

Infant Lesson Plan 4

Dairy and Eating Sustainably

Objective

To develop pupils' understanding of how food and dairy production impacts climate change, the importance of eating sustainably and to raise awareness of sustainable food choices. Duration: **30 minutes** (approximately).



Curricular Links

SPHE:

Myself and the wider world ⇨ Developing citizenship ⇨ Environmental care

Geography:

Natural Environments ⇨ Weather ⇨

Environmental awareness and care ⇨ Caring for my locality



Words of the Day

Greenhouse Gases – Gases in the air (like CO₂) that trap energy from the sun.

Climate Change – Humans have been doing a lot of activities that make greenhouse gases (like driving cars, using electricity and more). These gases act like a blanket and heat up the Earth. This means that climates (weather patterns) are changing around the world.

Food Production – How our food is grown, processed and packaged before it arrives in our supermarkets.

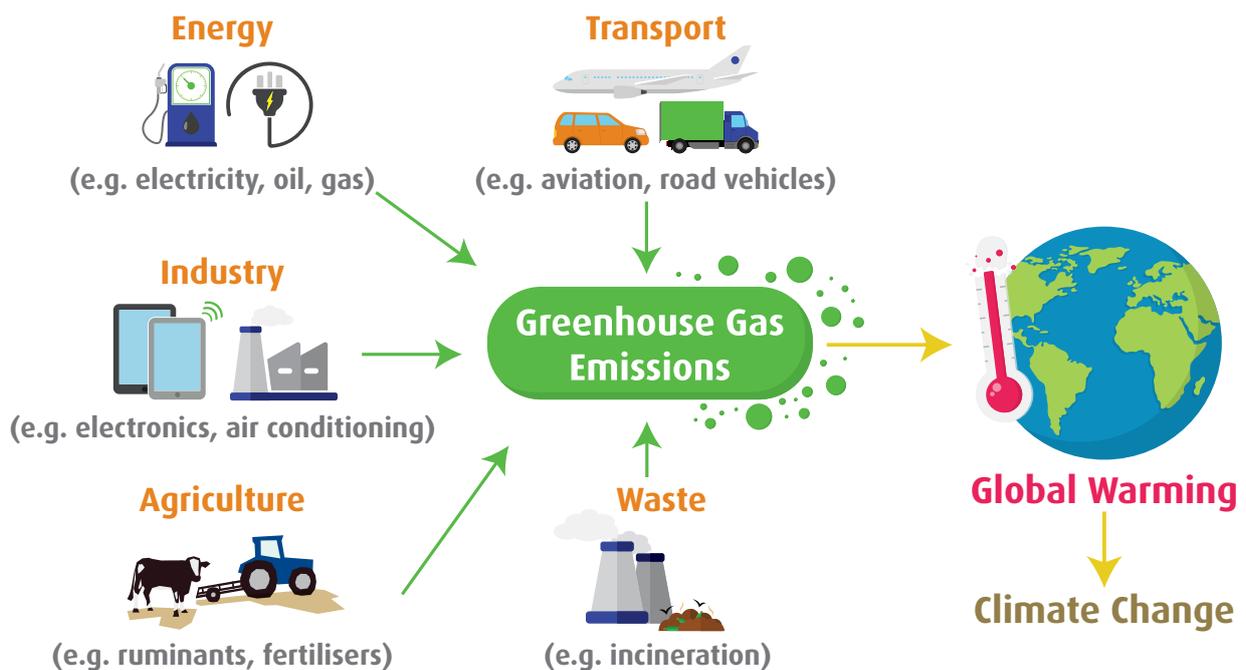
Food Miles – The number of miles food travels from the farm to our plates. The more your food has to travel, the more food miles it has.

Grass-based Dairy Production – Ireland's climate is mild (not too hot and not too cold) and wet. This means we have rich grasslands which our farm animals can eat for a healthy diet.

Sustainable Eating – Choosing foods that are good for both our bodies and the environment (everything living and non-living around you, including the air). To do this we can:

1. Buy local (close to our home/county or in Ireland)
2. Choose foods that are in season (grown naturally and at their freshest)
3. Try to avoid food in plastic packaging where possible
4. Grow our own fruits and vegetables!
5. Use the Food Pyramid to help us to make healthy food choices.

Human activities which contribute to greenhouse gas emissions



Class Discussion

- 1 Inform pupils that they will be learning about food and dairy production (how our food/dairy is grown, processed and packaged) and eating sustainably (eating foods that are good for our bodies and the environment). Ask pupils to look at their 'words of the day' section and the images next to the definitions. Choose some of the following points to discuss with your class and note their ideas on a mind map on the board.

Prompt Questions:

- What do you think happens to our food before it gets to the supermarket?
- Irish milk production is some of the best in the world. Can you guess why?
- How can we tell if milk is farmed here, in the Republic of Ireland?
- What are some food choices we can make that are good for the environment?
- What do you understand about our food choices and climate change?

