

## Key Stage 4 CFA Food Production

<b>Suggested presenter</b>	Someone with a level of technical knowledge specifically around sensory science and a good understanding of the process of food production “from field to fork” with training skills that include presenting/facilitating a group
<b>Lesson Information</b>	This session is aimed at Key Stage 4 pupils (Year 9, 10 and 11 – age range 14–16 years)
<b>Duration</b>	Up to half a day
<b>Aim</b>	The purpose is for the children to introduce pupils to the process of food production
<b>Learning Outcomes</b>	<p>The students will be able to;</p> <ul style="list-style-type: none"> <li>• Name the senses used to taste food</li> <li>• Use a range of vocabulary to describe a food product</li> <li>• Understand the basic concept of food production</li> <li>• Have an overview of the different job roles in the food industry</li> </ul>
<b>Key Points</b>	This lesson plan is a guide only. As the person delivering the lesson you are encouraged to adapt it to suit the class you are teaching. It is important to remember that the main point is to inspire and introduce young people to the food sector.

*Please refer to the “How to guide – Preparing for the lesson”*

### Lesson Format

1. Introduction
2. Tasting
  - a. Discussion
  - b. Video
  - c. Activity
  - d. Mini plenary
3. Break
4. Creating a sandwich
  - a. Discussion
  - b. Activity
  - c. Mini Plenary
5. Jobs the word
  - a. Discussion
  - b. Activity
  - c. Plenary
6. Finish

### Resources Required

- ✓ Basic Tastes (downloadable)
- ✓ Benchmarking Descriptors (downloadable)
- ✓ Food for the senses video
- ✓ Plastic cups for drinking water per pupil
- ✓ Coded food samples (a selection from each food category would be good) enough for the class
- ✓ 4 spoons each
- ✓ Record Chart per student (downloadable)
- ✓ Hand towel
- ✓ Shop brought sandwich (example of tuna and cucumber is used)
- ✓ 2 x Tins Tuna, 2 x Cucumber, 2 x Loaf of bread, 2 Mayonnaise dressing)
- ✓ 2 x Taste record chart for comparison (downloadable)
- ✓ Jobs the word Sheet per student (downloadable)
- ✓ Any company products for demonstration or gifts

### Introduction

#### Introduction (10 minutes)

It is important that students understand the format of the lesson they are about to participate in, spend a minute explaining how the session will run, the activities and things they will be learning.

Aim to spend about 8 minutes talking about yourself, your role and the company you work for. Consider using some pictures to show the place you work, or bringing in some produce that the students may have seen before.

This introduction is the opportune time to demonstrate real enthusiasm for your role and sector, enthusiasm is infectious.

***NOTE:** Each group of pupils you work with will be at a different ability, Key Stage 4 pupils will range between the ages of 14 to 16, you will need to gauge their ability and how technical/scientific you make this lesson.*

#### Tasting (10 minutes)

Determine the level of knowledge the class has by getting them to answer these questions.

- What part(s) of our body do we use to taste
- What can affect our taste
- Name the taste groups (sweet, salty, sour, bitter, umami) stick the pictures up
- Name some food products that fit into the taste groups – and generate some useful vocabulary – words that professional tasters use to describe new products. Write them on a white board or large piece of paper for the students to use if they need to.

Discuss with the students the answers to the questions exploring the sorts of food they eat, if they are put off certain foods because of their smell or memories they trigger.

#### Play the “Food for the Senses” Video (5 minutes)

### NOTES

**Activity (20 minutes)**

Explain how in some food production companies they use taste testers to assess the likely success of a new product or to evaluate how an existing product could be improved. Taste Testers have to have a good sensory ability to judge the composition of food (appearance, touch, smell, content etc).

In this activity you are going to explore how sensitive the class is to taste.

Each pupil needs to have the following;

Glass of water (to clean palette)  
4 food samples (coded with a number or letter)  
4 spoons  
Record Chart  
Hand towel

Ask each pupil to drink some water to cleanse their palette and then to take one food sample at a time, they should first really look at the sample and comment on its **appearance**, then **smell** it to analyse the different smells, then take a small piece put it in their mouths, roll it around their tongue to assess its **texture** and slowly chew and swallow it when they can describe its **flavours**. For each food product they must complete the record chart.

