

# 17. Food for Life

*Paired Units: History: 14. The Great Famine*

Explore different nutrients: carbohydrates, proteins, fats, vitamins, minerals and water. Examine why our bodies need each of these nutrients, and which foods contain them. Examine a healthy diet by learning about the food pyramid. Consider food's journey through the human body, and how and where it is broken down, absorbed and waste disposed of. Find out about food production in Ireland, including new artisan producers, traditional Irish ingredients and dishes, and food imports.

## Notes

When talking about the Famine versus plentiful food today, be mindful of any issues of food poverty in the class. Do any children have sensitivities about food allergies or preferences? Be aware of sensitivity around diet and weight issues, and other dietary restrictions (e.g. religious or ethical beliefs).

When measuring, refer to Skills: Measuring on p. 28 of the Student Book.

When examining maps, refer to Skills: Mapwork on p. 50 of the Student Book.

When investigating, refer to Skills: Working Scientifically on p. 82 of the Student Book.

When carrying out research, refer to Skills: Research on p. 114 of the Student Book.

## Curriculum Information

### Geography

#### Strand and Strand Unit

#### Human environments: People at work

- explore and investigate, especially through practical studies, a small number of the common economic activities of people in the locality and in a contrasting part of Ireland

#### Skills

#### A sense of place and space

- A sense of place
- A sense of space

#### Maps, globes and graphical skills

- Using pictures, maps and globes

#### Geographical investigation skills

- Questioning
- Observing
- Predicting
- Investigating and experimenting
- Estimating and measuring
- Analysing
- Recording and communicating

Science	
Strand and Strand Unit	Skills
<b>Living things: Human life</b> <ul style="list-style-type: none"> <li>develop an awareness of the importance of food for energy and growth</li> </ul>	<b>Working scientifically</b> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Questioning</li> <li><input type="checkbox"/> Observing</li> <li><input checked="" type="checkbox"/> Predicting</li> <li><input checked="" type="checkbox"/> Investigating and experimenting</li> <li><input checked="" type="checkbox"/> Estimating and measuring</li> <li><input checked="" type="checkbox"/> Analysing</li> <li><input checked="" type="checkbox"/> Recording and communicating</li> <li><input checked="" type="checkbox"/> Designing and making</li> </ul>

Resources
<ul style="list-style-type: none"> <li><i>Explorers</i> Geography &amp; Science 4th Class Digital: 17. Food for Life: Unit Stimulus</li> <li>Digital maps</li> <li><i>Explorers</i> Geography &amp; Science 4th Class Student Book: 17. Food for Life pp. 92–97</li> <li>For the ‘Investigate’ skills sticker on p. 93 of the Student Book: a range of food labels containing information about grams of carbohydrates, proteins and fats. If possible, some of these should contain allergy information also.</li> <li>For the ‘Investigate’ skills sticker on p. 95 of the Student Book: food labels with information on the origin of the food/ingredients (ideally from around Ireland and from other countries) and a blank world map</li> <li>Designing and Making template is available as an online printable</li> </ul>

Useful Links
<p>Find information on the food pyramid, including a video:</p> <p><a href="https://www.safefood.eu/Education/Primary-(ROI)/Taste-Buds/Food-for-Life.aspx">https://www.safefood.eu/Education/Primary-(ROI)/Taste-Buds/Food-for-Life.aspx</a></p> <p>Visit the Food Safety Authority of Ireland website:</p> <p><a href="https://www.fsai.ie/">https://www.fsai.ie/</a></p> <p>Find information on food allergies:</p> <p><a href="http://www.ifan.ie">www.ifan.ie</a></p> <p>Find more information on digestion, including diagrams and a quiz:</p> <p><a href="https://www.dkfindout.com/us/human-body/digestion/">https://www.dkfindout.com/us/human-body/digestion/</a></p>

Keywords
energy, nutrient, carbohydrate, protein, fat, vitamin, mineral, water, diet, digestive system, mouth, teeth, saliva, oesophagus, stomach, small intestine, absorb, large intestine, import, artisan