- 2 Using the diagram above on page 15, consider how food production might contribute to greenhouse gases. Expand on the ideas already explored as a class using some of the expansion points below:

Prompts for Discussion: (choose one or two points below to discuss with your class)

- Food production includes all the activities that can increase greenhouse gases, such as agriculture, transport and waste.
- A lot of natural resources, such as land and water, are used to process and package our food.
- Irish dairy farms release some of the lowest amounts of greenhouse gases in the EU.
- Grass-based dairy production is more sustainable for the environment than other dairy production methods. Due to our mild, wet climate, our cows graze outdoors on lush green grass for an average of 240 days a year!
- Approximately 99% of water used in Irish dairy farms is supplied naturally by rainfall, which leads to almost zero impact on water stress.
- Grasslands soak up carbon from the atmosphere, helping to partly offset some of the carbon emissions produced by agriculture farming.
- Using locally grown or locally sourced seasonal food uses fewer food miles.
- Using food with little or no packaging (or biodegradable packaging) helps to reduce waste.
- The *Farmed in the Republic of Ireland* guarantee tells us that the milk is sourced and processed in the Republic of Ireland and supports local jobs on dairy farms.



Pair Discussion

- 1 Display and read aloud a list of the following foods on the board (include images if you can): milk, yogurt, cheese, fish, potatoes, strawberries, avocados, pineapples, and carrots. Begin by telling pupils that we can find most of these foods in our supermarkets all year long.
- 2 Choose some of the questions below to read aloud and ask pupils to discuss briefly with a partner. Then discuss as a class, drawing from the expansion points that follow:

Prompt Questions:

- Which foods here do you think can be grown or made in Ireland?
- Do you know of any Irish brands (e.g. milk, yogurt, cheese)?
- Which foods do you think are grown in spring? In summer?
- Can you guess where we get avocados from? How about pineapples?
- How do you think the avocados and pineapples get to Ireland? (e.g. by plane, by ship etc.)
- When you see these foods in the supermarket, are they wrapped in plastic?
- Do you and your family usually eat all of the food you buy? How might we waste less food?

Prompts for Discussion: (choose one or two points below to discuss with your class)

- Milk, yogurt and cheese, certain types of fish (like salmon and mackerel), potatoes, carrots and strawberries can all be produced in Ireland but many of these items come from other countries too. This is especially true for when we buy foods that may not be in season or that are not frozen.
- We have lots of Irish milk and dairy products in our supermarkets. Remember that you can look for the *Farmed in the Republic of Ireland* guarantee on milk. Keep an eye out for Irish brands of cheese and yogurts when you shop. If possible, buy fish fresh and from your local fish monger. Always read the labels on the foods you choose.
- We can use Bord Bia's 'Best in Season' calendar (<https://www.bordbia.ie/whats-in-season/best-in-season/calendar/september>) to discover which foods are in season. Apples for example, start coming in season in September and strawberries start in May.



- We may enjoy foods that are not grown in Ireland at all, like pineapples, avocados and oranges. Or we may eat strawberries (which can be grown in Ireland) out of season. Some of these items may be imported from South Africa, Costa Rica, Spain and more!
- Items may be transported to Ireland by plane, ship, and trucks. Imported foods can still be healthy foods that we may want as part of our diet; what's important is that we try to choose local and in season when we can. By eating locally grown/produced food, we reduce our food miles and support Irish farmers.
- Many foods in the market are packaged in plastic. We can avoid packaged foods by choosing loose fruits and vegetables and using reusable bags. This helps to reduce food waste.
- One third of the world's food is wasted every year by getting spoiled or uneaten. Considering the resources used to produce food, food waste is a major contributor to climate change.
- Eating a balanced diet ensures that we consume the foods we need to grow healthy and strong; and that we consume the correct amount, so we do not overuse or waste resources. See Lesson Plan 1: Dairy in My Diet.



Pair Activity

Read aloud the **Mindful in the Market** activity sheet. Complete question 1 as an example with the class. Then, ask pupils to work in pairs and complete the activity sheet. Discuss the choices they made on their worksheet as a class.

Personal Activity

Design a poster for your local milk brand or your School Milk Scheme. Include the name of the brand and the *Farmed in the Republic of Ireland* guarantee. Remember to use pictures to get people interested! Display your poster in the classroom.



Extension Activities

- 1 Invite a farmer to speak to the class about why we should buy local.
- 2 Grow your own plants in the classroom! Plant some herbs or vegetables with your pupils.
- 3 Encourage pupils to try and reduce their waste by making the most of what they have in their fridge. Milk and yogurt can be combined with some fast-ripening berries/banana to make a delicious fruit smoothie. Wilted broccoli or soft tomatoes that you might normally throw in the bin, can be used in a tasty vegetable soup.

Bring it Home

- 1 On your next visit to the market, try to find 3 food items that are grown or made in Ireland. Remember to look out for the *Farmed in the Republic of Ireland* guarantee on milk!
- 2 Share your **Mindful in the Market** activity sheet with your family and test it with some of the foods in your home. How far did these foods travel? Make a family contract to shop local for more food items in your home.

