

Food waste assembly

Households in the UK throw away over 7 million tonnes of food every year, around 20% of what was purchased. Preventing this food waste could save the average family £680 a year and deliver significant environmental benefits, both reducing the volume which goes to landfill and allowing us to feed more people from the same amount of land. Eliminating household food waste would deliver greenhouse gas benefits equivalent to taking one in five cars off the road.

The fact below should allow you to run an assembly, quiz your students or run a class discussion. Points you might like to discuss include:

- 1) Why do we waste so much food?
- 2) Do you think it is important to reduce food waste?
- 3) Who do you think is responsible for waste? Consumers, supermarkets, farmers, Governments?
- 4) How can scientists help reduce waste?
- 5) How can you reduce waste in your own home?
- 6) How can we help developing countries waste less? Are we responsible for doing this?
- 7) If food which could be fed to humans is fed to animals or used in an anaerobic digester, is this still waste?

We would be interested to hear what your class think about the issues – please let us know by filling in the survey at www.societyofbiology.org/biology-week-schools

Waste Fact File

What is waste?

Food waste means different things to different people – if we feed it to animals is it still waste?

Perfectly good food is thrown away in large quantities:

- Each year, 2.6 billion pieces of bread are thrown away from UK households.
- 1.6 billion apples are untouched and thrown away too, that is 27 per person.
- 40 to 60% of all fish caught in Europe are discarded because they are the 'wrong' size or species.
- £9bn of avoidable food waste is disposed of in England and Wales each year, and £1bn of this is 'in date'.
- 5,500 whole chickens are thrown away each day in the UK, whilst 440,000 ready meals are thrown away each day too.
- 1.3 million pots of yoghurt are thrown away each day – that is 474,500,000 pots a year.

Why is food wasted?

Depending on the location, waste occurs for different reasons:

- A recently published study shows that 46% of potatoes grown in UK are not delivered to the retail market. 6% are lost in the field, 12% discarded on initial sorting, 5% lost in store, 1% lost in post-storage inspection and 22% lost due to rejection after washing.
- *Less-developed countries:* inefficient harvesting, inadequate local transportation and poor infrastructure mean that produce is frequently handled inappropriately and stored under unsuitable farm site conditions. Foodstuffs spill from badly maintained vehicles. Crops can also be eaten in the field by pests. In China, a country experiencing rapid development, the rice loss figure is about 45%, whereas in less-developed Vietnam, rice losses between the field and the table can amount to 80% of production.
- *Developed countries:* produce is often wasted through retail and customer behaviour - goods are rejected due to physical appearance and size. For example, up to 30% of the UK's vegetable crop is never harvested as a result of such practices. Globally, retailers generate 1.6 million tonnes of food waste annually in this way.

Older pupils may be interested to see this video on preventing crop losses in developing countries: 'War report: fighting armyworms' <http://ow.ly/putqg>

Where does waste come from?

Everywhere! Waste comes from farms, schools, factories, shops and even your own home:

- 24-35% of food from school lunches ends up in the bin.
- The catering industry often throws away a third of its food, as restaurants deliberately order too much in order to avoid running out.
- In canteens at offices, around one fifth of all edible food available is thrown away
- 4.1 million tonnes of food is thrown away from houses annually that could have been avoided – UK households alone waste 20% of the food they buy.

How could have this waste been used?

The resources used to produce food which goes on to be wasted could have been put to better use:

- If we planted trees on all the land that is used to grow food that we then waste, we could compensate completely the carbon dioxide emitted from burning fossil fuels
- There are one billion hungry people in the world, but these could be fed satisfactorily with just a quarter of the food wasted by the USA, UK and Europe in total.
- The amount of irrigation water used to grow food that is then wasted across the globe is enough to provide 9 billion people with their daily 200 litres of water.

How can it be reduced?

There are lots of ways people can help reduce waste, depending on their role in the community:

- Shoppers can stick to their list, and not be tempted into Buy One Get One Free deals unless they are certain they will be able to use the product.
- It is easy to confuse 'Use by', 'Best before', and 'Display until' dates and so safe food is thrown away. Only the 'Use by' date shows that the food is no longer safe to eat.
- Supermarkets and high street food retailers could increase efforts to redistribute unsold food that is reaching its sell-by date.
- In 2011, the charity FareShare provided food towards 8.6 million meals. It re-distributes 20,000 tonnes of food per year.
- Challenge the high standards that fruit and vegetable has to reach before being able to be sold in the store – we can still eat misshapen vegetables.
- Scientists can make improved crop varieties which are resistant to pests, or fruit that lasts longer after being harvested. Packaging can also ensure food lasts for longer.
- For ideas in your house, visit: www.wrap.org.uk/content/solutions-around-household-food-waste

Further resources

You can find these facts and more at

- www.lovefoodhatewaste.com
- www.recyclenow.com/schools
- www.tristramstuart.co.uk/FoodWasteFacts.html
- www.foodsecurity.ac.uk