



Year 8 Food & Nutrition

Developing Technical Skills & Food Science

Learning about this topic is important because:

- You will build upon the core knowledge and practical skills you developed in Year 7 by learning more advanced cooking techniques, applying food science and making increasingly independent decisions in the kitchen. You will develop greater confidence whilst understanding how scientific principles, nutrition and consumer choice influence the quality and success of food products.
- Throughout this unit, you will refine your practical skills through increasingly challenging recipes. You will explore the functional properties of ingredients, food provenance, sustainability, food manufacturing and ethical food production. You will also investigate how food is designed, produced and marketed commercially whilst considering factors such as cost, food labelling, packaging, consumer appeal and environmental impact.
- Practical lessons will encourage you to think critically, solve problems and justify your decisions. You will work with increasing independence, adapting recipes, refining techniques and applying food science to improve the flavour, texture, appearance and nutritional value of your dishes.

This builds on:

- Core practical skills developed in Year 7.
- Safe and hygienic working practices.
- Basic knowledge of healthy eating and the Eatwell Guide.
- Fundamental food science including heat transfer, gluten development and raising agents.
- Evaluating practical outcomes using appropriate food vocabulary.

This leads to:

- Greater confidence when preparing increasingly complex dishes independently.
- Applying food science to improve the quality of finished products.
- Understanding functional properties of ingredients and their role within recipes.
- Making informed consumer decisions using food labelling, nutritional information and product comparisons.
- Understanding sustainability, ethical sourcing, food manufacturing, recipe costing and reducing food waste.
- Preparing for the advanced technical, evaluative and independent work undertaken in Year 9 Food & Nutrition and, ultimately, GCSE Food Preparation & Nutrition.

We will learn

- How the functional properties of ingredients influence successful food preparation and cooking.
- How food science can be applied to improve the flavour, texture, appearance and consistency of food products.
- How nutrition can be used to adapt recipes to create healthier dishes for different consumers.
- How food products are manufactured, packaged and marketed to meet consumer needs.
- How provenance, Fairtrade, ethical sourcing and sustainability influence food production and purchasing decisions.
- How food labelling, ingredient information and nutritional data help consumers make informed choices.
- How recipe costing, reducing food waste and efficient use of ingredients contribute to sustainable food production.
- How world cuisines, cultural influences and consumer trends shape the foods we eat.
- How to evaluate practical outcomes using technical vocabulary and scientific understanding to identify improvements.

We will develop/practise skills including:

- Refining knife skills with increased precision and accuracy.
- Selecting and applying appropriate practical techniques for different ingredients and recipes.
- Bread making, kneading, proving and pastry making with increasing confidence.
- Applying functional properties including emulsification, coagulation, gelation, aeration and fermentation during practical work.
- Whisking, piping and presenting dishes to a high standard.
- Modifying recipes to improve nutrition, flavour, texture and presentation.
- Working independently whilst managing time, equipment and food hygiene effectively.
- Evaluating practical outcomes using technical vocabulary and scientific understanding.
- Justifying practical decisions using food science, nutrition and consumer needs

Some of the vocabulary that we will use includes:

You could learn more about this topic by:

- <https://www.foodafactoflife.org.uk>



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Functional Properties • Coagulation • Emulsification • Gelation •
Fermentation • Gluten Development • Maillard Reaction • Aeration • Protein
Denaturation • Provenance • Ethical Sourcing • Sustainability • Fairtrade •
Food Miles • Consumer Choice • Product Comparison • Food Manufacturing

- <https://www.ifst.org>
- <https://edu.rsc.org>
- <https://www.food.gov.uk>
- <https://www.fairtrade.org.uk>
- <https://careersinfoodanddrink.co.uk>

Your teacher will assess your knowledge & understanding throughout the topic by looking at your work, questioning, discussion and giving you feedback in lots of different ways. The key pieces of work in this topic are:

Assessment Area	Below/Equals/Above
Work safely and hygienically when preparing food.	B: Follows safe working practices with occasional reminders and demonstrates a basic understanding of food safety and hygiene. E: Consistently demonstrates safe, hygienic and organised working practices, applying food safety principles independently throughout practical lessons. A: Independently applies excellent food safety, hygiene and organisation whilst explaining the importance of food legislation, allergen management and quality assurance.
Demonstrate core food preparation skills.	B: Demonstrates a range of practical skills but requires support when applying more complex techniques accurately. E: Demonstrates confident knife skills, bread making, pastry making, sauce making, piping and baking techniques with increasing precision and independence. A: Demonstrates excellent technical accuracy, precision and organisation, consistently producing high-quality practical outcomes using a wide range of techniques independently
Understand healthy eating and nutrition.	B: Identifies the nutritional value of ingredients and recognises healthier food choices with some support. E: Explains how nutrition can be used to adapt recipes and make healthier food choices using the Eatwell Guide and nutritional knowledge. A: Justifies recipe adaptations using nutritional knowledge to improve health whilst maintaining flavour, texture, presentation and consumer appeal.
Apply food science to practical cooking.	B: Identifies some functional properties of ingredients but has limited understanding of how they influence practical outcomes. E: Explains how gluten development, fermentation, coagulation, emulsification, gelation and the Maillard reaction contribute to successful food preparation. A: Applies food science confidently to solve problems, justify practical decisions and improve flavour, texture, appearance and consistency using appropriate technical vocabulary.
Understand food provenance, sustainability and consumer choice.	B: Recognises where food comes from and identifies some examples of sustainable food choices. E: Explains how provenance, Fairtrade, food labelling, sustainability and consumer choice influence food production and purchasing decisions. A: Evaluates how ethical sourcing, food manufacturing, recipe costing, packaging, sustainability and consumer demand influence commercial food products.
Evaluate practical outcomes and identify improvements.	B: Describes strengths and weaknesses of finished products with some support. E: Evaluates practical work using appropriate technical vocabulary and identifies realistic improvements linked to practical skill, food science and nutrition. A: Critically evaluates practical outcomes, justifying improvements using technical skill, food science, nutrition, presentation, consumer appeal and commercial awareness.