

## Seafood in Schools – Nutrition

### Teacher Notes

**Aim:** This lesson promotes the health benefits of seafood, emphasising the quality of Scottish produce and linking to the Eatwell Guide. This lesson will also focus on tackling common barriers with pupils around the taste and smell of seafood – identifying the ‘problem’ or barrier to young people tasting seafood and providing suitable alternatives.

#### Curriculum Links (Mapping)

##### CfE

*HWB 3-29a:* I can explain the importance of eating a variety of foods, and the role of different food groups in keeping me healthy.

*HWB 3-30a:* I can explain the health benefits of eating a variety of foods and how this can influence my lifestyle and wellbeing.

*HWB 3-34a:* I can explore the factors that affect food choices and suggest ways to overcome barriers to making healthy eating choices.

*HWB 4-29a:* I can analyse how my food choices impact my physical, mental, and social well-being, and can make informed decisions based on my findings.

*HWB 4-30a:* I can investigate and discuss how lifestyle factors, including food choices, impact health and well-being.

*HWB 4-34a:* I can critically assess the factors that influence my food choices, and develop strategies to make healthier choices.

Interdisciplinary Links – if using the lesson plan wider than Home Economics lessons:

*SCN 3-03a:* I can investigate the relationship between the human body and food, exploring the benefits of a balanced diet.

*SOC 3-18a:* I can explain how people in Scotland contribute to the economy, and identify key industries such as farming, fishing, and tourism.

#### Learning Intentions

Young people will:

#### Success Criteria

Young people will be able to:

<ul style="list-style-type: none"> <li>• Understand the health benefits of eating seafood: Learn how seafood contributes to a healthy, balanced diet and supports well-being.</li> <li>• Explore barriers to consuming seafood: Identify common reasons why they may be reluctant to eat seafood (e.g., taste, smell, texture) and discuss potential solutions or alternatives.</li> <li>• Link seafood consumption to the Eatwell Guide: Understand how seafood fits into a balanced diet as per the guidelines of the Eatwell Guide.</li> </ul>	<ul style="list-style-type: none"> <li>• Describe the health benefits of seafood and explain why seafood is good for health.</li> <li>• Identify and reflect on common barriers to their eating seafood and discuss how these barriers can be overcome.</li> <li>• Demonstrate an understanding of how eating seafood contributes to a balanced diet.</li> <li>• Explain where seafood fits within the Eatwell Guide (e.g., protein and oily fish category).</li> </ul>
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	Description	Resources	Time
1.	<p><b>Introduction – Why Eat Seafood?</b></p> <p>Adding seafood to your meals offers numerous health benefits – explain to your learners that this lesson will help them understand the key health benefits of including fish and seafood in our meals. You’ll explore why fish, particularly seafood landed in Scotland, offers excellent choices for boosting overall well-being. Scotland is known for its sustainable, high-quality seafood, with varieties like salmon, mackerel, and haddock providing a rich source of essential nutrients like omega-3 fatty acids, vitamins, and minerals.</p> <p>By choosing Scottish seafood, you’re not only making a nutritious choice for your body but also supporting local economies and sustainable practices that help protect our waters and seafood for years</p>	<p><i>Nutrition</i> Presentation Slide 2</p>	

	to come. Let's dive into the many reasons why seafood deserves a place in our diets!		
2.	<p><b>Discuss – Health Benefits</b></p> <p>Learn about the key nutrients found in seafood and their positive effects on health:</p> <ul style="list-style-type: none"> <li>• Protein – Seafood, especially fish, provides lean, high-quality protein that is essential for building and repairing tissues, supporting muscle growth, and boosting the immune system.</li> <li>• Omega-3 – these are found in oily fish such as salmon, mackerel, and sardines, help reduce the risk of heart disease by lowering blood pressure and reducing inflammation. Omega-3s support cognitive function, improving memory, focus, and mental clarity.</li> <li>• Vitamin D – oily fish are also an excellent source of Vitamin D, which is crucial for calcium absorption and bone health and helps regulate the immune system.</li> <li>• Vitamin B – shellfish and fish are rich in Vitamin B12, which is essential for producing red blood cells and maintaining energy levels, and supports healthy brain function and nerve health.</li> <li>• Iron – seaweed species, such as dulse and kelp, provide a plant-based source of iron, which is crucial for producing haemoglobin and transporting oxygen throughout the body. Iron is vital for energy production and a healthy immune system, preventing fatigue and weakness.</li> </ul> <p>Below are some suggested questions to ask to generate discussion or can be used for the learners to investigate further – allow the pupils to organise themselves into groups or use as a class-wide discussion:</p> <ul style="list-style-type: none"> <li>• Why is it important to include lean protein, such as seafood, in your diet?</li> </ul>	<p><i>Nutrition</i> Presentation Slide 3 Slide 4</p> <p>NHS Eatwell Guide – Fish &amp; Shellfish <a href="https://www.nhs.uk/live-well/eat-well/food-types/fish-and-shellfish-nutrition/">https://www.nhs.uk/live-well/eat-well/food-types/fish-and-shellfish-nutrition/</a></p>	

