Ks3 – Ks5 Curriculum

Last Updated: Spring 2023

Technology: Food and Nutrition

The Food and Nutrition department at Arrow Vale aims to foster a love of cooking and creating. Many aspects of the food and nutrition curriculum involve promoting students' creativity, by using their knowledge and skills to design and create inventive dishes and meals. We always encourage adaptation of dishes and recipes to suit student's own individual tastes and requirements.

We aim to provide every student with the opportunity to develop their practical skills, enabling students to cook a range of nutritious dishes, so that they can feed themselves and their families into the future. We also aim to develop a good awareness of health, safety and hygiene considerations in the professional kitchen, so that students can take responsibility for managing the equipment and ingredients that they use, ensuring they produce safe and high-quality products.
The food and nutrition curriculum follows through from KS3 up to KS5. Our curriculum is sequenced to ensure that students master basic concepts by regularly returning to key ideas and embedding this knowledge, before building on this in future lessons. This ensures that throughout a student's journey through the key stages, they gain cumulative knowledge and confidence in their own abilities.

The curriculum provides ambition and challenge for all and is designed to stretch every student and support their own unique abilities and knowledge. This may be through providing structure and guidance to enable students to reach their full potential, or by providing stretch and challenge and going for gold activities, to further push and extend current knowledge and learning. Regardless, end points are ambitious and ensure that required knowledge is committed to memory.
When students study food and nutrition at key stage 5, we aim to further build upon the knowledge and skills that students have gained throughout their learning journey. There is a heightened emphasis on high-level skills and techniques, so that students are able to create and make professional quality dishes, that suit a wide range of differing needs and requirements. Students at KS5 also need to further develop their understanding of the scientific principles behind food and nutrition.
Students learn a wide range of key vocabulary and terminology in food and nutrition. This vocabulary is important for students to access not just the food and nutrition course, but it can also be linked across to other subjects. There are many links with science from understanding heat transference, through to the chemical structure and properties of ingredients.

Post-pandemic, we aim to focus on building confidence in developing practical skills and abilities, and instilling independence and resilience through our curriculum. Students have regular practical lessons where they are able to develop these high-level skills, techniques and abilities.

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Ks3 – Ks5 Curriculum

Term/Length of Unit	Outline	Knowledge and skills	End points and associated key assessments
All year – one lesson every other week.	Understand and apply food safety and hygiene in a professional kitchen	To understand the different components of food safety and hygiene and why they are important in a professional kitchen To produce guidance on the key food safety and hygiene regulations. To use their knowledge of food safety and hygiene in all practical lessons	Baseline assessment – written and practical. Students to have a good understanding of food safety and hygiene. To explain why these are important to reduce the risk of food-induced ill health and to use these procedures when handling food. Regular assessment of food safety and hygiene in practical lessons.
All year – one lesson every other week.	Understand and apply the principles of healthy eating	To understand the 'Eatwell Guide' and Government guidelines for healthy eating. Produce a meal plan showing their understanding of the 'Eatwell guide'. Cook a recipe showing an understanding of the 'Eatwell guide'.	Students are assessed in lesson to ensure they can show an understanding of how to eat healthily following government guidelines.
All year – one lesson every other week.	Understand and apply the principles of nutrition and health	To understand the key macro and micro-nutrients in food. To name sources of each nutrient and to explain the functions of nutrients in the body. To complete a worksheet and questions relating to the different nutrients in food. To identify key nutrients in practical dishes.	Students are assessed in lesson to ensure they have an understanding of key nutrients, including what foods provide them and what they are needed for. Mini assessment – written assessment based on theory taught in previous units.
All year – one lesson every other week.	Cook a repertoire of predominantly savoury dishes so that they are able to feed themselves and others a healthy and varied diet	To have knowledge of how to use a variety of practical skills to produce high quality and healthy dishes. To understand how to adapt dishes to suit different needs and tastes. To produce a range of savoury dishes using a variety of skills. To make adaptations to recipes to suit individual needs and tastes.	Students are assessed on their practical skills

All year – one lesson every other week.	Become competent in a range of cooking techniques.	For students to have knowledge of how to use a range of practical cooking techniques. To demonstrate a range of techniques throughout cooking different dishes. For example, selecting and preparing ingredients, using utensils and electrical equipment, applying heat in different ways, using awareness of taste, texture and smell to decide how to season dishes and combine ingredients, adapting and using their own recipes.	For students to use a range of techniques to produce high quality, healthy dishes. Knife skills assessment. Verbal feedback during practical lessons on skills and techniques demonstrated. Self-evaluation of dishes.
All year – one lesson every other week.	Understand the source, seasonality and characteristics of a broad range of ingredients.	For students to understand where food comes from and the issues around seasonality of different ingredients. To create a seasonality recipe mat. To use seasonal ingredients to make a range of dishes.	Students are assessed in lesson to ensure they have a good understanding of seasonality and why it is important.

