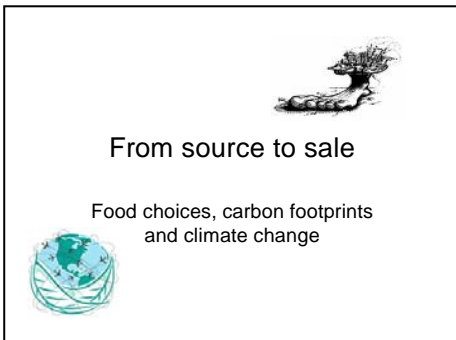


Food: From Source to Sale

Teacher's Notes

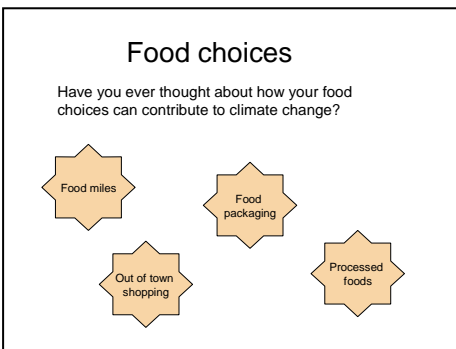


From source to sale

Food choices, carbon footprints and climate change

From source to sale

This presentation examines the sort of choices that can be made when buying food that have an impact on the levels of carbon dioxide emissions.



Food choices

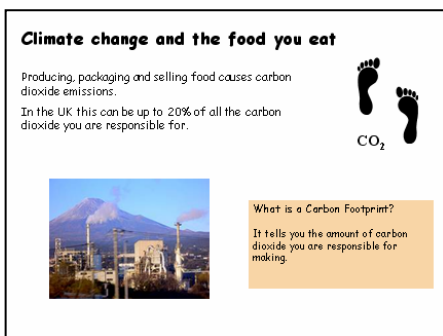
Have you ever thought about how your food choices can contribute to climate change?

- Food miles
- Food packaging
- Out of town shopping
- Processed foods

Food choices

How much of your dinner tonight will have been grown locally? Today our food is traveling increasing distances 'from the plough to the plate'. We refer to these distances as "food miles". For instance, Sustain says that for every calorie of carrot flown in from South Africa, we use 66 calories of fuel.

Researchers in Britain and Germany have started to investigate the composite distances travelled by food, taking into account their ingredients and the materials for their packaging. To produce a small glass jar of strawberry yoghurt for sale in Stuttgart, strawberries were being transported from Poland to West Germany and then processed into jam to be sent to Southern Germany. In counting the yoghurt's environmental costs, the lorry emerged as the main culprit, contributing to noise, danger and pollution. Also, using about 400 litres of diesel fuel per load. Other hidden factors are the fossil fuels used to plant, spray and harvest of the fruit, the aluminium for the lids, which has also travelled a long way, and cost of transporting workers and machinery.

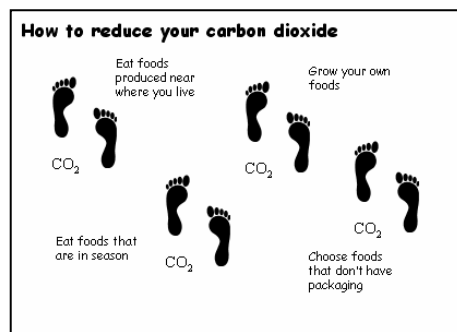


Climate change and the food you eat

Producing, packaging and selling food causes carbon dioxide emissions. In the UK this can be up to 20% of all the carbon dioxide you are responsible for.

CO₂

What is a Carbon Footprint?
It tells you the amount of carbon dioxide you are responsible for making.



How to reduce your carbon dioxide

- Eat foods produced near where you live
- Grow your own foods
- Eat foods that are in season
- Choose foods that don't have packaging

CO₂

What can we do to reduce the carbon footprint of the foods we eat?

Eat locally produced foods

If you buy butter made in this country, then no one has flown that butter to you in an aeroplane.

If you are buying apples, then look at where they all came from. If you have a choice of apples from the Cape, South America, France or England - then choose the apples that grew the closest to you.

