20)	tills NEA task.
<ul> <li>→ Multiple choice questions (20 marks)</li> <li>→ Five questions each with a number of sub questions (80</li> </ul>	→ Task 2: Food preparation assessment (70 marks)
marks)	Students' knowledge, skills and understanding in relation to the planning, preparation, cooking, presentation of food and application of nutrition related to the chosen task.
	Students will prepare, cook and present a final menu of three dishes within a single period of no more than three hours, planning in advance how this will be achieved.

	Theoretical Knowledge	Practical Dishes
	Theoretical knowledge	These may change in sequence and
		dependent on ingredient availability
Half term 1	Nutrients You will learn	Recipes you may make include: Lemon Meringue
	Recap of assessment	Savoury Roulade
	<ul><li>Protein</li><li>Fats</li></ul>	Vegetable Soup
	Carbohydrate	Jam
	<ul> <li>Vitamins and Minerals</li> </ul>	
	• Water	
Half term 2	Nutritional needs and health	Desires very may make include
man term 2	You will learn	Recipes you may make include: Profiteroles
	Food choices for a balanced	Chelsea Buns
	diet	Chicken risotto
	Energy needs	Tagine
	Nutritional analysis     Delational in lateral and dist	Quorn meat-free mince Spaghetti
	<ul> <li>Relationship between diet, nutrition, and health</li> </ul>	Bologneses
	nutrition, and nearth	Christmas Dinner
Half term 3	Food Science	Recipes you may make include:
	You will learn	Chorizo Chicken
	<ul><li>Why food is cooked</li><li>How heat is transferred to</li></ul>	Baked Falafel/ Meatballs
	food	Pizza
	<ul> <li>Appropriate cooking methods</li> </ul>	Fruit Flan
	Functional and chemical	Beef Burger
	properties of food (protein,	Cheese Scones
	carbohydrates, fats, and oils)	
	Raising agents	
Half term 4	Food Safety	Recipes you may make include:
	You will learn	Schnitzel
	<ul> <li>Micro-organisms and</li> </ul>	Rice Pudding
	enzymes	Pasta
	Food spoilage	Basic Shepherd's pie
	<ul> <li>Micro-organisms in food production</li> </ul>	Irish Wheaten LoafLemon
	Bacterial contamination	Cheese Cake
	Buying and storing food	
	<ul> <li>Preparing, cooking and</li> </ul>	
	serving food	
Half term 5	Food Drawanana and food shains	
nan term 5	Food Provenance and food choice You will learn	Recipes you may make include:
	Tou will learn	Reduced Sugar Sponge pudding
		Vegetable Spring rolls

	<ul> <li>Factors that influence food choice</li> <li>Food labelling and marketing</li> <li>British and international cuisine</li> <li>Sensory evaluation</li> <li>Food sources</li> <li>Food and the environment and sustainability</li> </ul>	Puff Pastry tarts Trifle Dressed Egg Canapes Fish cakes Moussaka Cheese Souffle
Half term 6	Processing and production / Recap You will learn  Food production and technological developments Recap / Revision NEA prep	Recipes you may make include: Chicken chow mein Jerk Chicken and Savoury rice Seasonal Quiche Chicken Mushroom Pie

# Year 11

	NEA Preparation	Theoretical Knowledge
Half term 1	NEA TASK 1	Revision and Exam Style
	Food Investigation (15%)	Preparation: Nutrition
	10 hours 1500-2000 words report	
	IL revision	
Half term 2	NEA 1 continued	Revision and Exam Style
	IL revision	Preparation: Dietary Needs
Half term 3	NEA TASK 2	Revision and Exam Style
	Food Preparation Task (35%)	Preparation: Food Science
	20 hours (including 3 hours making) 20	
	sides A4	
	IL revision	
Half term 4	NEA 2 continued	Revision and Exam Style
	IL revision	Preparation: Food Provenance
Half term 5	Final preparation for the unit 1 exam	
Half term 6		

# **Independent Learning**

Independent learning will be shared with you via 'Google Classrooms' and/or in class. It is expected that you complete all work and hand it in on time. IL will be a range of activities including case studies, skill development, research and analysis and problem solving.

