



KS4 CURRICULUM RATIONALE

SUBJECT MISSION:

Our aim is to develop young people who:

- are confident to cook healthy meals using a wide variety of equipment safely and accurately
- are aware of how their food was grown/reared
- have knowledge of the nutrients in their food
- know how to make healthy choices throughout their life
- are aware of the factors that influence the food they eat

WHY HAVE WE CHOSEN OCR GCSE FOOD PREPARATION AND NUTRITION?

We have chosen to offer GCSE Food Preparation and Nutrition rather than Level 2 Hospitality and Catering because we feel it meets the needs of our learners best. There is an appropriate balance between practical and theory elements, and the content links to Science, PE and Geography which are subjects frequently chosen by our students at KS4 at Coopers.

Whilst GCSE Food Preparation and Nutrition is also offered by AQA and Eduquas, we choose to run the OCR specification. The subject content of all these exam boards is the same, as is the weighting of the Non Exam Assessments but the style of the NEAs and written paper differ for each board. The style of the two OCR Non Exam Assessments are straightforward, logical and accessible for all students, with clear and accessible mark schemes. In particular, NEA2 Food Preparation Task focuses on the 3 hour practical exam without the complication of the additional skills trials as seen in other exam boards which still must be completed within the same 20 hour period. The recommended hours for the OCR NEA are achievable for the portfolios to be submitted, and allow our students to achieve excellent results. The written paper has a good question structure without multiple choice questions, with short and long answer questions which are accessible for all learners at all levels.

<https://www.ocr.org.uk/Images/234806-specification-accredited-gcse-food-preparation-and-nutrition-j309.pdf>

HOW IS THE COURSE STRUCTURED?

Content Overview	Assessment Overview	
<p>This content should be covered throughout all three components.</p> <p>Section A Nutrition</p> <p>Section B Food: food provenance and food choice</p> <p>Section C Cooking and food preparation</p> <p>Section D Skills requirements: preparation and cooking techniques</p>	<p>Food Preparation and Nutrition (01)*</p> <p>100 marks**</p> <p>1 hour 30 minutes written examination paper</p>	<p>50% of total GCSE</p>
	<p>Food Investigation Task (02 or 03)*</p> <p>45 marks</p> <p>Non-examined assessment (NEA)</p>	<p>15% of total GCSE</p>
	<p>Food Preparation Task (04 or 05)*</p> <p>105 marks</p> <p>Non-examined assessment (NEA)</p>	<p>35% of total GCSE</p>

The GCSE specification has no optional modules so the full specification is compulsory. There is limited optionality in the Non Exam Assessments, with just two options within each NEA being set each year – NEA1 in September and NEA2 in November of year 11. NEA2 historically has a choice between a commodity based context, a nutrition or culinary traditions focus, with students picking the context of their own choice to allow them ownership of their NEAs.

We have chosen to plan our curriculum around Food Commodities to allow key topics, such as Nutrition, Food Provenance and Food Science, to be taught and developed as strands across the whole of year 10 as can be seen in the table on the next page. This helps students to make cross specification links to help them connect and apply their knowledge from different areas, and allows key content to be revisited throughout the course. This reflects the style of questioning in the written exam, whereby different sections of the specification can be tested together within the same question. If the specification was planned as standalone topics students would not benefit from making these links.

Due to our increased curriculum time at KS3, many practical skills are introduced throughout KS3 so these can be revised, further developed and refined at KS4 – see the final page for a representation of when new skills are introduced. High level skills such as fish filleting, chicken jointing, emulsion saucemaking and pasta making, are not introduced until year 10 to reflect their complexity, difficulty and skill. Prior practical skills continue to be developed and refined by being used in dishes of increased complexity as students move through year 10, to prepare them for a mock practical exam towards the end of year 10 – a vital step in preparation for the practical element of year 11. The theory content and practical skills are sequenced and linked together to ensure students make the connections between practicals and theory topics. This is especially important with the Food Science elements as students learn by seeing the science in action within a recipe. Practical are reviewed and adjusted each year depending on the strengths and weaknesses of different cohorts skills, and also in response to dishes or current issues seen in the media.

The foundations for GCSE Food Preparation and Nutrition can be seen throughout the KS3 curriculum which has been reverse engineered around the GCSE specification. This allows students to activate prior KS3 knowledge at KS4, in both knowledge and practical skills. This is important in this subject as, due to the timing and length of the Non-Exam Assessments, much of Year 11 is spent on these controlled assessments which are worth 50% of the final grade. Year 10 must therefore frontload the theory, which then continues to be revised throughout Year 11 via focused homeworks which continues to build on the knowledge gained during year 10.

		Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
		Cereals and Carbohydrates	Milk/Dairy Foods and Fats	Meat, Fish, Poultry and Protein	Eggs, Beans, Non-Dairy Protein	Mock NEA2 planning	Mock NEA2 practical Fruit and Vegetables
	Students will develop the range of practical skills required for the NEA's via weekly practicals - recipes will include British and International cuisines. Food safety will be embedded throughout the course.						
Year 10	Nutrition	Energy balance, government guidelines, diabetes, dental health, coeliac. Carbohydrates (complex and sugar), fibre, water Nutrients in cereals	Fats, obesity/CHD, Micronutrients: Vitamins, Minerals Recipe adaptation to reduce fat content Nutrients in fats, milk and dairy products	Protein, biological complementary proteins Nutrients in meat, fish and poultry	Meeting nutritional needs of individuals throughout life stages Nutrients in eggs, beans, non-dairy protein	Nutritional analysis	Nutrients in fruit and vegetables
	Food Science	Sauce practical investigation Gelatinisation, Gluten formation Raising agents: biological and chemical	Use of micro-organisms to make cheese and yogurt. Emulsions. Shortening. Plasticity. Dextrinization. Protein denaturation. Caramelisation Raising agent: steam	Meat and fish structure Effect of cooking Protein denaturation Effect of marinades	Egg investigations: aeration, protein denaturation. Raising agent: steam Effect of different cooking methods	Homework revision tasks	Role of pectin in jam making Heat transfer Enzymic browning and oxidation practical investigation.
	Food Provenance	Intensive and organic production. Primary and secondary production. Red tractor scheme.	Milk production, primary and secondary processing into cheese, butter, yogurt. Cheeses from different regions and countries.	Primary and secondary processing of meat British culinary traditions Meat production methods: intensive, organic, free range, freedom food.	Egg production methods: intensive, organic, free range, freedom food. Beans nuts and seeds	Consideration of provenance of ingredients chosen in response to the brief	Classification of fruit and vegetables. Primary and secondary processing. Environmental impact and sustainability, food miles. British culinary traditions. Genetic modification
	Food choice	Coeliac, gluten free, diabetes. Role of cereals as staple foods in different cultures	Lactose intolerance and milk allergies Milk alternatives. Factors influencing food choice.	Vegetarians (all types)	Vegetarians Nut allergies	Students to apply knowledge gained by explaining the suitability of dishes chosen for their target audience	Garnishing and finishing techniques
	Additional focus	Healthy eating guidelines Food safety	Factors affecting food choice Food labelling Fortification	Reasons why food is cooked Food poisoning	Sensory analysis	Timeplan and dovetailing	Food security

WHY IS THE CURRICULUM PLANNED IN THIS SEQUENCE?

We have chosen to plan our curriculum around Food Commodities to allow key topics, such as Nutrition, Food Provenance and Food Science, to be taught and developed as strands across the whole of year 10 (see the table on the previous page). This helps students to make cross specification links to help them connect and apply their knowledge from different areas, and allows key content to be revisited throughout the course.

NUTRITION: Healthy eating is a key concept in the GCSE, so its inclusion in term 1 reflects its importance. It has been taught throughout KS3 so helps students to see the links between KS3 and KS4 study. Energy balance is a key concept so is included in term 1 as it is then referred to throughout the teaching of all 3 macronutrients which are taught in the first 3 terms of year 10, reflecting their links to different food commodities. Carbohydrates are taught first as it was last taught in depth in year 7, so this allows it to be taught thoroughly in term 1 then revisited throughout KS4. Fats is sequenced next because it was taught in some depth in year 9 so more time can be spent on the food science and food provenance area of the commodity, whilst building on KS3 nutrition knowledge. Protein is sequenced next as term 3 is where the highest knife skills are introduced via meat and fish so this fits with the bigger picture. Protein was taught in good depth in year 8 allowing further development from these sound foundations. Micronutrients are included throughout year 10, rather than all at once, when each is linked to the commodity – for example fat soluble vitamins and calcium during the milk and fats term, and iron and the B vitamin group during meat and fish. This is due to the sheer volume of micronutrients in the specification, as experience has shown that teaching micronutrients in food commodity context chunks down the content into manageable pieces. In term 4 students practice how to apply their knowledge of nutrition to meal planning for target groups with different nutritional needs throughout life. This is planned halfway through year 10, as earlier would not allow them sufficient time to further develop their knowledge of the different nutrients. Students will revisit nutritional analysis via the Mock NEA2 later in year 10 where they can apply their nutritional knowledge to adapting ingredients in recipes and seeing the impact this has on the nutritional analysis of dishes.

FOOD SCIENCE: This strand of the specification contains a number of key terms and terminology which have been discussed at a low level through KS3 due to their complexity. The different aspects of food science have been spread throughout year 10 rather than being taught together as students become very easily confused and overloaded otherwise. The sequencing of the food science content is directly linked to the order in which the commodity and practicals are taught. Practical have been planned to encompass the different food science concepts that students must be familiar with and this allows students to see the food science in action and can learn by doing. For example, in term 1 students will carry out an investigation into different starches and will be introduced to a viscosity mat as a way of measuring the thickness of a gelatinised sauce. This links to the commodity of cereals as different starches are obtained from different cereals. In term 2 they make cheese which not only demonstrated the steps of cheesemaking but also illustrates protein denaturation by acids, which is again picked in term 3 as the effect of marinades on meat. Students are introduced to planning scientific investigations in term 1, carry out their own planning in term 2 and carry out a teacher led mock NEA1 Food Investigation Task in term 4 to prepare students for the format and rigors of NEA1 in September of year 11.

