

### GCSE Food Preparation and Nutrition

#### Key Stage 4 Curriculum

Students choosing to study Food follow the OCR specification Food Preparation and Nutrition.

<http://www.ocr.org.uk/qualifications/by-subject/food-preparation-and-nutrition/>

Food Preparation and Nutrition allows students to demonstrate their creativity when making food products as well as to gain an understanding of food science and nutrition, including healthy eating.

This three unit specification requires students to develop their application of knowledge and understanding when selecting recipes, planning a number of dishes, producing products and evaluating them.

This course has two pieces of written assessment work

- Food Investigation Non-Examined Assessment Task. This will be assessed in the Autumn Term of Year 11. This is worth 15% of the qualification.
- Food Preparation Non-Examined Assessment Task. This will be assessed in the Spring Term of Year 11 and will include a 3 hour practical of 3 dishes and accompaniments. This is worth 35% of the qualification.

**and** one final 1 ½ hour Examination designed to test their knowledge and understanding, which is worth 50% of the qualification.

The knowledge and understanding is divided into four sections and each are assessed within the three units.

#### Section A

**Major commodity groups and their nutritional content** which include bread, rice, pasta and other starchy foods. Fruit and vegetables, milk and dairy, meat, fish, eggs, beans and other non-dairy sources of protein and foods and drinks high in fat and/or sugar.

**The relationship between diet and health** which includes a balanced diet, government guidelines and major diet related issues.

**Nutritional and dietary needs of different groups of people**, which includes dietary needs at different stages of life, allergies and intolerances, dietary reference values and calculating nutritional value.

**Energy balance**, what we need and how we calculate it.

**Protein, Fats, Carbohydrates, Vitamins and Minerals** investigated to identify types, functions and sources.

**Water**

#### Section B

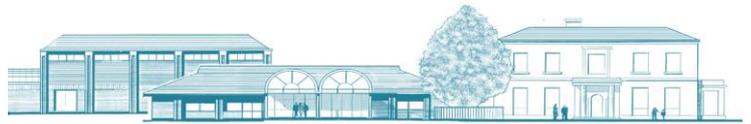
**Food Provenance.** This includes food sources and where they are grown, reared and caught.

**Food Processing and production.** These include primary stages of processing eg how wheat is milled. Secondary stages of processing eg how flour is then used to produce bread and pasta.

**Food processing and preserving methods** both domestic and industrial eg using high temperature and cold temperature, drying, smoking, using acids, salt and sugar and methods of atmosphere packaging.

**Food Security** which looks at our access to food globally and issues related to social, moral and ethical choices. Including food waste, carbon footprint and sustainable resources.

**Technological developments** to support better health and food production. This includes fortifying foods with specific nutrients.



## A Guide to the Curriculum at Key Stages 3 (Years 7-9) and 4 (Years 10 & 11)

**Using additives** by adding or using, preservatives, emulsifiers, stabilisers, colourings, flavourings, sweeteners, thickeners and antioxidants to foods.

Looking at new and emerging foods, like probiotics.

**Development of culinary traditions.** This includes British cuisine and at least two other international ones.

**Factors influencing our food choice.** This includes Personal, Social and Economic factors, religious and cultural beliefs and ethical and moral choices.

### Section C

**Food Science:** This includes nutritional value and includes reasons for why food is cooked. The way heat transfers through food. How cooking and preparation can affect nutritional values and improve sensory properties. Whilst also looking at working characteristics such as carbohydrates caramelising and protein coagulating.

**Sensory properties:** The senses known as organoleptic properties are examined looking at texture, appearance, colour, taste, sound and aroma.

**Sensory systems and how these influence our choices.** Looking at the five basic tastes - sweetness, sourness, bitterness, saltiness and umami.

Preferential and sensory tasting panels.

**Food Safety:** This includes looking at conditions to control bacterial, mould and yeast growth, both for positive and negative reasons. To be able to recognise signs for food spoilage. The correct way to buy, store, prepare, cook and serve food to ensure the food is safe to eat. This includes having knowledge of information such as; labelling, cross contamination and critical temperatures.

### Section D

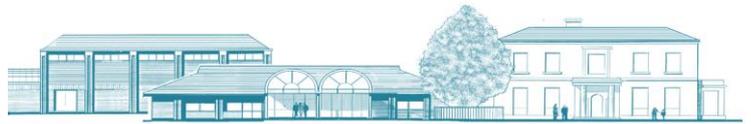
This section covers skills involved in preparing and cooking.

Throughout this section students are expected to:

- demonstrate their ability to weigh and measure
- grease and line tins
- select the correct process for each ingredient and recognise the length of time needed to cook
- understand how to recognise if the dish is ready to serve
- be able to use specialist equipment and understand how the function of the ingredient makes a recipe work.

There are 8 skill groups that students will learn:

1. **Knife skills.** This section includes being able to portion a chicken, fillet a fish, prepare vegetables and fruit correctly in slicing, dicing and evenly cutting.
2. **Preparation and techniques.** This section includes being able to tenderise and marinate. To wrap, shape and bind mixtures eg when making fishcakes or meatballs, whilst avoiding cross contamination. Also preparing fruits and vegetables to include mashing, shredding, segmenting, deseeding, juicing whilst showing how to control enzymic browning and spoilage.
3. **Cooking methods.** This includes the wide range of methods from boiling and poaching, to frying, grilling and baking.
4. **Sauces.** Students will learn how to make a range of sauces, including a starch based sauce such as a roux, which shows how gelatinisation effects viscosity and why agitation is necessary to achieve a smooth sauce. Also, a reduction sauce such as a pasta sauce or gravy, which shows how flavour and viscosity change with cooking. Finally, an emulsion sauce, such as mayonnaise, which shows skill in making a stabilised emulsion.



