KS4 FOOD & NUTRITION Curriculum Coverage: Eduqas Exam Board

Years 10 & 11

SOW	Food Safety	Commodity: Fruit & Vegetables	Commodity: Cereals	Dietary Needs	Commodity: Dairy	Cooking methods & Cuisines	Raising agents & sensory testing
Key knowledge	**To know:** • how to store foods safely • the importance of date marks • conditions and controls for enzymic browning • the signs of food spoilage • the role of temperature in the control of bacteria • types of bacterial contamination • how to prevent bacterial contamination • preservation methods • signs & symptoms of food poisoning • environmental and financial impacts of food waste • the positive use of microorganisms in food production	**To know:** • the different vegetable classification groups • the 4 main fruit groups • how to store fruits and vegetables safely • primary and secondary processing methods • intensive versus organic farming • nutritional content • cooking methods • effects of processing on foods • the role of micronutrients in the diet • problems of excess and deficiency of micronutrients	**To Know:** • common staple foods • nutritional content • storage requirements • types of pastry and their ingredients functions • a range of cereal crops • nutritional content of cereals • types of pasta • types of oats • nutritional content of oats • storage requirements of oats • complex carbohydrates in the diet • sugars/syrups and nutrition • storage requirements of sugars and syrups	**To know:** • a range of life-stages • specific dietary needs • specific lifestyle needs • specific religious food beliefs • how nutrients work together in the body • BMR - basal metabolic rate • PAL - physical activity levels • common dietary issues • recommended guideline for a healthy diet • how to plan balanced diets	To Know: • different types of milk • primary and secondary processing of milk • environmental concerns relating to dairy farming • different types of cheese • different types of yoghurt • different types of cream • Nutritional content of a range of dairy products • storage requirements for a range of dairy products • high risk foods	**To know:** • why food is cooked • how heat is transferred • a range of cooking methods • know British & International Cuisines	**To know:** • the ability of additives to achieve the desired effect • the functional properties of raising agents • know the types of raising agents • the types of sensory testing • what sensory testing is along with its importance
Key Skills	**To be able to:** • Identify key storage temperatures • Show the difference between date marks • Identify the signs of food spoilage and show how to prevent it • Discuss the negative impact of food waste 0n the environment & how to prevent it • Explain the positive use of microorganisms in food products • Identify the causes of enzymic browning and show how to prevent it • Describe & explain the types of food contamination • Discuss microbial food safety principles food safety • Identify the types of food poisoning bacteria & discuss their sources	**To be able to:** • Identify the 9 vegetable groups with examples for each • Discuss the different fruit groups with examples • Show the correct storage requirements for fruit & vegetables • Identify primary & secondary processing of fruit & vegetables • Explain the farming methods used for fruit & vegetables • Identify the functions and sources of micronutrients in the diet • Identify how to avoid problems associated with excess and deficiency of macronutrients in the diet • Produce a mini-NEA to GCSE standard • Show competent knife skills • Prepare fruit & vegetables • Select & adjust a cooking process • Weigh & measure accurately • Accurate & correct selection & use of equipment • Use dry heat cooking methods • Use water-based cooking methods • Use the oven • Test for readiness • Judge & manipulate sensory properties • explain how processing affects the sensory properties of ingredients	**To be able to:** • explain where staple foods originate and their uses • describe the nutritional content of a range of cereal crops • explain the storage requirement for a range of cereal crops • discuss the types and importance of complex carbohydrates • identify the differences between sugars and syrups • explain their function in the diet • Select & adjust a cooking process • Weigh & measure accurately • Accurate & correct selection & use of equipment • Use dry heat cooking methods - baking • Use water-based cooking methods - boiling/simmering • use the hob • use the oven - baking • use fat-based cooking methods - sauté • make and knead a bread dough • use the rubbing-in method • prepare, combine and shape • make sauces - reduction • Test for readiness • Judge & manipulate sensory properties	**To be able to:** • identify life stages for toddlers, teenagers. adults, elderly • identify how nutritional needs change through each of these life-stages • describe & explain different nutritional needs and their links