	<ul style="list-style-type: none"> <li>• What are some other food sources (besides seafood) that are rich in omega-3 fatty acids?</li> <li>• Can you think of any specific health conditions or diseases that may be improved by including more omega-3s in your diet?</li> <li>• Since Vitamin D can also be obtained through sunlight, why might it still be important to include Vitamin D-rich foods like seafood in your diet?</li> <li>• What are some potential health problems if you have a deficiency in Vitamin D?</li> <li>• How does a lack of Vitamin B12 affect your energy levels and overall health?</li> <li>• How can you include more iron-rich seaweed in your meals?</li> <li>• Why is it important to include plant-based iron sources, like seaweed, in the diet for those who don't eat meat?</li> </ul>		
3.	<p><b>Discussion – Portion Size</b></p> <p>The Eatwell Guide emphasises the importance of a varied diet, so incorporating different types of fish, including both oily and white fish, helps provide essential nutrients. The Guide recommends eating two 140g portions of fish per week, including one portion of oily fish. This is essential for a healthy diet – currently we eat around one portion per week.</p> <p>The UK has a strong tradition of enjoying seafood. The ‘Top 5’ seafood types eaten in the UK include:</p> <ul style="list-style-type: none"> <li>• Tuna: widely popular, especially in sandwiches and salads, tuna is a rich source of protein. While often consumed as canned fish, fresh tuna is also an option.</li> <li>• Salmon: known for its rich flavour and high omega-3 content, salmon is often eaten smoked, grilled, or baked.</li> </ul>	<p><i>Nutrition Presentation</i> Slide 5</p> <p>Food Standards Scotland – Eatwell Guide mini-site <a href="https://fss-eatwellguide.scot/">https://fss-eatwellguide.scot/</a></p>	

	<ul style="list-style-type: none"> <li>• Haddock: a popular choice for fish and chips especially in Scotland, haddock is a mild, white fish rich in protein and B vitamins.</li> <li>• Cod: another white fish, cod is commonly used in fish and chips and is prized for its flaky texture and mild taste.</li> <li>• Prawns: Often served in curries, salads, or as a starter to a meal, prawns are low in fat and high in protein, vitamins, and minerals.</li> </ul> <p>While these five types of seafood are commonly consumed, it's important to highlight the benefits of Scottish seafood, which is known for its high quality and sustainability. Scottish fish such as salmon, haddock, and cod are caught and landed sustainably in the waters around Scotland, making them a great choice for health-conscious consumers. Seafood caught and landed in Scotland is often fresher than imported options, ensuring better taste and nutritional value.</p>		
4.	<p><b>Discussion – Tackling Barriers</b></p> <p>Before diving into the topic, let's first explore what learners already know and enjoy about seafood. Ask them to think about their favourite seafood and dishes, by discussing the below questions:</p> <ul style="list-style-type: none"> <li>• What is your current favourite type of seafood?</li> <li>• Do you have a favourite seafood dish?</li> <li>• Have you ever tried a new type of fish that you enjoyed?</li> <li>• What's your usual reason for choosing or avoiding seafood?</li> </ul> <p>Understanding preferences will help to identify common barriers and discover new seafood options that might appeal.</p> <p>Let's look at some common barriers that may come up:</p> <ul style="list-style-type: none"> <li>• Picky Eating Habits: many young people are used to familiar foods and may be hesitant to try new seafood options due to unfamiliar tastes or textures.</li> </ul>	<p><i>Nutrition Presentation</i> Slide 6</p> <p><i>Find Your Fish</i></p>	

