THE MUSEUM OF ENGLISH RURAL LIFE

University of Reading

How diverse is your diet?

With the impact of increased food production, how has the farmed food we buy changed over time?

Your class will have the opportunity to consider how the variety of vegetables and fruits has become less diverse in recent decades. Fresh produce often travels many more thousands of miles than similar foods would have done in the past, and are available to buy at most times of the year, even when they are out of season in the UK. These activities enable everyone to evaluate how we source and buy our foods, how to increase the range of foods we eat, and how buying and eating greater varieties of apples, carrots and green beans can be better for farming, the environment, and our own health and wellbeing.

UPPER PRIMARY | LOWER SECONDARY

Learning outcomes

By the end of this activity students will:

- Have a greater awareness of how our food buying habits have changed over time and how the food industry has moved towards fewer varieties of certain foods, such as apples, carrots or specific animals in a world of mass production and intensive farming.
- Realise that there are many food producers in the UK producing local, less-intensively produced varieties of food and the benefits this has for them, the environment, and the animals or plants involved.
- Be better able to advise their families on where and what to buy, how to buy seasonally (and the associated benefits) and be more informed for when they are buyers of foods themselves.

Before your visit

- Research traditional varieties of farm animals, apples, pears, peas, potatoes or cheeses. How did (or do) they differ between regions? What were they initially bred, cultivated, or developed for? What was different or unique about them?

  Further activities:

  – Develop a class catalogue of lost or local varieties. What do their different names mean, and what does this tell you about where they come from?

  – Design your own artwork to feature on a seed packet promoting a once popular fruit or vegetable, encouraging people to buy and grow it again.

  – Produce a poster or webpage promoting a local breed, apple, pear or cheese. What will you say about it? What is special about it? Why should someone buy this local variety or type? What photos or illustrations would you have? Would you show it as the raw material – being made, grown or reared – or the final product?

- Investigate where your food comes from today. Look for the origins of foods at home and at school – involve the school kitchen or lunch suppliers.

  Plot on a map where foods originate from. Categorise into local, national and international, and compare amongst the class. What does this tell us about food production? What can we do to reduce the distances our food comes from?

THEMES AND TOPICS

- Realising where our foods come from, and where they used to come from.
- Understanding seasonality and the impact of consumer demand for certain foods all year round.
- Knowing where and how a variety of ingredients are grown, harvested, and processed.
- The principles of a healthy and varied diet.
- Environmental breakdown and effects on other living things.
- Foodchains: Farmland is important for many different food chains, forming food webs, in our countryside

LINKS WITH OTHER ACTIVITIES

These activities could be used in conjunction with the:

- 'What was farming like before modern technology?'
- 'Where have all our songbirds gone?'
- 'What is the future of our countryside?',
- 'Land of the Giants'

resources found on our webpage.

This resource works alongside our short Diet Detectives animated film.

- Where do some of our popular fruits, vegetables, spices and sugar originate? Find out more about the origins of apples, chickens, sugar, and tomatoes.

  For example, the apple is originally from Asia. How did these foods get here? What journeys and paths did they travel?

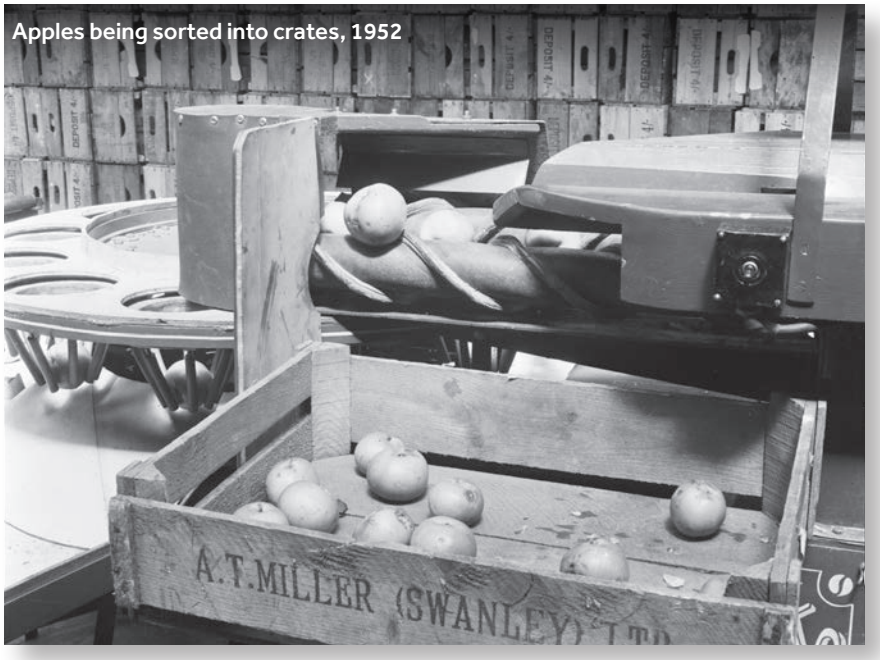
- Below are images relating to past practices of providing local foods. Discover whether these practices have changed and how growing, harvesting and packaging foods has progressed.