# **Rules and Expectations in GCSE Food Preparation and Nutrition**

- 1. Enter the classroom with the right kind of thinking that you are in a lesson to work hard, to follow the rules (especially health and safety rules) and to focus on your learning
- 2. Work together with others in your team, especially when completing practical work. Understand that we have 'collective responsibility' for clearing up the practical work
- 3. Be prepared to remove your jumper and blazer and wear an apron, to wash your hands well and to tie back your hair ready for practical work
- 4. Spend the full 2 or 3 hours a week in class focussing on your learning
- 5. Spend at least 60-90 minutes per week on Independent Learning
- 6. Meet all classwork and IL deadlines
- 7. When you experience difficulty with a topic or particular skill, seek help straight away
- 8. See staff in advance if you are unable to attend a lesson
- 9. Catch up on work missed through absence, including IL
- 10. You will work with anyone in the class without argument. We are all in this together and will help each other when we can.

Food and Preparation Glossary	
Additives	Natural or synthetic chemical substances added to food during manufacture or processing to improve the quality, flavour, colour, texture or stability of the product.
Aeration	Incorporating air into a mixture.
Agitate	To stir, shake or disturb a liquid.
Al dente	'Firm to the bite', a description of the texture of correctly cooked pasta.
Allergies	An immune system reaction that occurs soon after eating a certain food and can cause severe symptoms.
Ambient	Foods that can be stored, at room temperature (ordinary room temperature 19°C to 21°C), in a sealed container. All foods found on supermarket shelves are ambient foods.
Amino acids	The building blocks of proteins.
Anaemia	Diet related health condition caused by the lack of iron in the body, where the body lacks enough healthy red blood cells or haemoglobin.
Animal welfare	A duty of care on people to ensure that animals are as well treated as possible.
Antioxidant	A molecule that is able to stop the oxidisation process in other molecules and therefore can be useful in stopping foods from deteriorating. Antioxidants can prevent or slow down damage to the body which otherwise can lead to diseases such as heart disease. Antioxidants also improve our immune system.
Au gratin	A dish sprinkled with breadcrumbs or cheese and breadcrumbs and browned under the grill.
Bacteria	Pathogenic microscopic living organisms, usually single-celled, that can be found everywhere. They can be dangerous, such as when they cause infection, or beneficial, as in the process of fermentation (for wine).
Baking	Convection-conduction, cooking foods in a hot oven.

Balanced diet	A diet which provides all the necessary nutrients in the correct amount/proportions to meet the body's needs.
Basted	When fats or juices are poured over something (usually meat) while cooking in order to keep it moist, eg roasting meats.
Batter	A mixture of flour, milk or water, and usually an egg.
Best before date	Date on food products after which a non-high risk food will be safe to eat, but not be at its best.
Bind	To bring the ingredients in a mixture together using an ingredient, eg egg.
Biological catalysts	Substance which speeds up a chemical reaction.
Biological raising agent	Using yeast to produce CO2 gas.
B group of vitamins	Vitamin B1 (Thiamin): enables energy to be released from carbohydrates in the body, found in a variety of foods, eg meat, dairy, fruit, wholemeal products. Deficiency of this is called Beri-Beri.
Blanching	A method of cooking where food is cooked very quickly in boiling water for a short period of time. It stops enzyme actions which can cause loss of flavour, colour and texture. Conduction-convection.
Bone health	Health of the skeleton.
Braising	Conduction-convection, sealing meat/vegetables in hot fat, then cooking slowly in a covered dish with some cooking liquid.
Bridge hold	Use thumb and forefinger and grip either side of the ingredient, use knife under the bridge to cut.
Buddhism	An Eastern religion. Its followers consider living beings to be sacred. Many Buddhists are vegetarian or vegan.
Caramelisation	Breaking up of sucrose molecules (sugar) when they are heated. This changes the colour, flavour and texture of the sugar as it turns brown into caramel.
Carbohydrates	Macronutrients required by all animals; made in plants by the process of

