

## Global Perspective Topic Resource

### Where does our food come from?

Food habits have changed significantly over the last half a century, from people shopping in their local independent stores to most people frequenting multi-chain supermarkets. With improvements in farming and transport links we are no longer restricted to buying in-season, local food. Below are some of the pros and cons of this new way of shopping.

### Food importing and exporting – the good, the bad and the ugly

Historically, agriculture has been a major industry in Northern Ireland with grazing livestock and their products highly demanded in the past. However, the agricultural sector has adopted an export-oriented

**Local** – produced and processed within 30 miles.  
**Regional** – produced and processed in the country.

nature and the dependence on the importation of foods that are, or could be, produced locally has heavily increased. For example beef, sheep meat and dairy products can be produced in NI but are imported at a cost of over £40 million.

Food sold in NI is imported from countries all over the world. Tomatoes from The Netherlands and Morocco, peppers from Mexico, avocado and oranges from South Africa, kiwis from Greece and New Zealand, and cucumbers, melons and leeks from Spain are common examples of fruits and vegetables

**Importing** – bringing in from a foreign country  
**Exporting** – shipping to other countries

that can be found at supermarkets, right next to others grown in NI. For instance apples from South Africa, New Zealand, France, Chile, Spain and Argentina can easily be found right next to local or regional apples.

### Why choose the apples from NI?

Deciding whether to buy apples transported from a country thousands of miles away or apples grown in NI has health, economic and environmental repercussions to NI and its people:

- Buying locally supports local farmers and fuels the local economy.
- Local food is often tastier but also healthier than imported food because it does not have as many additives – since it doesn't need to withstand extended transport it's not bred to be hardy.
- Consuming local food is more sustainable than exporting/importing food as it reduces 'food miles'. Food miles refer to the distance food is transported, from its production until it reaches the consumer. The transport of food contributes to:
  - **Air pollution.** Vehicles emit nitrogen oxides, particles, carbon dioxide and hydrocarbons which harm the air quality.

- **Energy waste.** Longer transport distances imply higher energy usage and considering some foods are made up of ingredients imported from different countries all over the world this energy consumption sums up to very high levels. It is thought that a menu comprised of imported food results in 50 times more energy in comparison to a menu of locally produced food! (as cited in Jones 2001)
- **The greenhouse effect, which contributes to global warming.** The greenhouse effect is a natural process in any planet where greenhouse gases (such as carbon dioxide, nitrogen oxide, water vapour, methane, and ozone) in the atmosphere trap heat from the sun, warming up the Earth's surface. Without a layer of these gases the planet would cool down to well below freezing and life could not survive. The further food is travelled, the greater the greenhouse gas production, resulting in more greenhouse gases entering the atmosphere. With more and more greenhouse gases being produced, more heat is trapped and as a result the average global temperature is increasing.
- **Increased packaging waste.** Withstanding longer distances requires more packaging which means more waste that often cannot be recycled. Waste sent to landfill also contributes to the greenhouse effect because it produces methane. Plus it is expensive to send waste to landfill: approximately £90 per tonne whereas recycling costs approximately £40 per tonne!

Did you know? More than 50% of fruit and vegetables consumed in Europe are grown at the Almeria Greenhouses in Spain, also called "Sea of Plastic". These greenhouses cover approx. 26,000 hectares, an area larger than twice the size of Belfast, forming the biggest concentration of greenhouses in the world. In fact, they are so extensive and have transformed the region so extremely that they can be seen from space! Moreover, while temperatures in the rest of Spain have risen, the temperature in the province of Almeria is cooling down because this light-coloured plastic sea reflects the sunlight back into the atmosphere.

## Fair trade

Some fruit and vegetables will only grow in certain places so there is no local alternative, such as bananas, coffee and chocolate. The FAIRTRADE mark was originally established to support the most disadvantaged producers in the world, ensuring they receive fair pay for their products and work and that they have decent working conditions.



The basis of fair trade is similar to the old proverb "give a man a fish and you feed him for a day; teach a man to fish and you feed him for a lifetime" – rather than individuals being provided with aid they are able to support themselves in the long term. Fairtrade operates in 74 countries worldwide, representing over 1.5 million farmers and workers in certified organisations.

## What can we do?

- ✓ Always check the label. The origin of the product should be specified on the label.
- ✓ Consider eating seasonal foods. Eating fruit and vegetables that are out of season in NI implies having to eat imported ones.
- ✓ Grow your own. Working on the Eco-Schools school grounds topic will help you learn about growing fruit and vegetables and you might get to eat some of the harvest.
- ✓ Join community gardens. There are a number of community gardens all across NI that are free to join.
- ✓ Buy Fairtrade products where possible – check for the logo.

### Check out some interesting web sites:

- Trócaire
- Love Food Hate Waste NI
- Local Food Advisor
- GROW NI
- City Farms and Community Gardens
- Fairtrade

## School Activities

### Activity 1: Near or far?

Open up your fridge at home and randomly choose 5 products (a milk bottle, any vegetables, any fruit, cheese or other dairy products and eggs can be a good representation of your fridge).

- Check out the origin of each one of them – you will find it on the label. If it's imported, go to the supermarket and see if you can find the local version of any of those imported products.
- If you do find the local version of the imported food in your fridge think about the implications of having bought it imported – is the local version healthier? Are there unhealthy ingredients in the imported products?
- What do you know about how these products are produced in that country? And about the conditions under which the workers at the producing companies work? Has it been imported through fair trading? What are the environmental implications?

### Curriculum links

Learning for Life and Work; English

### Activity 2: The road less travelled

Choose a foodstuff that you could make at home out of ingredients you have in your kitchen like pizza or a cake. List the ingredients and check out their origin at the label.

- Calculate the food miles for your chosen foodstuff by calculating the distance from the origin country to Northern Ireland and summing all the miles up.
- Calculate the food miles for the local version of such ingredients (research where they are produced/grown locally) and the difference between the food miles for the imported foodstuff and the same one made out of local ingredients.
- Calculate the carbon dioxide emissions caused by transporting all the ingredients necessary to make your chosen foodstuff (average of 24 kg CO<sub>2</sub> per air mile).
- Calculate the percentage of food in your fridge that is imported and then calculate the average percentage in the class.

Food item	Distance travelled by imported food	Distance travelled by local version	Difference between imported and local	Amount of CO <sub>2</sub> which could be saved by buying local
<b>Total:</b>				

**Curriculum links**

Maths, Geography

### Activity 3: How the other half live

Make a poster of a world map and mark where common imported food comes from.

Pick one or more of the countries and find out about them:

- Do they produce the ingredients they export naturally?
- What makes them suitable for producing/growing these ingredients?
- How are the daily lives of farmers or food factory workers in that country?
- What are the advantages and disadvantages those countries face by exporting food?

**Curriculum links**

Art; World Around Us; Geography; Learning for Life and Work.