

Year 10, How Food can cause Ill Health, Technology Department

Rationale and Context of Unit:	Core curriculum content:	Tier 2 & Tier 3 vocabulary explicitly taught:
<p>What prior learning does this build upon? (links to KS2 national curriculum)</p> <ul style="list-style-type: none"> • <i>understand and apply the principles of a healthy and varied diet</i> • <i>prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</i> • <i>understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed</i> • <i>The SOL also builds on the last 3 years of learning, regularly addressing kitchen safety, nutritional health and the culture surrounding food.</i> <p>What future learning does it underpin? Why is worth teaching this content?</p> <ul style="list-style-type: none"> • <i>This unit is the largest and final unit covered in year 10. It sets the stage for the independence year 11 are given in the practical lessons by making them aware of specific risks with food safety, and provides content which will form a strong basis for their coursework in year 11.</i> <p>Why is it taught in this order? Sequencing?</p>	<p>What are the key knowledge and skills that will be taught through this unit?</p> <ul style="list-style-type: none"> • <i>Theory: Food spoilage, microbiological contamination, chemical contamination, physical contamination, allergic contamination, good and bad bacteria, identifying spoilage, pathogens, pesticides and herbicides, parasites, poisons, allergens, intolerances, coeliac disease, at risk groups, EHO roles and responsibilities, EHO job roles, food safety act, general food hygiene regulations, food labelling regulations, personal hygiene of food handlers, HACCP, Nutritional information and technology, consumer rights, Trade Descriptions Act, food poisoning, how to prevent food poisoning, safe storage of food, symptomatic food induced ill health</i> • <i>Practical: preparing ingredients, using different utensils and appliances, knife skills, different cooking methods, following recipes, presentation, cooking and sampling world foods.</i> <p>How will those skills and this knowledge be applied here and in the future?</p>	<p>Key words and terminology that must be learned using the whole school strategy of etymology/ morphology/ using it in context</p> <ul style="list-style-type: none"> • Bacteria- microscopic, single celled living organisms, some of which cause food poisoning • Contaminate- making a food unsafe to eat by allowing it to come into contact with microbes that will grow and multiply in it • Cross-contamination – how microbes are spread from one place onto some food • Food spoilage- when something happens which makes food unfit and unsafe to eat • Micro-organism – tiny plants and animals that are only clearly visible under a microscope (also called microbes) • Moulds – tiny organisms, related to mushrooms • Pathogenic – something that is capable of causing illness in people • Toxins – another name for poisons; if something is toxic, it is poisonous • Yeasts – a microscopic single celled fungi that ferment foods containing sugar • Fermentation – the process in which yeast turns carbohydrates into alcohol and CO²

- *This unit follows on from Health and Safety, zooming in on specific elements in practice in the industry, and the specific ways in which food can cause ill health, and how it can be countered. Students having a solid understanding of the industry and safety legislature from previous units will really benefit students in this unit as they can understand the context of how issues can arise and a good idea of systems which can be put in place to minimise risks.*

How does this link to the secondary national curriculum?

- *understand and apply the principles of nutrition and health*
- *cook a repertoire of predominantly savoury dishes so that they are able to feed themselves and others a healthy and varied diet*
- *become competent in a range of cooking techniques [for example, selecting and preparing ingredients; using utensils and electrical equipment; applying heat in different ways; using awareness of taste, texture, and smell to decide how to season dishes and combine ingredients, adapting and using their own recipes]*
- *understand the source, seasonality and characteristics of a broad range of ingredients*

- This unit has been designed to show students how to be safe in the kitchen, at a much more advanced level than anything they will have covered before, at an industry level. This comprehensive unit should help students prevent unnecessary ill health and increase their understanding of safety measures. It prepares them for an increased level of independence in the kitchen, greatly aiding them in their preparations for completing the coursework element in Year 11.
- The practical skills developed here will be applicable throughout the students whole life; it introduces some high level dishes which would score them high in the coursework, but also introduces new cooking techniques and presentation skills which could be applied in industry at any level, or at home to give students more independence.

- **Germinate**- when a seed or spore starts to grow and develop
- **Spores** – the name for the “seeds” which moulds send out so they can spread to other foods
- **Allergen** – something that causes an allergy
- **Anaphylaxis** – a severe and potentially life-threatening allergic reaction, which affects body systems such as breathing, the heart and circulation, the digestive system and the skin
- **Food allergy**- a condition where the body’s immune system reacts unusually to specific foods and causes a range of mild to severe symptoms
- **Food intolerance** – a long-term condition where certain foods cause someone to feel unwell and have a range of symptoms; it is usually not life threatening

Challenge and Support:	World wide learning/ links to 21 st century:	Cultural capital/ Industry/ Enrichment:
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How and where will students be stretched and challenged in this unit?

