

Subject: GCSE Food Nutrition	Autumn HT 1: Topic 1: Food commodities	Autumn HT 2 Topic 2: The science of food	Spring HT 1 Topic 3: Principles of nutrition	Spring HT 2 Topic 4: Diet and good health	Summer HT 1 Topic 5: Where food comes from	Summer HT 2
<p>Year 10</p> <p>skills covered during the course through practical lessons Cooking and food preparation</p>	<ul style="list-style-type: none"> • <input type="checkbox"/> bread, cereals, flour, oats, rice, potatoes, pasta • <input type="checkbox"/> fruit and vegetables (fresh, frozen, dried, canned and juiced) • <input type="checkbox"/> milk, cheese and yoghurt • <input type="checkbox"/> meat, fish, poultry, eggs • <input type="checkbox"/> soya, tofu, beans, nuts, seeds • <input type="checkbox"/> butter, oils, margarine, sugar and syrup • <input type="checkbox"/> the value of the commodity within in the diet • <input type="checkbox"/> features and characteristics of each commodity with reference to their correct storage to avoid food contamination • <input type="checkbox"/> the working characteristics of each commodity, with reference to the skill group and techniques table listed in Appendix A, e.g. when subjected to dry/moist methods of cooking • <input type="checkbox"/> the origins of each commodity 	<p><u>The effects of cooking on food</u></p> <ul style="list-style-type: none"> • why food is cooked, to include, digestion, taste, texture, appearance and to avoid food contamination • how heat is transferred to food through conduction, convection and radiation and how and why the production of some dishes rely on more than one method of heat transference • how selection of appropriate cooking methods can: <ul style="list-style-type: none"> (i) conserve or modify nutritive value, e.g. steaming of green vegetables (ii) improve palatability e.g. physical denaturation of Protein <input type="checkbox"/> the positive use of micro-organisms such as bacteria in dairy products: cheese, yoghurt; meat products: salami, chorizo and fermentation of sugar in drinks <input type="checkbox"/> the working characteristics, functional and chemical properties of ingredients to achieve a particular result: 	<p><u>Macronutrients and Micronutrients</u></p> <p>the definition of macronutrients and micronutrients in relation to human nutrition</p> <ul style="list-style-type: none"> <input type="checkbox"/> the role of macronutrients and micronutrients in human Nutrition <p><u>Macronutrients</u> are defined as a class of chemical compounds which humans consume in the largest quantities</p> <p>(i) protein: to include essential amino–acids in relation to nutritional requirements (histidine, isoleucine, lysine, leucine, methionine, phenylalanine, threonine, tryptophan, valine) and non-essential (alanine, asparagine, aspartic acid glutamic acid)</p>	<p><u>Energy requirements of individuals EARs</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> the recommended daily intake (RDI) and the percentage energy values of protein, fat and carbohydrates: monosaccharide’s (sugars) polysaccharides (starch) and non-soluble polysaccharides (dietary fibre) vitamins and minerals, for: <ul style="list-style-type: none"> (i) a range of life-stages: toddlers, teenagers, early, middle and late adulthood (ii) individuals with specific dietary needs or nutritional deficiencies to include coeliac disease; diabetes (type 2 diabetes only to be considered), dental caries; iron deficiency anaemia; obesity; cardiovascular disease (CVD); calcium deficiencies to include bone health; nut or lactose (dairy) intolerances (iii) individuals with specific lifestyle needs to include vegetarians: lacto-ovo, lacto, vegan, and those with religious beliefs that affect choice of diet, to include Hindu, Muslim, Jewish 	<p><u>Food Provenance</u></p> <p><u>Multicultural foods</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> food origins to include where and how foods are grown, reared, or caught <input type="checkbox"/> food miles, impact on the carbon footprint, buying foods locally <input type="checkbox"/> impact of packaging on the environment versus the value of packaging <input type="checkbox"/> sustainability of food: the impact of food waste on the environment, local, global markets and communities, effect of food poverty <input type="checkbox"/> food security: access to safe sufficient food for all (World Health) <p>the distinctive features, characteristics and eating patterns of different cuisines. 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</p>	

