

D&T at Balcarras



Subject	Year	Specialism
Level 3 Food Science and Nutrition	13	Term 5 and 6

Project

Examination period and Unit 2 – Ensuring food is safe to eat – assessed examination unit

Content (Intent)

Prior Learning; GCSE Food Preparation and Nutrition - Certificate in Food Science and Nutrition and Unit 3

Future Learning: Possibility of higher education and studies in food related subjects

How will knowledge and skills be taught (Implementation)

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.

Unit introduction

This unit is a follow on from term 4

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

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.

How will your understanding be assessed & recorded (Impact)

Assessment

WORK IS ASSESSED BY THE EXAM BOARD

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:

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

Practical work – verbal feedback 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

Unit 3 – real task – marked and moderated in school and then moderated by exam board – no formal feedback by teacher allowed Marked according to assessment criteria by the examination board – this unit is not marked by class teacher and is completed in line with examination requirements – as an 8 hour assessed task.

Link to mark book – we do not see the mark scheme for this piece of work until results day.

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 finds 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

Careers Links

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/hygieneguidebooklet.pdf