	photosynthesis.
Cardiovascular disease (CHD)	A narrowing of the arteries that supply your heart with oxygen-rich blood, due to the build-up of fatty deposits within the artery walls.
Casserole	Food that is completely covered in liquid and then cooked in the oven.
Caught ingredients	Animals, birds, fish and shellfish hunted and caught in the wild for eating.
Chemical raising agent	Uses baking powder or bicarbonate of soda to produce CO2 gas.
Choux pastry	A light, crisp, hollow pastry used to make profiteroles, eclairs and gougères.
Claw grip	Tips of fingers and thumb tucked under to hold the ingredient before chopping.
Climate change	A large-scale, long-term shift in the planet's weather patterns or average temperatures, which can lead to unusual weather conditions.
Coagulation	The setting or joining together of lots of denatured protein molecules during heating or change in PH. An irreversible change to the appearance and texture of protein foods.
Coat	To add another ingredient to create an attractive finish, or to create a protective layer on food when cooking.
Coeliac	Cannot absorb the protein gluten. Can result in Coeliac disease: a chronic intestinal disorder caused by sensitivity to the protein gliadin contained in the gluten of cereals.
Colourings	Added to intensify the colour of food to attract consumers. Can be natural or artificial.
Conduction	Transfer of heat through a solid object into food.
Convection	Transfer of heat through a liquid or air circulation into food.
Conventional farming	A term used to designate farming techniques that are traditionally, and often controversially, orientated towards using technology, pesticides, chemicals and other synthetic tools in the cultivation of crops.

Cook's knife	A large general purpose knife with a deep blade, used for cutting, chopping, slicing and dicing.
Cuisine	A traditional style of cooking and eating that has developed in a country or region of the world.
Danger zone	Range of temperatures between 5°C to 63°C at which bacteria begin to multiply rapidly.
Date marks	How long a food product will last.
Deglazing	To loosen the browned juices on the bottom of the pan by adding a liquid to the hot pan and stirring while the liquid is boiling.
Denaturation	Chemical bonds in the protein food have broken, causing the protein molecule to unfold and change shape.
De-seed	To remove seeds before using.
De-skin	To remove the skin by either putting the fruit or vegetable into boiling water or, for peppers, placing on direct heat.
Dextrinisation	Breaking up of the starch molecules into smaller groups of glucose molecules when exposed to dry heat, eg toast.
Dietary guidelines	Advice on diet, use of the 'eat well guide'.
Dietary Reference Values (DRVs)	An estimate of the nutritional requirements of a healthy population.
Disaccharide	A carbohydrate made from two sugar molecules.
Discrimination tests	Test used to find out whether or not people can tell the difference between similar samples of food.
Dovetail	When making two or more dishes by splitting the tasks within the recipes to make the best use of your time. For example, if making a cake and soup, the sponge mix for the cake could be made while the vegetables for the soup are sautéing.

Dry-frying	Heating food on a low heat without any fat or oil. Conduction.
'Eat well guide'	Informs individuals of the variety of food groups required for a healthy balanced diet.
Efficacy	Power or capacity to produce a desired effect; effectiveness.
Enzymic action	Causes fruit to ripen, change colour, texture, flavour and aroma; maturing of fruits and vegetables.
Enzymic browning	The discolouration of a fruit or vegetable due to the reaction/chemical process where oxygen and enzymes in the plant cells of the food to react and cause the surface to become brown. This process cannot be reversed.
Emulsification	Refers to the tiny drops of one liquid spread evenly through a second liquid. An emulsifier (such as egg yolk) is used to stabilise an insoluble mixture.
Environmental issues	The impact of human activities on the natural environment.
Estimate Average Requirement (EAR)	A useful indication of how much energy the average person needs.
Excess protein	A diet which contains too much protein.
Factors which influence food choice	Food choice according to lifestyle, attitudes, activities, likes, dislikes, beliefs, cultures.
Fairtrade	A partnership between producers and consumers; selling on Fairtrade terms provides farmers with a better deal and more income. This allows them the opportunity to improve their lives and plan for their future.
Fats	Macronutrient which supplies the body with energy.
Fat soluble vitamins	Vitamins (the A, D E, and K groups) that dissolve in fat.
Fish fillet	A cut of fish that is free from bones.
Flavourings	Improve or modify the natural flavours and odours in food.

