

## **The Food and Nutrition Curriculum**

In Food and nutrition, across all key stages, it is our intent for students develop the creative, technical and practical skills needed to thrive both in school and later in life. We encourage them to gain vital life skills enabling them to feed themselves and others affordably, safely and nutritiously, now and in the future. Our curriculum is accessible to all, allowing students to become self-motivated and confident learners, who can work independently as well as part of a team.

Through teaching and learning, we encourage investigation, experimentation, evaluation and questioning - How can I improve on that dish next time? Students will develop the life skills and knowledge associated with a healthy lifestyle, learning about the important nutrients to include in their daily diet, and well as and cooking well-balanced, nutritious dishes, with a focus on sustainability, savoury products and key technical skills. Cultural awareness and a focus on the relationship between diet and health is embedded within the curriculum. We encourage a caring, safe, inclusive and disciplined environment, allowing students to investigate in safe and positive atmosphere, enabling all students to reach their potential and be proud of what they have achieved.

### **Key stage 3**

Students begin in year 9 with basic hygiene, including how to prepare and cook food safely and hygienically, also washing up safely in order to avoid food poisoning. This is practised initially in their first practical lesson on making savoury rice, enabling students to practise basic knife skills. This is important as students have all had different experiences of food education coming from three different middle schools.

Students then learn how to have a healthy and balanced diet, in order to achieve good health throughout life. This is revision for many students, but is useful to reinforce at this stage.

Students continue to practise their basic knife skills whilst making a Ragu sauce, the benefits and versatility of this sauce is explained, and the focus is on adapting this recipe to make it suitable for different diets is also covered.

Students use the whisking method to make a Swiss roll, as it is quick, technical, and the healthiest type of cake to produce. This is followed by an investigation into the use of different sugars in cakes and how they affect the sensory properties, which links with the NEA1 science investigation carried out in GCSE food. The different cake making methods are also explored.

The basic skills of rubbing-in and pastry making are covered with students making cheese straws, followed by an investigation into the differences between home-made macaroni cheese and ready-made versions, enabling them to make the correct health and economic choices. This promotes an awareness of the sensory properties of food, leading on to sensory evaluation, an important skill to be mastered for those students taking GCSE Food and Nutrition.

An awareness of environmental issues is also covered to make students aware of the problems surrounding food waste, the impact of food miles and how they can eat more sustainably to support local food producers, and how ultra-processed foods affects both the environment and our health.

On completion of this module, we hope to enable students to be confident in cooking a variety of straightforward, predominately savoury dishes from scratch, which include both basic and more technical skills, preparing them for potential GCSE Food and Nutrition and future adult life., whilst gaining awareness of the principles of good food hygiene, and how food is produced.

## Key stage 4

In year 10 we focus on learning the theory and food science topics that students need to know in order to be successful in the written examination at the end of year 11, as well as NEA1, the Food investigation task. We cover all the practical skills and techniques that they need to master in order to pass their practical assessment as part of their NEA2, enabling students to develop practical skills and resilience in a safe environment, showing independence and being able to interpret and act on feedback from others.

Theory covered in year 10 begins with the basis of a healthy diet, followed by food hygiene and spoilage, vital before any practical work starts. Practical tasks include portioning a whole chicken and fundamental knife skills, followed by a focus on the macro and micronutrients, interspersed with a practical science investigation, and relevant practical sessions. We cover many basic skills initially, to gauge the skill set of all students, as students have not all completed the food module in year 9.

We follow this with sensory evaluation, as it is necessary to be able to analyse and evaluate students' dishes, also useful when evaluating dishes after each practical and at the end of NEA2. We then look at recipe modification and special diets, moving on to the relationship between diet and health, focusing on the impact of a poor diet, as well as the factors that affect energy requirements. Food commodities is covered next, such as cereal grains, and fruit and vegetables, with practical work focusing on cake making methods, bread and pastry at this point, whilst students learn the high skills associated with these foods, and the scientific reasoning behind these processes.

Students then learn about the factors that affect food choice and the role of water in the diet, closely followed by dietary reference values, and energy balance, and at this point students are introduced to the Nutrients Program which calculates nutrients in different recipes, very useful for later during NEA2. This is followed by a closer look at the different types of sauces, including practical lessons based on making fresh pasta, and another practical science investigation on gelatinisation of starches, encouraging students to begin understanding the science behind cooking techniques.

Students are encouraged to be confident in following a recipe throughout the course, substituting ingredients and cooking method appropriately, and to develop an understanding of different special diets, a very useful skill as they approach adulthood.

We continue to look at food commodities, firstly meat provenance and cooking, then poultry and eggs, which leads on to marinating, and combining and shaping meat products. Students then investigate different international cuisines and begin a mock NEA2 task to practise independent research, selection of recipe ideas, and most importantly how to write a time plan, which is essential when completing NEA2. By exploring different culinary traditions, it will enhance their understanding, appreciation and acceptance of people from a variety of different backgrounds, through the preparation and cooking of food from different countries.