- Throughout the theory lessons, students are given opportunities to use their creativity and understanding to produce challenging pieces of work. This is achieved through Stretch and Challenge style questions for students who finish an activity early, presentation challenges for students who complete practical work with time spare, larger pieces of work set across various mediums and contexts (examining different types of contamination, investigating poisons and allergens, recipe creation and substitution, job role analysis and problem solving tasks) which allow students to put their learning into action. In the practical lessons, students will be constantly pushed into learning new skills and to experiment with their dishes. A particular focus is to improve students presentation and plating applying some concepts we learn in the classroom directly into the kitchen.

How is this scheme ambitious at all levels?

- *This SOL is designed to build upon foundational learning in Year 7, 8 and 9 and to push students to produce dishes of restaurant quality. Our theory work draws in aspects from maths, English and design, but especially business and character and culture, and allows*

How is this content relevant to the wider world?

- The hospitality sector is a huge part of the UK economy employing over 3.2 million people and producing £130 billion in economic activity. It generates £39 billion in taxation for the UK Government and is the 3rd largest private sector employer representing around 10% of UK employment.
- The skills learnt here will help students cook for themselves at home and open the door for them to eventually work in the catering industry, which is a huge private sector employer of young people in the Broadland area.
- This content specifically covers food safety, which is universal, and should be in place at all times all over the world. This should help students stay safe when cooking and eating throughout their whole life.

How will this learning inform understanding about global/ social issues?

- In this unit we cover various health issues and how we can best accommodate them, as well as how to prevent and identify various forms of food induced ill health.

How does this learning relate to careers?

- This content has a direct link to careers in the hospitality and catering industry, which is the 3rd largest private sector employer. Catering jobs will be accessible from a young age and can take individuals down many walks of life, from working in the high-end restaurants and hotels, to working in the military or offshore.
- This unit is specifically developed to increase students understanding of how to minimise risks involved with the consumption of food. Any careers which involve customers or staff eating would benefit from the knowledge provided here, and the content would benefit anyone who plans to travel internationally.

What soft employability skills are developed through this unit?

- Communication and Teamwork (in the kitchen, especially during closedown)
- Adaptability and problem solving (dishes will not always turn out how students envisage- *if half the food is uncooked, but the rest is burning, what can we do to save it?*)
- Working under time pressure.
- Understanding cultural identities.
- Safe consumption of food and preventative measures
- Identifying ill health and its causes.

How does this learning enrich students' cultural capital?

students with differing skillsets to thrive. The course covers many subjects which might be new to students and aims to introduce them to the legal side of the world of industry and business.

- *This unit specifically builds upon the content from “The Industry”, “Kitchen Operations” and “Health and Safety”. With the context of the industry and the legislation affecting it, students should begin the unit with an understanding of the environment in which it operates, by the end of the unit, they should be able to practice a professional level kitchen safety.*

What scholarly directed reading will be prescribed for HPAs?

- *A series of articles and non-fiction texts examining the hospitality and catering industry and various facets within it.*

What further support may students require to access learning? (SEND/PP)

- *PP students have their ingredients provided for them for our practical lessons. PP and SEND students are given extra care and attention in the kitchen, with a focus on making sure they have a finished product they can take home, but also the opportunity to do every part of the preparation and cooking. In the theory lesson, students will receive the necessary level of support and guidance to allow them to access learning and to achieve well, in reference to their students profiles.*

- *The content of this course greatly improves student’s cultural capital. It gives them the opportunity to understand how to safely buy, store, cook and eat a variety of foods. How to identify and prevent common food induced sickness and their causes. In a wider scope, students may be able to identify why these risks exist in the first place and how they are more prevalent in some parts of the industry.*