Fluoride	Strengthens the bones and teeth, helps prevent tooth decay.
Foam formation	Foams are formed when gases (mainly air) are trapped inside a liquid, for example meringue, whisked sponge.
Folic acid	Works with Vitamin B12 to make red blood cells. Found in leafy green vegetables, whole grains and some fruit.
Food intolerance	A long-term condition, which after some time may cause the consumer to feel unwell and have a range of symptoms.
Food poisoning	Illness caused by pathogenic bacteria/toxins, for example e-coli: salmonella, listeria, staphylococcus aureus.
Food processor	A piece of equipment with various attachments that can prepare a variety of foods, such as slicing and grating vegetables.
Food provenance	The place where food originates (where is it grown, raised or reared).
Food security	Ability of people to buy sufficient safe, nutritious and affordable foods.
Fortification	Adding vitamins and minerals to foods during its manufacture.
Free range	A method of farming husbandry where the animals, for at least part of the day, can roam freely outdoors.
Free sugars	All monosaccharides and disaccharides added to foods by the manufacturer, cook, or consumer, plus sugars naturally present in honey, syrups, and fruit juices.
Fruit sugars	Carbohydrate, which is the natural sugar in fruit –mostly in the form of fructose, or glucose.
Gelatinisation	When starch granules swell when cooked with liquid, then burst open and release the starch, causing the liquid to thicken.
Genetically Modified (GM)	A scientific technique that enables a particular characteristic from one plant or animal to be inserted into the genes of another.
Gliadin and glutenin	The core proteins of the gluten part of wheat seeds.

Global warming	The heating up of the earth creating a greenhouse effect.
Gluten formation	Formed from the two wheat proteins gliadin and glutenin, in presence of water. Gluten is developed by kneading.
Gluten free	Food which does not contain gluten (crucial for those with Coeliac disease).
Grading tests	Put in order particular characteristics of a food product.
Grilling	Radiation cooking foods under intense heat.
Grown ingredients	Plants grown for food.
Hedonic rating test	People give their opinion of one or more food products by filling out a table that uses a preference scale.
High Biological Value (HBV)	Protein foods that contain all the essential amino acids.
Hinduism	An Eastern religion. Many Hindus are vegetarian and many practice fasting. In Hinduism, the cow is sacred and is not eaten.
Infuse	To flavour liquid with aromatic ingredients by slowly heating to a boiling point and then allowing it to cool.
lodine	Helps to produce hormone thyroxin, needed for stable metabolic rate.
Infused liquids	Liquids with seasoning, spices, herbs or wine added.
Intensive farming	Farming that aims to produce as much as possible, usually with the use of chemicals.
Iron	Needed to make haemoglobin in the red blood cells, requires Vitamin C for absorption.
Islam	Semitic religion. Muslim dietary laws require that poultry/meat is slaughtered in a special ritual called Zibah. Certain foods are forbidden.

Judaism	Semitic religion which has a number of food laws called the Kashrut. Kashrut food is called Kosher foods.
Knead	To manipulate dough by pushing it across a work surface and pulling it back. This is essential to develop the gluten.
Knock back	To knead out the carbon dioxide in risen dough to remove large air pockets to ensure an even texture.
Lactose	A natural sugar found in milk and dairy products.
Lactose intolerant	A condition which means you cannot digest disaccharide sugar lactose.
Layer	To make up a dish with differing ingredients one on top of another.
Life stages	Phase of development of people through their lives (young children, teenagers, adults, elderly).
Locally produced	Buying of food from local producers to avoid the environmental impact of food miles.
Low Biological Value (LBV)	Protein foods that are missing one or more essential amino acids.
Mandatory information	Must be done, or is demanded, by law on a food label.
Marinade	To soak foods such as fish, meat, poultry and vegetables in a liquid to help develop the flavour, tenderise and in some instances colour the food before it is cooked. The liquid can be acidic or a salty solution. Protein is denatured by marinating.
Mash	To reduce to a soft mass by using a masher.
Mechanical raising agent	Whisking, beating, sieving, creaming, rubbing in or folding to trap air into the mixture.
Micro filtered	All bacteria in milk are removed, by forcing it through filtration membranes, then pasteurised and homogenised.