Continuing with the food commodities theme, we then investigate the provenance and nutritional content of dairy products, followed in the summer term by why and how food is cooked; preservation methods, and alternative proteins as well as new and emerging foods, food additives, food security and other environmental issues. These are all favoured topics for the written exam, and will create an understanding of the environmental factors caused by food production and the inequalities of food distribution on a national and global scale, whilst understanding the need to minimise food waste within their own practise.

A food mock written exam is followed by a look at fish cookery, including practical work on filleting and skinning fish, more skills likely to be used in the practical assessment, then we finish year 10 by investigating food allergies and intolerances, which is more common than ever, and finally how your diet changes throughout life, enabling our students to be able to feed themselves and others affordably and nutritiously, now and in the future.

Year 11 begins with the announcement of the NEA1 Food investigation task, which takes six weeks to complete, closely followed by the NEA2 food preparation task, where students must plan, prepare and cook three dishes in a practical assessment of three hours towards the end of year 11. They will use the theory covered in year 10 to support both of these tasks, in order to gain a valuable GCSE. NEA2 is completed by Easter, which then leaves a few weeks of focused revision before the written exam in June.

Our goal is that by studying food preparation and nutrition, we develop independent students who can make healthy and nutritious food choices in a safe environment, whilst demonstrating skill and creativity in high quality practical outcomes.

### **Key Stage 5**

Students begin in Year 12 by recapping and developing knowledge of the Eatwell Guide and current healthy eating guidelines. We look at the current top health related concerns. This is important to refresh as students often come in from other secondary schools.

Students then develop their knowledge of nutrition further by looking at nutritional values, nutritional labelling, nutrition density, biological value, complementary actions of nutrients and GI foods. This builds upon their knowledge of GCSE of nutrients and food labelling and shows how they interlink. They carry out nutritional analysis using computer software on a chosen dish for a particular client group. This requires them to consider the nutritional needs of the chosen group and how they can provide them through diet. This is a key skill to learn not only for exam purposes but for daily life.

Having outlined nutrients and how they are measured, students will then learn about each of the specific macro and micronutrients, considering their functions, sources, excess and deficiencies in greater detail than GCSE. They will look at the function of protein in cooking and how various client groups obtain protein from a variety of sources. Throughout this topic they make Eggs Benedict, Quiche and their choice of vegetarian/vegan dish. This provides them with the ability to put their knowledge of protein into useful practice.

Looking at lipids in a similar way, they carry out an experiment to identify the optimal fat for making pastry and creating a low fat savoury snack for the canteen.

Carbohydrate, Vitamins, Minerals and Water are covered in a similar format, developing their knowledge and applying it to practical lessons and practice exam questions.

Using their enhanced knowledge, students will then learn about the nutritional needs throughout the lifecycle. This is in preparation for the section C aspect of the written exam and also provides them with a deeper knowledge of the specific age groups.

Students will look at the unsatisfactory nutrient intake which can lead to a variety of health problems to include obesity, rickets, diverticulitis and digestive problems, cancer, diabetes, anaemia, dental caries and cardiovascular disease. By looking at these individually students will gain a better depth of knowledge as to how to prevent dietary related diseases through good nutrition.

Vegetarian and Vegan diets are prevalent today and there is a greater awareness surrounding religious diets and therefore we look at these diets to allow pupils to explore how to obtain key nutrients in each diet.

Finally, factors surrounding our energy needs are considered, for example BMR, and BMI and how they are used as an indicator of good health. We consider what DRV's are how to calculate the physical activity level and why this might be useful.

In dispersed with the theory outlined above, and taught by a different teacher, students carry out a series of practical tasks which include advanced food preparation skills, advanced cooking skills and advanced presentation skills, all of which students need to be confident in carrying out, in order to be able to cook a three course meal for a particular group of people as part of their Unit 1 coursework.

Throughout this year, students learn about the legal aspects of food hygiene and safety, the responsibilities of food handlers and their training, the uniform of a chef and key requirements of food premises, all of which are necessary for those that may pursue a career in food or catering.

This is followed by input on how to avoid food poisoning, the different types of food poisoning, symptoms, causes and prevention, and finally a recap on food allergies and intolerances, an issue that we need to be evermore aware of, as it becomes more common.

In the spring term students begin their first controlled assessment, Unit 1, based on meeting the nutritional needs of different groups. This is continued at the same time as the final phase of their nutritional theory as outlined above, culminating in a final practical assessment, showing the practical skills they have learnt previously

On completion of this module we hope that students feel more confident in their cooking ability but also equipped with a vast array of knowledge about how a healthy diet and lifestyle can have a positive impact on reducing diet related diseases, managing medical illnesses and ensure that at each life stage they are confident in the nutritional needs.

Time is spent in the summer term preparing for the exam, working on practising section C especially, which is based on a case study where pupils use the knowledge they have gained throughout the year to analyse a dietary profile. We also dedicate time to preparing for the written exam, ensuring that throughout the year pupils are given practise exam questions to complete, topic tests and mock exams to ensure that they are familiar with the layout of the exam, and how to structure their answers.