KS4 Curriculum

Term/Length of Unit	**Outline**	**Knowledge and Skills**	**End points and associated key assessments**
Food Safety Unit (6 weeks) delivered in Autumn 1	Food Hygiene, food safety, HACCP and food spoilage	Importance of food safety (including the results of poor food safety), personal hygiene, hazards in the kitchen, coloured chopping boards, fridge organisation Difference between preservation methods eg Canning, pickling, curing, freezing, vacuum packing etc. The purpose of and types of food packaging	Baseline assessment at the start of the unit Exam questions focused on food safety
Sugars, Fats in Oils (6 weeks) delivered in Autumn 1 and 2	The functions, sources, and examples of sugars, fats and oils	Differences between sugars fats and oils The process of butter making The nutritional values of fats (saturated and unsaturated) The functions of fats and oils	Exam questions focused on sugars, fats and oils

		The nutritional value and function of sugar The impact of a high fat and/or a high sugar diet on the body The influence of fat, oil and sugar on cholesterol, diabetes, and other health conditions	
Dairy (3 weeks) Delivered in Autumn 2	The functions, sources, and examples of dairy	Different examples of dairy products and how these fit into the eat well guide The purpose of dairy products in the human diet Developing practical skills when cooking with diary products The difference between primary and secondary processing in cheese, yoghurt and other dairy product making	Exam questions focused on the function, sources and examples of dairy
Meat, Fish, Eggs and Poultry (8 weeks) Delivered in Spring 1 and Spring 2	The functions, sources, and examples of meat, fish, eggs and poultry	Different examples of key products and how these fit into the eat well guide The purpose of key products in the human diet Developing practical skills when cooking with key products The difference between red meat and white meat and the influence this has on health The different categories of seafood	Exam questions focused on the function and sources of meat, fish, eggs and poultry Practical assessment on portioning chicken
Fruit, Veg, Nuts, Seeds and Pulses (4 weeks) delivered in Spring 2	The functions, sources, and examples of Fruit, Veg, Nuts, Seeds and Pulses	Different examples of key products and how these fit into the eat well guide The purpose of key products in the human diet Developing practical skills when cooking with key products	Exam questions focused on the function and sources of fruit, veg, nuts and pulses

		The different categories of fruits and vegetables and the health benefits of these The benefits of nuts, seeds and pulses in vegetarian and vegan diets	
Cereals (summer 1) **NEA 1 Mock Exam and Revision** (summer 1 and 2)	The functions, sources, and examples of cereals NEA1 – Food Science investigation and the functions of ingredients Revision of all units	Different examples of cereals and how these fit into the eat well guide The purpose of cereals in the human diet Developing practical skills when cooking with cereals The benefits of nuts, seeds and pulses in a human diet The key parts of a food science investigation eg the aims, hypothesis, method, results and conclusion (main ingredients can change yearly) How to revise effectively Key terminology Key purpose, function, source and examples of food types taught throughout the year	Exam questions focused on the function and sources of cereals NEA 1 (coursework) Full Written Paper Mock Exam