Micronutrients	Nutrients required in small quantities to facilitate a range of physiological functions.
Microorganisms	Tiny forms of life, usually single cell microscopic organisms such as bacteria, moulds and fungi.
Milk sugars (lactose)	A single molecule of glucose linked to a single molecule of galactose to form a carbohydrate, known as lactose.
Minerals	Chemical substances found in a wide variety of foods.
Mise en place	Preparation before starting to cook.
Mix	To combine two or more ingredients together to become one.
Monosaccharide	A simple carbohydrate. Mono means one, saccharide means sugar.
Monounsaturated fats	Fats that contain one double bond in the molecule.
Moral and ethical beliefs	Relate to what people believe are right or wrong, may be concerned how food is produced.
Mould	A type of microorganism fungus that grows and multiplies in filaments creating a fuzzy appearance on food. It is a soft, green or grey growth that develops on old food.
	Can produce toxins (poisons) which may cause food poisoning.
	May give some cheeses their characteristic colours and flavours.
Mould in cheese	Two types of pathogenic microorganisms are involved, bacteria and moulds.
Nutrients	The properties found in food and drinks that give nourishment – vital for growth and the maintenance of life. The main nutrients needed by the human body are carbohydrates, proteins, fats, vitamins and minerals.
Nutritional analysis	Nutritional information for different foods, creating a nutritional profile of the specific nutrients in the food.
Nutritional guidelines	Food choices determined by life stage.

Nutritional labelling	Informs consumers about the nutritional profile of the product, the types and amounts of different nutrients a food contains.
Nutritional value	Information about the energy (measured in kilocalories/kilojoules), the macronutrients (carbohydrates, protein, fats), micronutrients (vitamins and minerals) and how they impact on the body.
Obesity	Diet-related disease where the body contains too much stored fat.
Oil in water emulsion	Keeping drops of oil or fat suspended in a liquid to prevent them from joining together, for example butter.
Olfactory systems	The receptors found in the back of the nose that are responsible for our sense of smell/aromas.
Organic	Food produced by methods that comply with the standards of organic farming. Standards vary worldwide, but organic farming in general features practices that strive to cycle resources, promote ecological balance, and conserve biodiversity.
Organic farming	Farming that produces food using natural methods without the use of chemicals, fertilisers and pesticides.
Organoleptic qualities	Characteristics of food that affect our organs or senses.
Osteoporosis	Reduction in mineral content of the bones, this occurs gradually, usually in the elderly.
Oxidation	Substances pick up oxygen from the air; they then oxidise to undergo a chemical reaction, resulting in food losing freshness and colour.
Paired preference	People given two similar samples of food and they have to say which one they prefer.
Paring knife/vegetable knife	A small multi-purpose knife mainly used for slicing and dicing.
Pasteurisation	The process of heating a food to a specific temperature for a specific period of time in order to kill microorganisms that could cause disease, spoilage or undesired fermentation.
Physical Activity Level	Energy balance (% of energy from nutrients), the amount of energy the body uses for movement and physical activity daily.

(PAL)	
Poaching	A method of cooking where food is cooked in a liquid that is just below boiling point. Conduction-convection.
Polysaccharide	A complex carbohydrate: many sugar molecules joined together, they do not taste sweet.
Polyunsaturated fats	Fats that contain several double or even triple bonds in the molecule.
Plasticity	The ability of fat to soften over a range of temperatures to hold its shape, or be shaped and spread.
Presentation style	Distinctive way food is presented in different cuisines.
Preservatives	Used to prevent food from spoilage by microorganisms; increases the shelf life of commodities.
Primary processing	The conversion of raw materials into food commodities, for example milling of wheat grain into flour.
Profiling	People asked to rate the intensity of a food product from 1–5 against a set of sensory descriptors.
Protein	A macronutrient that is essential to building muscle mass.
Protein alternatives	Manufactured protein food products consumed in place of meat or fish.
Protein complementation	Eating a combination of low biological value foods together to provide all the essential amino acids that the body requires.
Provenance	The place of origin of something.
Proving	The last rising of the bread dough in its final shape before it is baked.
Radiation	A heating process that does not require physical contact between the heat source and the food being cooked. Instead, energy is transferred by waves of heat or light striking the food. Two kinds of radiation heat are used in the kitchen: infra-red and microwave.