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5. **Set a mixture.** This can be done by removing heat to produce a set, for example in a custard or cheesecake, or heating a mixture, for example when making quiche.
6. **Raising agents.** Students will make a Genoese and Swiss roll which uses egg as a whisked foam as the raising agent. Using chemical raising agents, for example self-raising flour in a Victoria sandwich cake and steam as a raising agent in choux pastry.
7. **Dough.** This includes understanding shortening, gluten formation and proving when making pastry, bread and pasta. Being able to understand how and why we create layers, roll out and prove, as well as how to glaze and finish the products.
8. **Judge and manipulate sensory properties.** This includes making adjustments to taste, texture and flavour throughout the cooking process. Also, the ability to present and style to improve aesthetic qualities.

### Literacy/Numeracy Skills:

Literacy and numeracy skills are assessed throughout.

### Numeracy:

Numeracy skills are developed so that students can:

- Weigh, measure and divide accurately to make a quality product
- Cost accurately their chosen dishes
- use data rather than opinion if asked to justify an explanation

### Literacy:

Literacy skills are developed in the following areas:

- spelling, punctuation and grammar
- appropriate use of correct cooking and food science terms
- developing a structured, well developed and analysed Non-Examined Assessment
- selecting and using research to identify choices
- logical sequencing in order to dovetail the making of a number of food dishes.

### Promoting Reading for Pleasure/Independent Reading:

Reading recipe books and encouraging reading food labels as a way of understanding what we eat is encouraged throughout the course and greatly benefits those students who need to increase their independent reading.

### Support, Strategies and Interventions for students (SEN, Most Able, Students not making Expected Progress):

Extra support in the form of additional sessions outside of lesson time is offered at certain key points of the course. We will make it clear which students we expect to attend but all are welcome.

In order to make it possible for more complex dishes to be made, students should expect practical lessons to be extended to include lunch times.

### Useful websites:

[www.ocr.org.uk](http://www.ocr.org.uk)

[www.foodfactoflife.org.uk](http://www.foodfactoflife.org.uk)

[www.nutrition.org.uk](http://www.nutrition.org.uk)

[www.food.gov.uk](http://www.food.gov.uk)

[www.bbcgoodfood.com](http://www.bbcgoodfood.com)

[www.graintrain.com](http://www.graintrain.com)



## A Guide to the Curriculum at Key Stages 3 (Years 7-9) and 4 (Years 10 & 11)

The revision guide **My Revision Notes: OCR GCSE Food Preparation and Nutrition** by Val Fehners, published by Hodder Education, is recommended to all students and will be used as part of their lessons and for homework.

### How to help your child in Year 10 and 11

Please check your child's planner to ensure they are prepared for their food lessons. They will normally have at least a week's notice for ingredients for cooking.

Relying on last minute preparation for exams is always a risky strategy. We have found that the most successful students are those who organise and start their revision preparations at the start of Year 10. We recommend that students prepare revision cards, mind maps etc as the course progresses.

## GLOSSARY OF TERMS

**Assembling:** putting component parts together

**Balanced diet:** a diet which provides adequate amounts of nutrients and energy

**Calorie:** a unit of energy which is used to give the energy yield of foods and the energy expenditure by the body

**Development:** make changes to a food product which will affect its characteristics

**Diabetes:** a metabolic disorder caused by the poor absorption of glucose; this can be due to the failure to produce insulin (in insulin dependent diabetes) or the poor response of tissues to insulin (in non-insulin dependent diabetes). Type 1 diabetes mellitus develops in childhood. The onset of Type 2 is in middle age

**Eatwell plate:** a healthy eating model, to encourage people to eat the correct proportions of food to achieve a balanced diet

**Food additive:** a substance added to a food product to improve its quality

**Gluten:** protein found in flour

**Halal:** food which is selected and prepared according to Islamic dietary law

**Hygienically:** to prepare food in a clean environment to stop food spoilage or poisoning occurring

**Kosher:** food which is selected and prepared in accordance with Jewish dietary law

**Nutrient:** the part of a food that performs a particular function in the body

**Nutritional analysis:** using resources to find out the nutritional content of a product

**Obesity:** excessive fatness. Measured as a ratio of weight to height

**Organic food:** plants grown without the use of synthetic pesticides fungicides or organic fertilizers. They must have been prepared without preservatives

**Pasteurisation:** the process of prolonging the keeping quality of products such as milk by heating to destroy harmful bacteria

**Quality Control:** steps taken to check a product at various stages of making to ensure a consistent and high quality outcome is achieved

**Sample:** small amount of the product

**Sensory Analysis:** identifying the sensory characteristics of products, i.e. taste, texture, appearance, mouth-feel, colour

**Sensory evaluation:** using the range of senses to assess a food product – appearance, smell, taste

**Staple food:** a food that forms the basis of a traditional diet – wheat, barley, rye, maize or rice or starchy root vegetables such as potatoes

**Sterilisation:** a method of increasing the keeping quality of products by destroying all micro organisms by heating to a high temperature

**Test kitchen:** the place where a food technologist experiments and develops new products

**Ultra Heat Treatment (UHT):** the high temperature, short time sterilization of milk known as long life milk.

**Vegans:** people who eat no products of animal origin

**Vegetarians:** those who for a variety of reasons, choose not to eat meat