Term/Length of Unit	Outline	Knowledge and Skills	End points and associated key assessments
Principles of food and nutrition unit (3 weeks) Autumn 1.	Scientific principles behind preparing and cooking foods.	How ingredients behave in food products and their function in a recipe.	Exam questions focused on functions of ingredients.
NEA 1 – the food investigation assessment. (6 weeks) Autumn 1 and 2.	Non-Examination Assessment 1. Students are to complete a food science investigation. EDUQAS release the title for this at the start of September (this title changes each year).	The functions of ingredients in food products. How to carry out a food investigation. The scientific principles behind preparing and cooking foods.	NEA1 marking – 15% of overall grade.
Principles of food and nutrition (2 weeks) Autumn 2	Key nutrients in the diet (protein, carbohydrates, fats, vitamins and minerals).	The nutrients provided by different foods. Why the body needs these nutrients. Key nutrients needed for good health.	Exam questions focused on key nutrients
NEA 2: The food preparation assessment. (10 weeks) Autumn 2 and Spring 1	Non-Examination assessment 2. Students are to complete the food preparation assessment. EDUQAS release the title for this at the start of November (this title changes each year).	Research skills to investigate the title. Testing and trialling to narrow down ideas. Planning the task by dovetailing a sequence of work. Knowledge of health, safety and hygiene procedures. High-level preparation, cooking and presentation skills. Evaluation skills.	NEA2 marking – 35% of overall grade.

Core knowledge (5 weeks) Spring 2	**The science of cooking food, technological developments, cultures and cuisines.**	Different methods of heat transference. How to maintain the nutritional value of foods through preparation. Different types of cuisine available throughout the world. Factors affecting food technology. Importance of new technologies on food production and processing. Positive and negative health implications of technological developments.	Exam questions focused on the science of cooking food, technological developments, cultures and cuisines.
Revision for written exam (summer 1 and 2)	Revision of all units Practising exam technique.	How to revise effectively Key terminology Key purpose, function, source and examples of commodities taught throughout the year. Practising exam questions and marking answers using mark schemes.	Exam questions and full papers based on the course content.

KS5 Curriculum

Term/Length of Unit	Outline	Knowledge and Skills	End points and associated key assessments
Food safety and hygiene (3 weeks) Autumn 1.	Food safety in practice.	AC 1.1 Explain how individuals take responsibility for food safety AC 1.2 Explain methods used by food handlers to keep themselves clean and hygienic AC 1.3 Explain methods used to keep work areas clean and hygienic	Exam questions focused on food safety and legislation. Practical assessment (knife skills).
Nutrients: Carbohydrates (4 weeks) Autumn 1.	Nutrients: Carbohydrates. Nutritional needs of humans.	AC 2.2 Classify carbohydrates in foods. Sources, nutritional values, glycaemic index. AC 2.3 The structure of carbohydrates. AC3.1 describe functions of carbohydrates in the human body (growth and development, energy production and regulating metabolism). 3.2 Explain characteristics of unsatisfactory nutritional intake.	Exam questions focused on Carbohydrates. Practical assessment on carbohydrates (enriched dough, pasta making)
Nutrients: Protein (4 weeks) Autumn 2.	Nutrients: Protein. Nutritional needs of humans.	AC 2.2 Classify proteins in foods. Sources, nutritional values. AC 2.1 The structure of proteins AC3.1 describe functions of protein in the human body (growth and development, energy production and regulating metabolism). 3.2 Explain characteristics of unsatisfactory nutritional intake.	Exam questions focused on protein. Practical assessment on protein (portioning chicken)
Nutrients: Lipids (4 weeks) Autumn 2 and Spring 1	Nutrients: Lipids. Nutritional needs of humans.	AC 2.2 Classify lipids in foods. Sources, nutritional values. AC 2.1 The structure of Lipids. AC3.1 describe functions of lipids in the human body (growth and development, energy production and regulating metabolism). 3.2 Explain characteristics of unsatisfactory nutritional intake.	Exam questions focused on lipids. Practical assessment on lipids (chicken or mushroom Kiev)

Nutrients: Vitamins, Minerals and Water (3 weeks) Spring 1	Nutrients: Vitamins, minerals and water. Nutritional needs of humans.	AC 2.2 Classify Vitamins and Minerals in foods. Sources, nutritional values. AC 2.1 The structure of Vitamins and minerals. AC3.1 describe functions of Vitamins, minerals and water in the human body (growth and development, energy production and regulating metabolism). 3.2 Explain characteristics of unsatisfactory nutritional intake.	Exam questions focused on vitamins, minerals and water.
Allergenics and food related illnesses. (2 weeks) Spring 1.	Allergies, food intolerances, coeliac disease and implications for consumers and businesses.	AC 1.4 Analyse risks associated with food safety.	Exam questions focused on allergies and intolerances.
Mock Unit 1 assessment and real Unit 1: Internal assessment. (10 weeks) Spring 2 and Summer 1	Unit 1: Internal assessment	AC 1.4 analyse risks associated with food safety AC 2.3 assess the impact of food production methods and their effects on nutrients AC 3.3 Analyse nutritional needs of specific groups AC 3.4 Assess how different situations affect nutritional needs AC 4.1 Evaluate fitness for purpose of diets AC 4.2 calculate nutritional requirements for given individuals AC 5 Menu planning AC6 Preparation and cooking techniques	Marking of Unit 1 Internal assessment – 50% of overall grade.