FOOD PROVENANCE: Food provenance has been sequenced to tie in with the key macronutrient focus of each term, so the order of food provenance is directly linked to the macronutrient and commodity. Primary and secondary processing are introduced during cereals ie wheat into flour, flour into bread, and picked up again in milk ie milk pasteurisation, milk into cheese. Different methods of production are developed and revisited throughout year 10 in a spiralling manner through different food commodities. Environmental impact of food production is included for each commodity, allowing a greater

understanding and context for different commodities as each builds on the previous commodity. Students will apply their knowledge of food provenance and seasonality in term 4 via the teacher led mock NEA2 Food Preparation Task. This is planned halfway through year 10, as earlier would not allow them sufficient time to further develop their knowledge of food provenance.

FOOD CHOICE: Factors affecting food choice is taught in year 9 so students have a good recent foundation of this strand of the specification as a starting point for development. Again, the content is sequenced to complement the commodity being taught to allow students to make links between different areas of the specification ie gluten is found in cereals hence why coeliac disease is covered in term 1, lactose is found in milk so lactose intolerance is in term 2. Students will apply their knowledge of food choice in term 4 via the teacher led mock NEA2 Food Preparation Task. This is planned halfway through year 10, as earlier would not allow them sufficient time to further develop their knowledge of food choice.

ADDITIONAL FOCUS: As seen in the table above, we have highlighted key topics for each term that are again sequenced to complement the commodity focus. For example food labelling is included in term 2 when we are revising nutritional analysis, and food poisoning is a focus in term 3 as meat and fish are frequent vehicles of contamination. Timeplans and dovetailing are taught during the teacher led mock NEA2 Food Preparation Task as students have not previously dovetailed multiple dishes, due to practical lesson time constraints.

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
	MOCK NEA1 & NEA1	NEA 1&2	NEA 2	NEA 2	Revision and preparation for final exam	Revision continued, dependant on date of exam
Year 11	Assessment of the students' understanding of the working characteristics, functional and chemical properties of ingredients		Assessment of 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 3 hours, planning in advance how this will be achieved.		Intensive revision programme.	
	Food Investigation Task Non-examined assessment 1 (NEA1) Task setting by OCR Time: Recommended 10 hours. Outcome: Written or electronic report including photographic evidence. (1500-2000 words)		Food Preparation Task Non-examined assessment 2 (NEA2) Task setting by OCR Time: Recommended 20 hours (including 3 hour final assessment within a single block period.) Outcome: Written or electronic portfolio including photographic evidence limited to no more than 10 pages (20 sides) A4 including all photographs, graphs and charts.			
	Theory homework will be set regularly via Seneca throughout the Non Exam Assessment period to revise theory throughout the year					



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FOOD AND NUTRITION PRACTICAL SKILLS CURRICULUM MAP

This map shows when new skills are first introduced – these skills are then further developed and refined

OCR GCSE SKILL GROUPS	Knife skills (KN)	Set a mixture (SM)
	Preparation and techniques (PT)	Raising agents (RA)
	Cooking methods (CM)	Dough (DO)
	Sauces (SA)	Judge and manipulate sensory properties (JA)



YEAR 7

KN1: bridge hold	KN3: peel	PT2: shred	PT5: grate	PT7: shape	PT12: roll/wrap	CM1: safe use of the hob	CM5: dry-frying	CM8: safe use of the grill	CM10: baking	RA2: use biological raising agent	DO1: bread making	JS1: use of seasoning herbs and spices
KN2: claw grip	KN4: slice, dice, julienne	PT4: crush	PT6: peel/ de-skin/ deseed	PT11: marinate	PT13: skewer	CM2: boiling/ simmer	CM6: shallow frying	CM9: safe use of the oven	SA1: reduction sauce	RA3: use chemical raising agent	DO2: rubbing in	JS2: change texture and flavour

KN5: slice raw and cooked meat and fish or alternatives	PT1: mash	PT8: pipe	PT14: coat/ panne	PT15: shape and bind wet mixtures	CM7: stir-frying	CM11: roasting	SM1: heating (coagulation)	SA2: blended sauce
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YEAR 9

RA1: use egg (colloid foam) as a raising agent	RA4: use steam in a mixture	DO3: shortcrust pastry	DO4: flaky/puff pastry	DO5: rolling/lining tin	DO6: glazing/ finishing/ piping	JS3: presentation and food styling
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KN6: portion/ fillet chicken	PT9: blend	CM4: steaming	YEAR 10
KN7: fillet fish	PT10: juice	CM12: casseroles /braising	
PT3: scissor-snip	CM3: blanching/ poaching	SA3: emulsion sauce	

YEAR 10

SM2: removal of heat