to good health • discuss energy and why it is needed • Define and calculate BMR • Discuss the different PAL levels between age groups • plan balanced meals to meet specific requirements	**To be able to:** • identify and describe the different types of milk and how they are processed (primary) • explain how cheese/yoghurt/cream are secondary processed products • discuss the nutritional content of a range of dairy products • Identify the storage requirements for a range of dairy products • Use foaming - tres leches cake/chocolate mousse • use natural raising agents - goujeres • Select & adjust a cooking process • Weigh & measure accurately • Accurate & correct selection & use of equipment • Use dry heat cooking methods - baking • set a mixture - gelatinisation • prepare, combine and shape • Test for readiness • Judge & manipulate sensory properties	**To be able to:** • Explain why food is cooked • Use sensory descriptors when evaluating food • Explain how conduction/convection/radiation work in heat transfer • Select and use appropriate cooking methods • Identify dishes from British Cuisine • Identify dishes from international cuisines • Cook dishes from different cuisines	**To be able to:** • Describe the differences between chemical, mechanical and biological raising agents • Use mechanical raising agents to produce profiteroles • Use sensory descriptors accurately • Conduct, analyse and evaluate sensory tests • Select & adjust a cooking process • Weigh & measure accurately • Accurate & correct selection & use of equipment • Use dry heat cooking methods - baking • Shaping a pastry dough • Set a mixture – coagulation • Make a pastry dough
	Tier 3 key vocabulary	**Tier 3 key vocabulary**	**Tier 3 key vocabulary**	**Tier 3 key vocabulary**	**Tier 3 key vocabulary**	**Tier 3 key vocabulary**	**Tier 3 key vocabulary**
Subject specific	• Cross-contamination • Autolysis • Microbial spoilage • Oxidation • Denature • Catalysts • Microorganisms • Pathogens	• Provenance • Intensive farming • Primary processing • Secondary processing • Antioxidants	• Staple foods • Wheatgerm • Extraction rate • Milling • Kneading • Proving • Blind baking • Fermentation • Cereal crops • Fortification • Coeliac • Gluten • Maize • Genetically Modified • Macronutrient • Monosaccharides • Disaccharides • Plaque	• PAL - physical activity level • BMR - basal metabolic rate • Obesity • Intolerance • Diabetes • Coeliac • CHD - coronary heart disease • Anaemia • Caries	• Lactose intolerance • homogenisation • Pasteurisation • Gelatinisation • Fermented • Foaming	• Conduction • Convection • Radiation • Cuisines • Sautéing • Braising	• Raising agents • Bias • Hedonic testing • Preference testing • Attribute profiles • Coagulation

SOW	Meat, fish, poultry & eggs	Factors affecting food choice	Fats & Oils	Food Science	NEA 1	NEA 2
Key knowledge	**To know:** • the role of protein in the diet • the structure of each commodity & how this affects cooking methods • primary and secondary processing methods • the concept of 'traceability • classifications of fish • preparation & cooking techniques • farming methods • storage requirements • functions in cooking • common meat alternatives the changes meat undergoes during cooking	**To know:** • the range of factors affecting food choice – religious/ethical/moral/dietary • the reasons people make choices about foods • how to make informed choices about food • how information about food is available to the consumer • how food provenance affects the environment • how to produce food sustainably • the issues concerning food packaging & labelling • the positive & negative use of additives • the technological developments that support food processing & production	**To know:** • the types, composition & sources of fat in the diet • function of fats in the diet • nutritional content of fats & oils • storage requirements	**To know:** • functional properties of carbohydrates – dextrinization, caramelisation, gelatinisation • functional properties of proteins – denature, coagulation, foaming, gluten • functional properties of fats – aeration, shortening, plasticity, emulsification	**To know:** • how to research a given topic using a range of sources • the working, functional and chemical properties of given ingredients • a range of practical investigations suitable for the task • how planning and a hypothesis form part of an investigation • how findings inform future choices and investigations • how to analyse findings • how to evaluate findings • how to evidence practical investigations with photographs • how to produce a report supporting your investigation	**To Know:** • how to research a given topic using a range of sources • the working, functional and chemical properties of given ingredients • a range of suitable dishes for the chosen task • a range of high-level cooking skills/techniques • hygiene and safety rules for planning, preparing and cooking dishes • the stages of making for each dish chosen • suitable presentation techniques for the chosen dishes • suitable portion sizes for the chosen dishes • a range of sensory testing techniques • how to analyse chosen dishes/skills • how to evaluate chosen dishes/skills • how to produce a report supporting your task