- Wool from New Zealand - Wool from Yorkshire?
- Spinach from Israel - Spinach from Lancashire?
- Oranges from California - Oranges from Spain?
- Wine from Australia - Wine from Italy?

It's not that the products from these countries are not good quality products. It's just that buying the same product from a closer place will reduce carbon emissions, which is better for the environment, and for you! Oh - its good for our farmers too; it must be very dismaying for them when they cannot sell their apples because there are so many apples from other countries for sale.

Further Information: <http://www.suschool.org.uk/transport.html>

This website has some good ideas about food miles.

Eat locally produced foods

Local foods don't travel far. There is less carbon dioxide from lorries and trucks.




Look at the labels on the food you buy. Where has the food come from? Try to choose foods from the UK or as close as possible.




Eat seasonal foods

Fruits are nice in the winter but it is too cold for them to grow in the UK. They may have travelled thousands of miles from countries that are hot when we are cold.



Transporting foods thousands of miles produces lots of carbon dioxide.



It is your choice. Look for vegetables that are grown in the UK in the winter.

Eat seasonal foods

Compare strawberries that arrive in the shops in spring (they have been grown under glass) with those that grow under the sun and are ready for picking in the summer.

How much energy is used to produce strawberries in a green house?

Farmers' Markets generally have a higher proportion of local, seasonal produce available.

Grow your own foods

If you have a garden, you can grow your own foods. They are fresh, tasty and free.



Growing Brussel sprouts in the Autumn

Try it!
Grow your own vegetables
http://www.growingschools.co.uk/learn2_grow/learn2_grow.html



Grow your own food

These links are excellent sites with support and resources available to help your school or class start their own vegetable gardens.

Growing Schools: <http://www.teachernet.gov.uk/growingschools/>

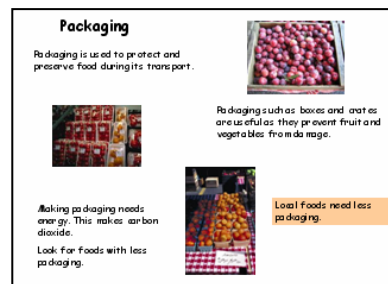
Ryton Organic Gardens for Schools

http://www.gardenorganic.org.uk/schools_organic_network/

Packaging

Local food generally requires less protective packaging, so this is another area where buying local helps. Other tips include:

- Plastics are frequently used for packaging. Where possible, look for recyclable packaging – this may be plastic, but may also be card or paper
- Look out for schemes that encourage you to re-use carrier bags
- Use long-life bags from natural materials whenever possible



Food Processing in Africa

Food processing is generally about extending its life, or making food available out of season. In the UK this often results in what are regarded as 'convenience' foods, but in Africa it can be essential to improve food security.

Practical Action

The charity Practical Action is helping women in Sudan to develop their food processing skills.

They can start a business and help secure their future.

Groups make dried fruit and vegetables, jams, juices, sweets, cakes and biscuits.

These are sold at the market to earn money.

Practical Action

Practical Action is working with women's groups in Eastern Sudan to develop their food processing skills.

New skills can be used at home to earn income and improve the food security and the nutrition of their family.

Eastern Sudan - Lulla's story

Lulla produces foods including dried onions, garlic, juices, tomato paste and jams. She sells them in the market.

This helps her pay her daughter's school fees.

Lulla has bought a donkey-drawn cart for transporting her products.

She now has enough food to feed her family.

Lulla bought a pasta machine that she uses at home.

Lulla Mohammed is a widow with a 10 year old daughter. She took part in one of Practical Action's food processing training courses in Kassala and has seen many changes in her life.

Lulla joined the Kassala Women's Development Centre, took part in sales exhibitions and shared her experience with fellow members.

Images from Practical Action and:

<http://www.flickr.com/photos/lisascenic/179344112/> (plums)

<http://www.usda.gov/oc/photo/98cs0430.htm> (nectarines)

<http://www.usda.gov/oc/photo/02cs0604.htm>