

Subject	Year	Specialism
Level 3 Food Science and Nutrition	13	Term 3 and 4
Project		
Examination period and Unit 2 – Ensuring food is safe to eat		
Content (Intent)		
<p>Prior Learning; GCSE Food Preparation and Nutrition - Certificate in Food Science and Nutrition and Unit 3</p>		
<p>Future Learning: Possibility of higher education and studies in food related subjects</p>		
How will knowledge and skills be taught (Implementation)		
<p>The aim of this unit is to allow pupil to develop an understanding of hazards and risks in relation to the storage, preparation and cooking of food in different environments and the control measures needed to minimise these risks. From this understanding, learners will be able to recommend the control measures that need to be in place, in different environments, to ensure that food is safe to eat.</p> <p>Unit introduction Why should we follow storage recommendations on food products? Why do menus need to highlight products containing nuts? Why should vegetarian dishes be prepared away from those containing meat? Why are temperature probes used in the food industry? How can you be sure the food you eat is safe? Food needs to be stored, handled, prepared and cooked correctly to ensure its consumption does not affect people’s health. For some people, their health is affected because they have food intolerances or allergies, but the health of all people can be affected if they are subjected to food poisoning. Everyone working in the food industry has a responsibility to minimise the risks of causing a food borne illness. Food safety is one of today’s major health issues and there are many roles within the food industry related to food safety. Many food scientists work for the Environmental Health departments of local authorities as food inspectors. Food inspectors ensure businesses produce and serve food that is safe to eat; this would include a whole range of businesses from a large bakery to a stall selling pasties at a local festival. Food inspectors also ensure that descriptions of food (on menus for example) do not mislead customers and help to minimise the risks to ill health, for example, noting where certain dishes contain nuts. In this unit you will learn about food safety, how micro-organisms can affect food safety, how some foods can cause ill health in people that have intolerances or allergies and what controls need to be in place to minimise the risks of food causing ill health. This understanding will allow you to recommend the safety controls that should be in place in different environments where food is stored, prepared and cooked.</p> <p>Learners need to know and understand: LO1 understand how microorganisms affect food safety LO2 understand how food can cause ill health LO3 understand how food safety is managed in different situations</p> <p>Learners will: AC1.1 describe properties of micro-organisms Learners should be able to give factual descriptions of each type of micro-organisms using scientific terms and models AC1.2 assess how changing conditions affect growth of microorganisms in different environments Learners should know what is required for micro-organisms to grow so that they understand how changing conditions affect growth. They should consider all microorganisms in AC1.1 and make judgements that incorporate reference to their properties. AC1.3 explain how microorganisms affect food quality Learners should understand that microorganisms have negative and positive effects on food quality and explain how those changes take place. Learners should consider all microorganisms in AC1.1 and make reference to their properties. AC1.4 assess how preservation methods prevent the growth of micro-organisms Learners should gain sufficient understanding to make judgements about the ability of the preservation methods to prevent growth of organisms in AC1.1. AC2.1 explain the physiology of food intolerances. Learners should acquire a theoretical understanding of the types of food intolerance and their physiological causes. Chemicals in foods could include caffeine, salicylates monosodium glutamate, and naturally occurring chemicals like histamines. AC2.2 explain the physiological basis of food allergies Learners should acquire a theoretical understanding of the types of food allergies and their physiological causes, particularly in relation to immunological response. AC2.3 explain the physiological basis of food poisoning Learners should acquire a theoretical understanding of foods that present a high risk of food poisoning, causes and physiological effects. AC2.4 describe the symptoms of food induced ill health Learners should gain knowledge of symptoms related to food intolerances, food allergies and food poisoning. They should be able to describe how symptoms are detected and outcomes diagnosed. AC3.1 describe food safety hazards in different environments Learners should consider a range of different environments and the types of hazards that can exist in each. AC3.2 assess risk to food safety in different environments Learners should gain sufficient knowledge to differentiate between hazard and risk. Learners should develop sufficient understanding of risk to make judgements that are reasoned and supported by evidence. AC3.3 explain control measures used to minimise food safety risks Learners should consider risks assessed in AC3.2 and understand how each can be minimised. AC3.4 justify proposals for control measures in different environments Learners need to learn how to justify through the use of appropriate language and evidence.</p>		

How will your understanding be assessed & recorded (Impact)

Assessment

Work will be assessed in a variety of ways

Teacher assessment – books will be checked and marked on a regular basis

Written and verbal feedback will be given

Homework will be assessed in line with dept policy

These will be used to build up a clear picture of student effort and progress which will be communicated to parents in interim reports, main school reports and during parents' evenings.

Main areas of assessment:

Trial piece - marked feedback will be issued to pupils

Marked according to assessment criteria issued by examination board and shared with pupils

Mark book issued to pupils as accessed through secure teacher area of Eduqas website

How can parents help at home?

Students will complete their work in school for the assessment. It would be great if you could talk to your child about their work and ensure tasks are completed to the best of their ability. In addition, it would be good if you could look at the vast resources on our Food and Nutrition VLE pages – especially on the Unit 2 tab – where you will find lots of information and guidance to help complete this task.

Helpful further reading/discussion (including Reading and Vocabulary Lists)

Reading

The department will issue a textbook and has an extensive range of books to support your learning – which pupils may borrow at any time

Level 3 Textbook

Vocabulary

Micro-organisms

Properties

Conditions

Environments

Quality

Preservation methods

Food intolerances

Food allergies

Food poisoning

Symptoms

Environments

Risk – control - justification

Careers Links

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Find out about all aspects of food careers

<https://tastycareers.org.uk>

<https://www.foodafactoflife.org.uk/whole-school/careers-in-food/>

Websites

Society for General microbiology: www.microbiologyonline.org.uk

Food spoilage:

<http://culinaryarts.about.com/od/safetysanitation/a/bacteria.htm>

Food preservation:

http://en.wikipedia.org/wiki/Food_preservation

<http://science.howstuffworks.com/innovation/edible-innovations/food-preservation.htm>

Food Allergy and food intolerance:

<http://www.nhs.uk/conditions/food-allergy/Pages/Intro1.aspx>

<http://www.food.gov.uk/multimedia/pdfs/publication/allergyfactsheetcoeliac0308.pdf>

Food poisoning:

<http://www.stopthestomachflu.com/what-is-food-poisoning>

<http://www.nhs.uk/news/2011/11November/Pages/loyd-grossman-curry-sauce-botulismrecall.aspx>

Food Standards Agency, foodborne disease strategy:

<http://www.food.gov.uk/multimedia/pdfs/fds2015.pdf>

Food safety advice, NHS: <http://www.nhs.uk/livewell/homehygiene/pages/homehygienehub.aspx>

Food standards Agency: Food hygiene:

<http://www.food.gov.uk/multimedia/pdfs/publication/hygienebooklet.pdf>