Historical, Social, Moral, Spiritual, Cultural context:	Cross curricular links/ literacy/numeracy:	Common misconceptions:
<p>What historical, social, or cultural context will be developed?</p> <ul style="list-style-type: none"> <i>We will be looking at how food can cause ill health, and how approaches to food safety have changed throughout history to the point where food poisoning is relatively uncommon.</i> <p>Are there opportunities to promote moral or spiritual development?</p> <ul style="list-style-type: none"> <i>There is plenty of academic research suggesting that cooking in schools boost students' mental wellbeing (L. Franklin, 2020). It also provides student with a sense of pride in the foods they produce as cooking is a very transformative process where you can produce something wholly different than the sum of its parts (e.g. a cake doesn't resemble flour, egg and sugar). Cooking can also provide students with a new way in which they can be independent, helping them feel more mature.</i> <i>In learning how to operate safely when buying, storing, cooking and eating food, students should gain an enhanced independence and confidence with their own cooking and eating.</i> 	<p>Does this unit relate to another cross curricular unit of study?</p> <ul style="list-style-type: none"> <i>This topic has very strong links with topics covered in Character and Culture, Maths, English and Art/DT, but especially with biology. Students have to analyse text, evaluate safety procedures, categorise risks and hazards and ensure that they can meet safety requirements, all whilst thinking creatively and methodically.</i> <p>Opportunities to develop numeracy.</p> <ul style="list-style-type: none"> <i>In dealing with weighing out ingredients and measuring, also there are some cases where students will need to scale up or scale down recipes.</i> <p>Opportunities to promote reading aloud.</p> <ul style="list-style-type: none"> <i>Each lesson includes opportunities to read aloud from a variation of sources.</i> <p>Opportunities for extended writing?</p> <ul style="list-style-type: none"> <i>There are multiple opportunities for extended writing throughout the unit, including an in depth look at the role of an EHO, and a guidance for hygiene and storage.</i> 	<p>What are the common misconceptions within this scheme and how can they be addressed?</p> <ul style="list-style-type: none"> <i>That all bacteria are pathogenic.</i> <i>That spoilage is always easily identifiable.</i> <i>That knowing about poisons isn't relevant to working in the hospitality industry.</i> <i>That only the ill and the very old are considered at risk groups.</i> <i>That the paperwork and safety processes are too complicated for them to understand.</i>

<p>Are there opportunities to promote personal development?</p> <ul style="list-style-type: none"> • Students are responsible for their utensils and equipment, keeping them clean and organised throughout the lesson. Students experience multiple levels of Maslow's Hierarchy of Needs in personal development through the course, with their safety needs being met in a very literal way, their esteem needs by feeling proud of what they have produced, which they often do, their cognitive needs through being pushed in the theory lessons and their aesthetic needs in the continuing work on presentation and plating skills. 		
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Assessment timeline:

<p>How are the knowledge and skills going to be assessed through this unit?</p> <ul style="list-style-type: none"> • Regular, low stakes testing throughout the unit, with an assessment piece built into the end of the project. <p>What will be the timings of assessments?</p> <ul style="list-style-type: none"> • Low stakes testing is built into various lessons throughout the unit, often used as a plenary. The main assessment piece will take place at the end of the project. <p>What pre test, formative, summative testing methods will be used?</p> <ul style="list-style-type: none"> • Low stakes formative and pre-test testing will take the form of class quizzes and knowledge checks throughout the unit. The summative assessment will be a written exam question (guidance on food safety) and will be marked as such. <p>Are the assessments also assessing prior knowledge? (cumulative)</p> <ul style="list-style-type: none"> • Yes, practical skills and content covered in KS3 <p>Will you use any low stakes testing to test memory retention?</p> <ul style="list-style-type: none"> • Students will be questioned in the plenaries of lessons and will be asked to explain the previous lessons content at the start of the following lesson. <p>What success criteria/ model answers/ WAGOLLS will be used?</p> <ul style="list-style-type: none"> • Model answers are provided throughout the unit. Success criteria will be discussed in depth before any extended task. For their practical, students are given WAGOLLS in the form of photos of previous student's dishes (anonymously) and asked to critique them and say what they like and what could be improved.
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How will assessments inform future planning and monitor progress?

- Assessment scores will be used to identify weaknesses in understanding to be addressed in the future. Assessments in the practical setting will guide where support is needed and which skills need to be focussed on in a teacher-led demonstration at the next opportunity.

Home learning

What home learning is being set and when and how does this link to learning?

- *An investigation into food storage, high risk foods, poisonous plants and allergens. Research into safety protocols to prepare for final assessment of unit.*

What assessment method will be used to give feedback on home learning?

- *Feedback 4*

Scholarly reading?

- *The investigation will require students to research storage, high risk foods, poisonous plants and allergens. This will require them to use a variety of academic resources. Research will be needed to complete their safety guidance.*

Feedback

What tasks, homework or assessments will require Feedback Four?

- All Homework Tasks
- Final Assessment

What other feedback will be used? Class common misconceptions/ peer/ self?

- I speak to each student individually at the end of every practical lesson, to give feedback on their dish and for them to vocalise a WWW and an EBI. Students are then prompted to discuss what they would want to change in a recipe to make it better for them or to improve its taste/texture/presentation.

Length of unit (duration indicated in lessons)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
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