

# Y7 Science – 15 minutes

## Lesson plan

**Curriculum link:** Content of a healthy human diet: carbohydrates, lipids (fats and oils), proteins, vitamins, minerals, dietary fibre and water, and why each is needed.

**Learning Objective:** To explore job roles linked to the healthy human diet part of the KS3 science curriculum.

**Learning Outcomes:**

- To understand why knowledge of a healthy human diet is necessary for a dietician

**Success Criteria:**

1. **Describe** – what does a dietician do?
2. **Understand** – how is knowledge of a healthy human diet necessary for a dietician?
3. **Apply** – create a plant-based, sustainable diet plan and use it to influence other people's diet decisions.

Timings	Activity	Details	Resources
2 mins	<b>Starter</b> – What do you see?	<p>Starter: In your pairs discuss <b>2 learnings</b> you can share from this graph.</p> <p>Extension: How does this impact society?</p> <p><i>Animal products typically have higher greenhouse gas emissions (in kg CO2 Emissions [CO2e] of food product) than plant-based foods.</i></p>	Slide 3
2 mins	<b>Introduction</b> – What's the problem?	<p>Facilitator to ask a student to read out the statement on the board. Ask pairs to discuss why they think this is a problem.</p> <p>Get feedback, all answers welcome. <i>(Meat and fish have a negative impact on the environment and yet how are we supposed to maintain healthy, balanced diets – whilst being sustainable?)</i></p> <p>The challenge <i>'How can you help Sasha create a plant-based, sustainable diet plan that's appropriate for athletes and can be marketed to wider society?'</i></p>	Slides 4



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		So, who are the kinds of people who might want to tackle this exact problem in their day to day lives? Introduce the challenge for the students today and the role of a dietician, Sasha and her athlete client Anja.	
5 mins	<b>Describe</b> – what does a dietician do?	<p>Introduce the role of a dietician.</p> <ul style="list-style-type: none"> <li>Show the video embedded in the PowerPoint (link <a href="#">here</a> or <a href="#">here</a> in case it doesn't work)</li> <li><b>AND/OR</b> give students print outs of case studies (<a href="#">here</a>) and summarise findings in a 280 character tweet.</li> </ul> <p>True or false quiz about what a dietician does <i>Can be done with mini-white boards, hands up, standing in certain area of classroom etc</i></p>	<p>Slides 5,6,7</p> <p>Video</p> <p>Print out of case studies (optional)</p>
7 mins	<b>Understand</b> - how is knowledge of a healthy human diet necessary for a dietician?	<p>Dietician for a day!</p> <p>Discuss what nutrients an athlete needs and why?</p> <ul style="list-style-type: none"> <li>What are the names of the different food groups?</li> <li>Which ones are important for an athlete?</li> <li>Why are those nutrients important?</li> <li>What should an athlete avoid having too much of? Why?</li> </ul> <p>Get feedback from the class. This could be done in several ways depending on the class – hands up/pick a person/write ideas on a mini whiteboard/discuss with the person next to you and feedback to the class</p> <p>Look at Anja's current diet. Discuss in pairs what food need to be removed from Anja's diet and what they could be replaced with. Fill in the table and feedback to whole class.</p> <p>Facilitator to go around the room and write up the examples that students have used.</p> <p>Students then have 3 minutes to send a tweet from Anja's account to explain why she's choosing a</p>	<p>Slide 8,9,10,11,12</p> <p>Mini whiteboards (optional)</p> <p>Worksheet 1 (printed and cut up per person)</p>



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		plant-based diet and what she's substituting in her diet.	
	<b>Optional extensions if more time or can be set as homework</b>	<p><b>Task 1</b> Create a new plant-based week-long diet plan for Anja with foods for each meal and explain why Anja needs each of the foods.</p> <p><b>Task 2</b> Keep a food journal for a week, like Anja's. And answer the following:</p> <ul style="list-style-type: none"><li>• In what ways could you change your diet to make it more plant-based and sustainable?</li><li>• How would you ensure that you are maintaining a balanced diet?</li></ul> <p><b>Task 3</b> Research a new plant-based recipe to swap out one of your meat options (or just a new vegan/vegetarian recipe if you don't eat meat). For example, an aubergine curry rather than a chicken curry recipe. Write it up and bring it in to swap with another recipe from a classmate.</p>	Slide 13  Option to print worksheet 2 for their own diet plan