## Lesson Suggestions

- Use the digital Unit Stimulus to examine the picture of the meal scene. It shows chicken, peas, carrots, potatoes, butter and a glass of milk. For dessert, there is ice cream with orange pieces and blueberries. Potatoes are grown in the ground. Chicken comes from the animal. Milk comes from cows.
- Use the digital map of Ireland to locate the artisan farming locations.
- Begin by reminding children that humans need a range of things to survive. They need oxygen, a place to live, and ...? Prompt for food and water. Remind children that humans can only live for three weeks without food, and three days without water. Ask the following question. So why is it that we need food?
- Brainstorm. Do the children know what their body does with something from each of the nutrient groups. What does your body do with potatoes? With eggs? With butter? Then have the children read the six panels on p. 92 of the Student Book and look at the illustrations. You could check and embed understanding by asking them to come up with their ideas for what they like to eat in each category, with or without referring to the page. Can they think of anything not pictured or listed, such as noodles for a carbohydrate?
- As per the 'Think About It' skills sticker on p. 92 of the Student Book, discuss why Vitamin D is added to most milk. It helps our bodies use the calcium present in the milk.
- Explain that you can find out what is in your food by looking at the labelling. Have ready a range of food labels for the children to explore and catalogue. This is an activity the children could do at home too. Explore any food allergies or ethical limitations that they know of, having read the final paragraph on this page. Ask anyone with personal experience to talk about how they find out what is in food before they can choose it.
- The section on digestion is bound to inspire some giggling. Remind the children that food waste is a perfectly normal part of human life processes. Have children work through p. 94 of the Student Book. A game that children often enjoy is to 'be' different parts of the digestive system and go on their own journey. In groups, each can choose to represent the food, the mouth, the teeth, the oesophagus, the stomach, the small intestine and the large intestine. Each person should draw what they represent and make notes on what they do. Then the group should stand in the right order from mouth to large intestine. As the 'food' moves through the digestive system, each person in turn explain what is happening. This can be an opportunity to discuss healthy eating: fibre in fruit, vegetables, beans and wholemeal cereals will aid efficient digestion. Children could add facts from research, such as the different roles of teeth (e.g. incisors to bite off bits of food, canines to tear and rip, and molars to grind).
- You could introduce p. 95 of the Student Book with the following quiz. What country produces 7.5 billion litres of milk a year? What country farms 1.1 million dairy cows and 300,000 hectares of crops? What country is the largest beef exporter in Europe, and exports €100 million of mushrooms? The answer to all questions is – Ireland!
- Introduce p. 96 by asking children to study the dishes shown. What natural ingredients are used in them? What is the most frequently used ingredient (potatoes)? Remind the children of what they learned about the Famine and how the Irish diet depended on potatoes. Do the children know that the potato was not introduced to Ireland until the 19th century? Before that, people relied more on grains for their carbohydrates. What animals would be most farmed to make these dishes (pork for sausages and bacon; beef for stews and dairy products)? Which of the dishes have the children tried? Which do they like? How else could some of these Irish ingredients be cooked? This work is preparation for the 'Working as a Geographer and Scientist: Designing and Making' activity on p. 97 of the Student Book.
- End by reading the conclusion to remind children of all the different things they have learned about food. Given that food is such an everyday thing, what have they learned that surprised or interested them most? If you have a food display you could add a 'Did You Know?' area to it, using the children's feedback on the surprising facts learned in this unit.
- As per the 'Working as a Geographer: Investigating and Experimenting' activity on p. 97 of the Student Book, find out more about a food producer in your local area.
- As per the 'Working as a Geographer and Scientist: Designing and Making' activity on p. 97 of the Student Book, design and make a nutritious Irish menu.

### Linkage and Integration

**Geography & Science:** The food of other countries is covered in 5. Italy – *Bel Paese* pp. 30–33 and 9. China – Land of Variety pp. 52–57. In both units, local ingredients and growing conditions are considered and seen in the context of the food produced. There is an opportunity to reinforce why certain foods are produced in Ireland, with its unique landscape and climate.

**History:** *Explorers History* 4th Class: 14. The Great Famine pp. 74–79.

**Mathematics:** Work on assessing quantities of different nutrients in foods will link with weights and measures work, and can be reinforced by looking at Skills: Measuring on p. 28 of the Student Book.

**SPHE:** Link with work on keeping healthy by eating a balanced diet. Link to sensitivity around other people's food beliefs (religious or ethical).

**Language:** *Abair Liom* 4th Class: 3. Ag an ollmhargadh pp. 22–29, 4. Bia blasta pp. 30–37. *Starlight* 4th Class: 3. Healthy living pp. 30–41, 9. All change! pp. 98–109, 10. Children around the world pp. 110–121, 11. Family ties pp. 122–133.

### Home/Parental Involvement

Parents or guardians can help children to find food labels showing quantities of different nutrients and allergy information. They can encourage children to join in with food shopping and cooking to become more aware of what is in the food they eat. They could cook the recipes the children have created, and help the children to complete their food diaries. Older relatives may be able to talk about the variety of food now available and people's attitudes to food, and how it compares with when they were in 4th Class.