Revision for Unit 1 External written exam. Summer 1 and summer 2	Revision of all AC's ready for written exam.	Revision techniques, exam practise, past papers and mark schemes.	Marking of past questions.

Term/Length of Unit	**Outline**	**Knowledge and Skills**	**End points and associated key assessments**
Unit 3 (12 weeks) Autumn 1 and 2.	Experimenting to solve food production problems	**AC1.1** explain how food properties can be **changed** **AC 1.2 e**xplain **variables** that affect physical properties of food **AC2.1** set **success criteria** for scientific investigations **AC2.2** Obtain **outcomes** from scientific investigations **AC2.3** **record outcomes** of investigative work **AC2.4** process data **AC2.5** review **suitability of investigative methods** **AC3.1** analyse food production situations **AC3.2 propose** practical options to solve food production problems **AC3.3** **scientifically justify** proposed options	Assessment of practical experiments. Marking and feedback on experiment write up's
Unit 2 (6 weeks) Spring 1		**AC1.1** describe properties of micro-organisms **AC 1.2** Asses how changing conditions affect growth of microorganisms in different environments **AC 1.3** Explain how micro-organism affect food quality **AC 1.4**	Written and verbal feedback on classwork for each AC.

		Assess how preservation methods prevent the growth of micro-organisms **AC2.1** explain the physiology of food intolerances **AC2.2** Explain the physiological basis of food allergies **AC2.3** explain the physiological basis of food poisoning **AC2.4** Describe the symptoms of food induced ill health **AC3.1** describe food safety hazards in different environments **AC3.2** assess risk to food safety in different environments **AC3.3** Explain control measures used to minimize food safety risks **AC3.4** Justify proposals for control measures in different environments	
Unit 3 (6 weeks) Spring 2	Completing coursework	**AC1.1** explain how food properties can be **changed** **AC 1.2 e**xplain **variables** that affect physical properties of food **AC2.1** set **success criteria** for scientific investigations **AC2.2** Obtain **outcomes** from scientific investigations **AC2.3** **record outcomes** of investigative work **AC2.4** process data **AC2.5** review **suitability of investigative methods** **AC3.1** analyse food production situations **AC3.2 propose** practical options to solve food production problems **AC3.3** **scientifically justify** proposed options	50% of overall grade. Internally assessed and externally moderated.

Unit 2 (8 weeks) Summer 1 and 2		**AC1.1** describe properties of micro-organisms **AC 1.2** Asses how changing conditions affect growth of microorganisms in different environments **AC 1.3** Explain how micro-organism affect food quality **AC 1.4** Assess how preservation methods prevent the growth of micro-organisms **AC2.1** explain the physiology of food intolerances **AC2.2** Explain the physiological basis of food allergies **AC2.3** explain the physiological basis of food poisoning **AC2.4** Describe the symptoms of food induced ill health **AC3.1** describe food safety hazards in different environments **AC3.2** assess risk to food safety in different environments **AC3.3** Explain control measures used to minimize food safety risks **AC3.4** Justify proposals for control measures in different environments	Mock exam for Unit 2 and feedback on mock exam.
Unit 2 Exam Summer 2.	Unit 2 Exam	**AC1.1** describe properties of micro-organisms **AC 1.2** Asses how changing conditions affect growth of microorganisms in different environments **AC 1.3** Explain how micro-organism affect food quality **AC 1.4** Assess how preservation methods prevent the growth of micro-organisms **AC2.1** explain the physiology of food intolerances **AC2.2** Explain the physiological basis of food allergies **AC2.3** explain the physiological basis of food poisoning **AC2.4**	50% of overall grade.

		Describe the symptoms of food induced ill health **AC3.1** describe food safety hazards in different environments **AC3.2** assess risk to food safety in different environments **AC3.3** Explain control measures used to minimize food safety risks **AC3.4** Justify proposals for control measures in different environments	