UNIVERSITY OF LEEDS

Food Science and Nutrition: From the Farm to You

Scheme of Work

	Lesson 1	Lesson 2	Lesson 3
Length	Approx. 1 hour	Approx. 1 hour	Approx. 1 hour
Objectives	• To identify different macro and micronutrients and be able to describe their functions in the body. • To identify the different organs involved in digestion and describe what they do.	• To identify and justify different processing methods. • To explore behaviour nudging as a tactic to encourage consumers to buy certain food products.	• To produce a presentation that combines their understanding of food chemistry, processing and marketing.

Lesson plans for each session can be found on the following pages.

Food Science and Nutrition: From the Farm to You

Lesson 1 plan

<table>
<tr><th>Starter activity</th><th>Learning objectives</th></tr>
<tr><td>Students try to identify key macronutrients and micronutrients from the food label on Step 1.5, and try to guess what the food item is.</td><td>• To identify different macro and micronutrients and be able to describe their functions in the body.

• To identify the different organs involved in digestion and describe what they do.</td></tr>
<tr><th>Main activities</th><th>Resources required</th></tr>
<tr><td rowspan="6">The teacher then reveals the food item from Step 1.6 of the course.

Students use the information in Step 2.7 and 2.8 to create a table that summarises the main functions of each micronutrient in the body.

In pairs, students complete the exercise on Step 2.10 to find out what happens to food in the body, then create their own flow diagram of the process.

Class discussion: Would you eat food that was 3D printed? Then watch the video on Step 1.8.</td><td>1. Access to FutureLearn course.

2. Devices to watch video on.</td></tr>
<tr><th>Assessment for Learning</th></tr>
<tr><td>Identifying macro and micronutrients.

Flow diagram of digestion.</td></tr>
<tr><th>Differentiation</th></tr>
<tr><td>SEND: Videos have subtitles.

Low ability: Peer-learning.

Gifted and Talented: Peer-teaching.</td></tr>
<tr><th>Plenary</th></tr>
<tr><td>Students select one food product to investigate over the next couple of lessons.</td></tr>
</table>

Food Science and Nutrition: From the Farm to You

Lesson 2 plan

<table>
<tr><th>Starter activity</th><th>Learning objectives</th></tr>
<tr><td>In pairs, students discuss what food processing is and whether they think it's good or bad.</td><td>• To identify and justify different processing methods

• To explore behaviour nudging as a tactic to encourage consumers to buy certain food products</td></tr>
<tr><th>Main activities</th><th>Resources required</th></tr>
<tr><td rowspan="6">Students make a mindmap of the processing methods listed in Step 1.2 and, in pairs, suggest examples of food that require that method of processing, as well as explaining why it's needed.

In pairs, students complete the exercise on Step 1.7 to find out more about food processing, making notes of what they've learnt.

As a class, watch the video in Step 2.5 on behaviour nudging. Then the class discusses the tactics they've experienced in both health and unhealthy food products.</td><td>1. Access to FutureLearn course.

2. Devices to watch videos on.</td></tr>
<tr><th>Assessment for Learning</th></tr>
<tr><td>Processing diagrams.</td></tr>
<tr><th>Differentiation</th></tr>
<tr><td>SEND: Videos have subtitles.

Low ability: Peer-learning.

Gifted and Talented: Peer-teaching.</td></tr>
<tr><th>Plenary</th></tr>
<tr><td>Students make a quick flow diagram of how their chosen food product is processed.

Remind the students to bring in their chosen food product next lesson to help them with their task.</td></tr>
</table>

Food Science and Nutrition: From the Farm to You

Lesson 3 plan

<table>
<tr><th>Starter activity</th><th>Learning objectives</th></tr>
<tr><td>Teacher talks through the diagram on Step 1.3 showing how food goes from farm to fork. This should give an introduction to their main task.</td><td>• To produce a presentation that combines their understanding of food chemistry, processing and marketing.</td></tr>
<tr><th>Main activities</th><th>Resources required</th></tr>
<tr><td rowspan="8">Students create a presentation all about their chosen food product. It must outline the following:
• Macro and micronutrients it contains (which also means detailing the original raw food ingredients).
• Processing methods required to make it.
• Any fortification added and why.
• What has been done to improve the 5 senses of the product.
• What behaviour nudging methods have been used to convince consumers to buy the product.

Students may ask for support from their peers for information on any element of their presentation.

The presentations should be completed by the end of the lesson and distributed to the rest of the class as case studies (this could be done in a shared folder).</td><td>1. Access to FutureLearn course

2. Devices for research.

3. Paper or technology as appropriate to create presentations.</td></tr>
<tr><th>Assessment for Learning</th></tr>
<tr><td>Presentations.</td></tr>
<tr><th>Differentiation</th></tr>
<tr><td>SEND: Videos have subtitles.

Low ability: Peer-learning.

Gifted and Talented: Peer-teaching.</td></tr>
<tr><th>Plenary</th></tr>
<tr><td>Students write down the three most important things they think they’ve learnt from the least three lessons.</td></tr>
</table>