Food Science and Nutrition summer task 2026

Before the course starts try to carry out the research and tasks below in detail.

Task 1: Nutrition is a key part of the course and you will need to have a clear understanding of nutrients and healthy eating.

a) Watch the video link to learn more about what is meant by a healthy diet. Explain what a healthy diet is and the key elements of the Eatwell Guide. Present your findings in a **mind map** format. https://www.youtube.com/watch?v=1tJYcNt6Bpk

b) Explore the concept of energy intake, expenditure and energy balance. Watch the podcast about **energy** and answer the questions below. https://www.youtube.com/watch?v=d-5w67NAOlo

- What is energy?
- Why do we need to eat food?
- How much energy do we need?
- What are the factors that affect 'energy out'?
- What is energy balance?

Task 2: Food Presentation: It is important to understand how to layout food products in order to improve their visual appearance. Use the following websites and videos to investigate what makes food look good. You are welcome to search for other tips and guidance on food presentation techniques. This is particularly important, as you will be required to photograph the products you make. Write a list of tips and ideas for successful food presentation.

http://www.howtocookgourmet.com/foodpresentationtips.html
https://www.youtube.com/watch?v=Udzs_MPNpMQ
https://www.youtube.com/watch?v=9YBnczqciHI

Task 3: Food in the news: Create a "food in the news" media folder in OneNote. Between now and the beginning of September collect any articles that you find referring to Food and Nutrition. The Guardian and Observer newspapers, the BBC news and the BBC Good Food Magazine are good starting places. You could also look at the free papers and magazines available at food retailers.

Task 4: Select 2 articles that you think are important/newsworthy about nutrition. Summarise the key points and explain why you think that each article was published/written.

Task 6: Undertake the following and present your work on a single A3 sheet in mind map format or in OneNote. **Photograph your practical work and include this.**

Select one of the scenarios below and complete the activities

Nursery scenario
The cook at your local children's nursery (ages 2 to 5) has received comments from parents that the current menu is both unhealthy and repetitive. The cook is, therefore, planning to make changes to the menu to ensure it is healthy and appealing to the children.
OR
Elderly Residential Home

The cook at a local Elderly residential home has received comments that the current menu is unimaginative. The cook is therefore planning to make changes to the menu to ensure that dishes meet the nutritional needs of the elderly and have traditional appeal.

(i) Review the nutritional considerations that the cook will need to include when planning a monthly menu for this target group.
(ii) Plan a weekly menu; this must include breakfast, mid-morning snack, lunch, mid-afternoon snack and tea (including drinks at each meal)
(iii) Plan, prepare and cook one of your dishes and review the nutritional content of your proposed one day menu. You will need to take photos of the dishes
(iv) Evaluate your finished outcomes referring to their sensory characteristics and appeal for the target group
(v) Discuss whether your choices reflect current nutritional guidelines for target group and suggest improvements or alternatives to your menu choices.

Sugessted Reading List

Food magazines and those related to diet and fitness

Textbooks

Please use your GCSE textbooks to revise Nutrition.
There will be an online textbook soon!
Specification: https://www.wjec.co.uk/media/q4vj4eah/wjec-aaq-food-science-and-nutrition-specification-extended-cert.pdf

Podcasts

ZOE Science and Nutrition – can be found on all streaming apps.

Recipe books

Blumenthal H. Heston Blumenthal at home. Bloomsbury publishing: October 2011
Masterchef Kitchen Bible
Masterchef at home
Mary berry Cook books

Recommended Television shows/videos to watch – good to watch on iplayer or 4OD

Food Inspectors – BBC 1 or YouTube
Great British Bake off – Channel 4
Masterchef- BBC1
Jimmy's Food Factory – BBC1

Useful websites

BBC Health: www.bbc.co.uk/health/healthyliving
British Nutrition Foundation: www.nutrition.org.uk
Department for Health: www.dh.gov.uk
Food and Drink Federation: www.fdf.org.uk
Food Standards Agency: www.food.gov.uk/aboutus/publications/industrypublications/
NHS: http://www.nhs.uk/livewell/healthy-eating/Pages/Healthyeating.aspx
Physical Activity and Nutrition Wales: www.physicalactivityandnutritionwales.org.uk
Vegetarian Society: www.veg.soc.org.uk
www.bbc.co.uk/food/recipes

www.bbcgoodfood.com

Summary of programme of study

Unit	GLH	Mandatory/ Optional	Assessment
Unit 1: Nutritional needs across the life stages	90	Mandatory	External
Unit 2: Developing practical food production skills	90	Mandatory	Internal
Unit 3: Principles of food hygiene and food safety in food production	90	Mandatory	External
Unit 4: Experimenting to solve food production problems	90	Optional	Internal
Unit 5: Current issues in food science and nutrition	90	Optional	Internal

Unit 1 Nutritional Needs across the life stages (Year 12)

The purpose of this unit is to develop an understanding of nutritional needs across the life stages. You will learn about different types of nutrients, their properties, how they are used by the body and how to plan a balanced nutritious diet.

Unit 2 Developing practical food production skills (Year 12 – mandatory for certificate)

You will develop complex skills for preparing, cooking and presenting nutritious dishes that meet specific client needs. You will plan, prepare, cook and present food items to meet the needs of a specific target audience, using appropriate level 3 practical skills and techniques.

Unit 3: Principes of food hygiene and food safety in food production (Year 13 – mandatory for extended certificate)

The purpose of this unit is to develop an understanding of hazards and risks in relation to the storage, preparation, cooking and serving of food items in different environments and the control measures needed to minimise these risks. From this understanding, learners will be able to explain the control measures that need to be in place, in different environments, to ensure that food is safe to eat.

Unit 4 Experimenting to solve food production problems (Year 13: either Unit 4 or 5 – extended certificate)

The aim of this unit is for learners to use their understanding of the properties of food in order to plan and carry out experiments. The results of the experiments would be used to propose options to solve food production problems. The unit covers a wide range of topics, from the scientific properties of food to practical problem-solving techniques, ensuring a holistic understanding of the subject. The emphasis on real-world problems and practical solutions makes the content relevant and engaging for learners. The inclusion of evaluation sections for both the food production process and the final product encourages critical thinking and continuous improvement.

Unit 5 Current issues in food and nutrition (Year 13: either Unit 4 or 5 – extended certificate)

The unit effectively covers the key aspects of research in food science and nutrition, from understanding current issues to conducting research and evaluating findings. The sections are clearly defined and organised, making it easy for learners to follow the research process from start to finish. The unit addresses contemporary issues in the field, providing learners with valuable insights into the challenges and opportunities facing the food industry. The emphasis on practical research skills, data analysis, and

presentation techniques prepares learners for real-world applications in the food industry or further academic study.

Current issues may include:
Is it too expensive to eat healthy meals?
Energy density/nutrient density…
Are mass produced economy ready meals meeting the needs of individuals?
Should cooking skills be compulsory in schools?
How much extra will consumers pay for organic food?