	<ul style="list-style-type: none"> <li>○ Solution: start with mild-flavoured fish, like cod or haddock, and gradually introduce more flavourful options like mackerel or salmon.</li> <li>• Texture and Appearance: the texture or appearance of seafood can be off-putting for some, especially if it's unfamiliar or perceived as "slimy" or "fishy." <ul style="list-style-type: none"> <li>○ Solution: choose seafood that's prepared in a way that feels comfortable—e.g., breaded fish, fish cakes, or seafood in sauces. These can mask unfamiliar textures and flavours.</li> </ul> </li> <li>• Lack of Knowledge: many people don't know the benefits of eating different types of fish, or how to cook them in a way that tastes great. <ul style="list-style-type: none"> <li>○ Solution: the below activity could help with preparing simple, tasty dishes.</li> </ul> </li> <li>• Environmental Concerns: concerns about overfishing or unsustainable fishing practices may make young people hesitant to eat seafood. <ul style="list-style-type: none"> <li>○ Solution: encourage choosing sustainably sourced seafood, such as Scottish seafood, which is known for its eco-friendly fishing practices and better sustainability.</li> </ul> </li> <li>• Cost and Accessibility: seafood may seem expensive or difficult to find in some areas. <ul style="list-style-type: none"> <li>○ Solution: look for affordable, locally available options or canned fish that are still nutritious and versatile, like tuna or salmon.</li> </ul> </li> </ul> <p>This presentation slide includes a flavour and texture fish matrix (<i>'Find Your Fish'</i> – also available as a A1 poster from Seafood Scotland), allowing learners at a glance to find familiar seafood types and offer a</p>		
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	way to ease into new seafood options that have familiar tastes and textures, helping them to expand their palate.		
5.	<p><b>Activity – Cooking and Tasting Session</b></p> <p>Cooking and/or tasting provides learners with the opportunity to get hands-on with preparing delicious seafood dishes. This is a great chance to try cooking with fresh, sustainable Scottish seafood, and discover how easy and tasty it can be to include fish in your meals. Pupils can learn how to prepare and cook a variety of seafood dishes and get a firsthand experience of the flavours and textures. This interactive session will not only build confidence in cooking with fish but also help appreciate the nutritional benefits of adding seafood to your diet.</p> <p>Trying new types of seafood can be an exciting journey. By understanding common barriers to eating seafood and offering solutions, we can help young people feel more confident in incorporating seafood into their diets. Remember, if you like one type of fish, there's a good chance you'll enjoy others as well! Start small, try new things, and discover how delicious and nutritious seafood can be.</p>	Recipe Cards	
6.	<p><b>Discussion – Why It Matters</b></p> <p>This section provides an opportunity to bring together topics discussed throughout the lesson.</p> <ul style="list-style-type: none"> <li>• First, Scottish seafood is known for its taste and high nutritional value, offering a rich source of protein, omega-3 fatty acids, and essential vitamins that contribute to a healthy, balanced diet.</li> <li>• Fish offers a cost-effective way to include high-quality protein in your diet – if fresh fish is too expensive, tinned fish can be an affordable tasty option.</li> <li>• Fish cooks quickly and requires minimal preparation, making it an ideal choice for fast, flavourful meals</li> </ul>	Nutrition Presentation Slide 7	

	<ul style="list-style-type: none"> <li>• Fish, especially oily varieties like salmon and mackerel, are rich in omega-3 fatty acids, which are essential for brain health and can help improve focus, memory, and overall cognitive function.</li> <li>• Moreover, promoting Scottish seafood helps strengthen Scotland's global food reputation, showcasing the country's commitment to quality, sustainability, and innovation in the food sector.</li> <li>• Finally, choosing locally caught and landed fish plays a crucial role in boosting both the local and wider economy, supporting Scottish fishermen, communities, and businesses.</li> </ul> <p>By eating Scottish seafood, pupils contribute to the growth of a thriving industry that benefits people and the environment, both in Scotland and beyond.</p>		
7.	<b>Activity – Reflect on your learning from the presentation</b> Using the worksheet, pupils should answer the questions drawn from information provided in the presentation – this will include	<i>Worksheet – Nutrition</i>	
	<b>Follow up</b> In the next lesson in this series, Sustainability, pupils will learn more about the sustainable practices of the Scottish seafood industry to maintain a plentiful supply of products both now and for future generations.		

### Additional Resources

‘Find Your Fish’ – contact Seafood Scotland to request an A1 printed copy for your classroom.

Seafood Scotland can support with seafood products to use in your lesson – please contact [enquiries@seafoodscotland.org](mailto:enquiries@seafoodscotland.org) to discuss availability in your area.



The range of Seafood in Schools recipe cards across different species are available on the resources site.

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## **Appendix**

### **Additional Links**

The Eatwell Guide resources (UK Government): <https://www.gov.uk/government/publications/the-eatwell-guide>

Health Benefits of Scottish Salmon (Salmon Scotland): <https://www.salmonscotland.co.uk/news/goodness-on-a-plate-the-health-benefits-of-scottish-salmon>