**Plenary (10 minutes)**

Bring the class back together and on a larger Record Chart (or white board) discuss and record the findings of the group – How many students were able to name the food product correctly, how many descriptive words were used in the smell, appearance categories, are there more words that can be used to describe these? Which food product was most/least liked.

**This is a good point at which to break for playtime/ assembly or however the timetable allows.**

**Creating a Sandwich****Intro (10 minutes)**

In this activity you are going to get the students to understand the processes involved in making mass produced food items (we have used an example of a Tuna and Cucumber Sandwich purchased for £1.15 but you could use any prepared food product).

First, hold up a sandwich and ask the pupils;

- Who eats shop-brought sandwiches?
- Have you ever looked at the ingredients?
- What ingredients do you think are in this sandwich?
- How much do you think it costs to make it?
- How many people do you think have been involved in making it and getting it on the shelf?

Do the students think they could make a sandwich just like the shop brought one with the same ingredients? What about the cost?

**NOTES**

### Activity 2 (40 mins)

Split the class in to groups (assuming there are four groups) each group will do two of the activities below with a time limit of 20 minutes per activity;

1. **Making** – Start by getting the students to evaluate the shop brought product as they did with the earlier experiment (assessing texture, smell, appearance and then taste) get them to record the findings of the shop produce and then using the exact same ingredients listed in the sandwich try to recreate it. (there might be some that are not available but if they work with the majority) They then move to evaluating it against the shop produce. What were the differences, what could have caused the differences?
2. **Money** – Knowing the cost of the ingredients, how many sandwiches would you need to make to get a similar price to the shop brought sandwich? Have they thought about packaging, staff, production, transport costs and where is the profit? In the example of the tuna and cucumber sandwich you would need the following ingredients;

**Tinned Tuna 185g tin £0.85**

**Cucumber Whole £0.80**

**Oatmeal bread £1.30 per loaf (approx. 20 slices per loaf)**

**Mayonnaise Dressing 650ml £1.45**

3. **Production** – Most sandwiches are made in a factory on a production line, design a production line that you think would make this sandwich. They could draw the floor plan of the factory, if they know about HACCP what are the hygiene and safety controls. Ensure you prompt the students with open questions such as; how many people, what would they be doing, where would they work on the plan?
4. **Design a sandwich** think about an athlete what sort of sandwich do you think they would most likely buy, what do you think would be the key ingredients, what would you call it, why have you chosen these ingredients, would you design have been different for another sort of person (Cheryl Cole, toddler)

### Plenary (10 minutes)

Bring the students back together and discuss how they got on, did the sandwiches taste the same, how close to the cost did the students get, what might a sandwich making production line look like? Where there any surprises? Link back to the taste activity earlier, do students think the produce they made would impress a taste panel?

Explain what sort of Chilled Food jobs the students have experienced, which did they enjoy the most?

**Show the sandwich making movie clip (5 minutes)**

### NOTES

### Jobs the word

#### **Discussion (10 minutes)**

Discuss with the students the amount of people that have been involved in the process of making a sandwich; can they list some of the jobs involved? Try to get them to think about the whole process from “field to fork”. Ask them to suggest some of the responsibilities, skills needed for these jobs.

What sort of jobs do you have in your organization, what are some of the exciting, scientific, unusual roles.

#### **Activity (15 minutes)**

Ask the students to pick one of the jobs in this process, giving each student a “My job is...” worksheet ask them to complete as much of the information as possible

#### **Plenary (10 minutes)**

What jobs did the students pick, get some of the students to share their worksheets, ask the class to help add more responsibilities or skills to those jobs.

Discuss with the class what it is they have learnt today;

- ✓ Taste
- ✓ Food Production
- ✓ Job Roles

If you have time you could ask the pupils to draw a poster/cartoon panel of the process involved in making a sandwich from consumer tasting to eating.

#### **Finish (5 minutes)**

- Ask for any questions - be prepared for some in the younger year groups to ask irrelevant questions and don't feel you have to answer them. If you are not comfortable with a question or don't have time, tell them you'll come back to them. (Do try to remember to ask them again if you can.)
- Thank the pupils for working so hard and listening well and if possible leave them something that reminds them of you, your company and your products.

### NOTES