Key Skills	**To be able to:** • Describe the structure of each commodity • Explain how the structure affects cooking methods • Describe & explain Primary processing for each commodity • Describe & explain traceability • Explain storage requirements • Discuss nutritional content • Identify classifications of fish with examples • Describe preparation & cooking methods for each commodity • Explain the changes meat undergoes during cooking • Discuss the function & importance of eggs in cooking • Describe & explain the importance of protein in the diet • Identify examples of common meat alternatives • Discuss different farming methods • Use sensory descriptors accurately • Conduct, analyse and evaluate sensory tests • Select & adjust a cooking process • Weigh & measure accurately • Accurate & correct selection & use of equipment • Use knife skills • Prepare combine and shape/form • Tenderise & marinade • Use water-based cooking methods – boiling, poaching • Use dry heat & fat- based methods using the hob – shallow frying • Use the oven – baking • Making sauces – roux/velouté • Use raising agents – whisking egg whites • Testing for readiness Judge & manipulate sensory properties	**To be able to:** • Describe & explain the factors affecting food choice • Discuss how food provenance affects the environment • Discuss the impact food has on local & global markets – food sustainability • Show how to cost a recipe • Identify issues concerning food packaging & labelling • Evaluate the influence of marketing • Discuss the positive & negative effects of the use of additives during food manufacture Describe & explain the technological developments that support food processing & production	**To be able to:** • Describe the composition of a range of fats & oils • Identify the sources of fats in the diet • Discuss the nutritional content of fats & oils • Explain the safe storage requirements of fats & oils • Discuss the function of fats in the diet	**To be able to:** • Discuss the functional properties of fat, protein & carbohydrates • Demonstrate how the Maillard reaction works • Demonstrate how sugars caramelise • Demonstrate the formation of foams & how they are stabilised • Demonstrate coagulation & how it is caused • Demonstrate the creaming method and the best fats/temperatures to use • Demonstrate shortening & which **fats are more suitable to achieve this**	**To be able to:** • Concisely research information relevant to the given task using a range of sources • Accurately plan the task using the research • Investigate the working, functional and chemical properties of the given ingredients • Write a hypothesis with more than one variable • Use practical investigations to prove/disprove your hypothesis • Record data using tables/photographs • Use findings to achieve your results • Analyse and evaluate the task • Produce a concise report to support your investigative task	**To be able to:** • Concisely research information relevant to the given task using a range of sources • Investigate the working, functional and chemical properties of the given ingredients • Choose and trial a range of suitable dishes for the task • Evaluate the trialled dishes • Select and modify final dishes showing a range of high-level skills • Produce a detailed, dovetailed time plan • Carry out a 3-hour practical exam to produce and present chosen dishes • Conduct a range of sensory testing on chosen dishes • Analyse results and present findings • Compare own dishes with others • Self-evaluate chosen dishes/skills • Make realistic suggestions for improvements • Produce a concise report to support your practical task
	Tier 3 key vocabulary	**Tier 3 key vocabulary**	**Tier 3 key vocabulary**	**Tier 3 key vocabulary**	**Tier 3 key vocabulary**	**Tier 3 key vocabulary**
Subject specific	• Structure • Reared • Collagen • Elastin • Tenderise • Slaughter • Non-enzymic browning/Maillard reaction • Functional properties	• Provenance • Carbon emissions • Climate change • Fairtrade • Sustainability • Seasonality • Locally produced • Intolerances • Allergies • Ethics • Social influences • Economic influences • Welfare • Food assurance • Advertising & marketing	• Plasticity • Shortening • Essential fatty acids • Cholesterol • CHD • Saturated • Unsaturated	• Saccharides • Monosaccharides • Disaccharides • Polysaccharide • Glucose • Fructose • Galactose • sucrose • Lactose • Maltose • Glycogen • Cellulose • Pectin • Maillard reaction • Dextrinisation • Caramelisation • Gelatinisation	• Hypothesis • Functional properties • Chemical properties • Working characteristics • Evaluate • Analyse	• Functional properties • Chemical properties • Working characteristics • Evaluate • Analyse