Ranking	People asked to rank order samples of food according to a criteria.
Rastafarianism	Follow the rules of I-tal. Food must be natural, clean and contain fruits, vegetables and herbs.
Rating	People asked to rate a food sample for a specific characteristic.
Raising agents	An ingredient or process that introduces a gas into a mixture so that it rises when cooked.
Reared ingredients	Animals, birds and fish specially bred in captivity to be eaten.
Reduction	The process of simmering a liquid over heat until it thickens. It is also the name of the concentrated liquid that forms during this process.
Reference Nutrient Intake (RNIs)	An estimate of the amount of proteins, vitamins and minerals that should meet the needs of most of the group to which they apply.
Religion and cultures	The way of life, general customs and beliefs of a particular group of people at a particular time. Relating to the core of their traditions. Dietary laws, rules and advice which dictate the type of foods to be eaten.
Rickets	Deficiency of calcium in the bones, reducing peak bone mass.
Saturated fats	This type of fat is mostly from animal sources; they are normally solid fats. All of the carbon atoms in the fatty acid molecules are linked by single bonds.
Scientific principles	Demonstrates how science of the ingredients are at work in producing, processing, preparing, preserving, and metabolising foods.
Seasonal foods	Foods that are at the stage of their natural life cycle when they are ready for harvest or to be caught.
Secondary processing	Primary processed foods into other food products, for example flour into biscuits.
Segment	To peel and pull apart, for example an orange.
Sensory properties	Smell, appearance and texture, mouth feel influence what we select to eat.

Sensory testing methods	A way of measuring the sensory qualities of food and is used by chefs, food manufacturers and retailers to analyse a food product.
Shallow frying	A quick method of cooking where a small amount of fat is used to cook food in a frying pan.
Shred	To slice into long, thin strips.
Sikhism	Eastern religion in which many are vegetarian and do not drink alcohol, tea or coffee.
Simmering	Water that is heated to just below boiling point.
Skewer	A long metal or wooden pin used to secure food on during cooking; to skewer is to hold together pieces of food using a metal or a wooden pin.
Sodium (salt)	Controls the amount of water in the body.
Soya bean	An Asian bean plant.
Snip	To cut (usually with a pair of scissors) with a small, quick stroke.
Stabilisers	Help stop substances separating again after they have been mixed stabilise an emulsion.
Starch	A polysaccharide, a complex carbohydrate.
Steaming	A method of cooking where food is cooked in the steam coming from boiling water. Conduction-convection.
Sterilised	Heated in sealed bottles to 110°C for 30 seconds.
Stir-frying	A quick method of cooking where small pieces of food are fast-fried in a small amount of oil in a wok.
Sustainability	Human activity that is not harmful to the environment and does not deplete natural resources, thereby supporting long-term ecological balance. For example, sustainable fishing.