	<ul style="list-style-type: none"> • <input type="checkbox"/> experiment with the commodity to explore physical and chemical changes that occur as a result of given actions • <input type="checkbox"/> consider complementary actions of a commodity in a recipe • <input type="checkbox"/> prepare and cook dishes using the commodities 	<p>(i) carbohydrates – gelatinisation, dextrinization</p> <p>(ii) fats/oils – shortening, aeration, plasticity and emulsification</p> <p>(iii) protein – coagulation, foam formation, gluten formation, denaturation (physical, heat and acid)</p> <p>(iv) fruit/vegetables – enzymic browning, oxidisation</p> <ul style="list-style-type: none"> <input type="checkbox"/> reasons why particular results may not always be achieved, e.g. a sponge cake sinks, a sauce goes lumpy <input type="checkbox"/> how to remedy situations when desired results may not be achieved in the first instance <p>Food spoilage how to store foods correctly: refrigeration/freezing, dry/cold storage, appropriate packaging/covering of foods</p> <ul style="list-style-type: none"> <input type="checkbox"/> the importance of date-marks, labelling of food products to identify storage and preparation <input type="checkbox"/> the growth conditions, ways of prevention and control <p>methods for enzyme action, mould growth and yeast production</p> <ul style="list-style-type: none"> <input type="checkbox"/> the signs of food spoilage, including enzymic action, mould growth, yeast production and bacteria 	<p>(ii) fats, oils and lipids: saturated fats, monounsaturated fats, polyunsaturated fats and essential fatty acids</p> <p>(iii) carbohydrates: monosaccharides, disaccharides and polysaccharides</p> <p>Micronutrients are required by humans throughout life in small quantities to facilitate a range of physiological functions</p> <p>(i) fat soluble vitamins: vitamin A, and vitamin D</p> <p>water soluble vitamins: B vitamins: B1 thiamin B2 riboflavin, B3 niacin, B12 cobalamin and B9 folic acid (folate) and vitamin C</p> <p>(ii) minerals: calcium, iron, potassium and magnesium</p> <p>(iii) trace elements, to include: iodine and fluoride</p> <p>Learners must know and understand for each named macro nutrient and micronutrient:</p> <ul style="list-style-type: none"> <input type="checkbox"/> the specific function 	<ul style="list-style-type: none"> <input type="checkbox"/> how nutrients work together in the body, e.g. complementary actions <input type="checkbox"/> basal metabolic rate (BMR) and physical activity level (PAL) and their importance in determining energy requirements <p>Learners must have a sound awareness of other common dietary issues including coronary heart disease (CHD), cholesterol and liver disease</p> <p>Plan balanced diets</p> <p>recommend guidelines for a healthy diet</p> <ul style="list-style-type: none"> <input type="checkbox"/> identify how nutritional needs change due to age, life style choices and state of health <input type="checkbox"/> plan a balanced diet for: <ul style="list-style-type: none"> (i) a range of life-stages: toddlers, teenagers, early, middle and late adulthood (ii) individuals with specific dietary needs or nutritional deficiencies to include coeliac disease; diabetes (type 2 diabetes only to be considered), dental caries; iron deficiency anaemia; obesity; cardiovascular disease (CVD) calcium deficiencies to include bone health; nut or lactose (dairy) intolerances (iii) individuals with specific lifestyle needs to include vegetarians: lacto-ovo, lacto, vegan, and those with 	<p>Presentation or serving techniques.</p> <ul style="list-style-type: none"> <input type="checkbox"/> traditional and modern variations of recipes to include variations of recipes to include changing use of food commodities, changes to nutritional guidelines, and use of modern cooking methods and or equipment <input type="checkbox"/> meal structures: presentation of menus within different Cultures <p>Food Manufacturing</p> <ul style="list-style-type: none"> <input type="checkbox"/> primary stages of processing and production to include point of origin, the transporting, cleaning and sorting of the raw food e.g. bags of fruit. <input type="checkbox"/> secondary stages of processing and production to include how primary products are changed into other types of products, e.g. wheat to bread; milk to cheese and yoghurt; fruit to jams, jellies and juices. <input type="checkbox"/> how processing affects the sensory and nutritional properties of ingredients e.g. cured meat products <input type="checkbox"/> technological developments that claim to support better 	
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Subject: GCSE Food Nutrition	Autumn HT 1 NEA1 : Science investigation	Autumn HT 2 NEA 2 :	Spring HT 1	Spring HT 2	Summer HT 1	Summer HT 2 Revision & Exam
Year 11	<p>NEA1 – Release date 1st Sept</p> <p>2000 words, science experiment (approx. 6 slides)</p> <ul style="list-style-type: none"> • Research • Plan • Hypothesis • Make – photos and annotation • Evaluate • Conclude 	<p>NEA 2 release date 1st Nov</p> <p>30 slides</p> <ul style="list-style-type: none"> • Research Eg • Research range of topics • Research subject specific • Questionnaire • Visit • Taste test similar product • Trialled dishes • Reasons for choice (trial dishes during practical lessons) 	<ul style="list-style-type: none"> • Justification and changes to improve • Plan of action • Equipment <p>Practical assessment</p>	<ul style="list-style-type: none"> • Cost and nutrition • Changes/ Ideas • Evaluation 	<ul style="list-style-type: none"> • Revision 	