Tagine	A glazed earthenware pot with a distinctive lid. It is also used to describe the food cooked in it.
Taste receptors	Special cells on the tongue that pick up flavours.
Tasting panel	A process of testing foods. The process must be fair and realistic controlled conditions.
Temperature probes	Give an accurate reading of the core temperature (centre) of the food. Food probes must be used correctly.
Textured Vegetable Protein (TVP)	Vegetable protein, especially from soya beans, that is used as a substitute for meat, or is added to it.
Tofu	A high protein food made by coagulating soya milk and pressing the resulting curds into soft white blocks.
Transportation	The distance foods travel, measured in air miles.
Triangle test	People given three samples of a food product to try. Two samples are identical, the third something is different; they need to discriminate between the samples.
Type 2 diabetes	A person with type 2 diabetes has insulin resistance, meaning their pancreas doesn't produce enough insulin or the body doesn't react properly to insulin.
Ultra Heat Treatment (UHT)	Heated very quickly in a heat exchanger to 72°C for 15 seconds cooked rapidly to below 10°c (normally 4°C).
Unsaturated fats	Fats that contain a high ratio of fatty acid molecules with at least one double bond. Unsaturated fats are normally liquid oil.
Use by date	Date by which high risk perishable foods should be eaten. They may not look different but are unsafe.
Vegan	People who do not eat flesh or any animal products. They can eat plant protein soya, TVP, tofu.
Vegetarian	A lacto-vegetarian diet includes dairy products and plants, and a lacto-ovo vegetarian diet includes eggs, dairy products and nuts.

Vitamin B2 (Riboflavin)	Enables energy to be released from carbohydrate, fat and protein in the body found in many foods, such as milk, eggs, rice. Deficiency is rare.
Vitamin B3 (Niacin)	Enables release of Vitamin C (ascorbic acid) needed for absorption of iron, to maintain body cells. Found in citrus fruits, green vegetables.
Vitamin B12	Works with folic acid, found in meat, fish fortified cereals.
Water based	Using liquid to transfer heat via convection.
Water in oil emulsion	Where liquid is suspended in oil or fat and prevents them from separating out, for example mayonnaise.
Water soluble vitamins	Soluble vitamins (the B group and vitamin C) in water of energy in the body. Found in wheat flour, eggs, milk some meats. Deficiency is called pellagra.
Wraps	Fillings that are wrapped in soft flat breads such as tortillas or pittas.
Yeasts	A microscopic fungus consisting of single oval cells that reproduce by budding, and capable of converting sugar into alcohol and CO2 gas. Also ferments in the correct conditions to make bread rise.

#### **Resources and Useful Links**

#### Text books

CGP GCSE Food Preparation and Nutrition

https://www.cgpbooks.co.uk/Student/books gcse food prep nutrition.book FNS41

Food Facts by Delia Clarke and Elizabeth Herbert. This book was written in 1986 and no longer in print but used copies are available from Amazon. It is especially useful for understanding the function of food ingredients and the science aspects

# **TV Programmes**

Throughout the year there are various TV shows which are both entertaining and great for learning about food, for example The Great British Bake Off, Masterchef, programmes featuring celebrity chefs such as Jamie Oliver and Nigella Lawson, documentary programmes such as Rip Off Food

#### **Web Sites**

https://www.bbc.co.uk/bitesize/subjects/zdn9jhv- has video clips covering a range of food related ideas

http://www.nhs.uk/Livewell/Goodfood/Pages/the-eatwell-guide.aspx for information about nutrition and healthy eating

http://www.foodsafety.gov/ - for the most up-to-date information about food safety http://www.food.gov.uk/policy-advice/additivesbranch/ for information about food additives

https://www.foodafactoflife.org.uk/ lots of information about food, farming and cooking including videos

https://www.bbc.co.uk/food Recipes and inspiration

<u>https://www.bbcgoodfood.com/</u> Recipes and inspiration

### This course handbook!

This handbook gives you a definitive guide to what you need to do to get top marks in each unit. Ensure that you are familiar with these criteria.

#### Revision guide

During the course, you will be issued with a revision guide, which includes useful tips and strategies to help revise for exams or and to prepare for NEA.

#### **Past papers**

This is a new specification and as such there are no past papers. The OCR website has example papers and as you go through the course there will be past papers available.

# YouTube - www.youtube.com

YouTube is a fabulous free way to watch cooking and food preparation, especially large scale production in factories. Get ideas, note your favourites and watch as much as you can!

#### **Possible Career Paths**

The food industry is one of the biggest employers in the country and this GCSE will give a basic understanding to prepare students for careers in food preparation, food production, research, and nutrition or food retail.

http://tastycareers.org.uk/ - this web site is a specialist Food and Drink Industry site for careers. It has detailed information about the types of jobs, the training opportunities and job vacancies.