Sprouts being sorted by the roadside, 1936

Growing sprouts before harvesting, undated (1940s)

Ploughing the soil after the sprouts have been harvested, 1950

Sprouts being sold on the roadside, 1936



Apples being sorted into crates, 1952

Sorting apples into crates; a small-scale operation, 1952

A closer image of the apple-sorting machinery, 1952

Heritage fruit and vegetables

Until the middle of the nineteenth century many people grew their own fruit and vegetables (if they had land or their own garden). Hundreds of varieties of fruits, such as apples and pears, were grown and suited to particular soils, weather and gardens across the country. These fruits were developed over hundreds of years. With the advent of large-scale farming, older traditional forms have been lost to a handful of common cultivars and varieties of fruit and vegetables. For example, today at the supermarket you will often find only one type of carrot. Modern varieties have been developed to grow more easily, quickly and be better resistant to diseases and pests. Modern tomatoes have thicker skins so they can be transported without tearing and carrots are resistant to the carrot-fly, an insect that causes widespread damage.

For more information on heritage animals see our **'Land of the Giants'** resource.

Apples

In our supermarkets we often see just a few varieties of apples, and usually the same ones all across the country. For example, we often have just the choice of Granny Smith and Pink Lady, both types of apple that come from Australia. However, local varieties include the Saltcote Pippin from the Sussex counties, the Worcester Pearmain from Worcester and Ashmead's Kernal from Gloucestershire. The national fruit collection, which is curated and maintained by the University of Reading, holds 2000 types of apple at the **Brogdale Collections** in Kent. See also illustrations of the Herefordshire Pomona on display in our Year on the Farm gallery (in the open book).

Most common plant and animals used for food

In our weekly shop a whole variety of foods from across the world are available to buy. Despite this, we actually have less variety of meats, fruits and vegetables to choose from; 75% of the world's food comes from just 12 plant and five animal species listed overleaf.

What are some of these vegetables and where are they grown? How many of these do we use in our own cooking and eating? How are they important in other countries and cultures?

Plant-related foods

Rank	Product
1	Sugar
2	Maize
3	Rice
4	Wheat
5	Potatoes
6	Soy beans
7	Cassava
8	Tomatoes
9	Banana
10	Onions
11	Apples
12	Grapes

Animal-related foods

Rank	Product
1	Beef and milk
2	Chicken and eggs
3	Pork
4	Goat and milk
5	Sheep

Ranked by annual global production (2011), with 1 generating the greatest production (thefuturemarket.com/biodiversity).

Due to our changing tastes for meat, the UK has lost 26 traditional varieties of farm animal, known as native livestock breeds (see **Rare Breeds Survival Trust**). 20% of livestock breeds are at risk of extinction around the world.

Why does this matter?

The United Nations' goal is to end malnutrition and world hunger by 2030. To do this we need to be growing foods that are able to survive in a changing climate and help us combat environmental breakdown. Relying on a just a small range of single varieties of fruit, vegetables and animals places us at great risk. If something catastrophic were to happen, such as disease, drought, flooding or a massive issue with particular insects, this might wipe out one or more of these core food sources.

The loss of food diversity means:

- we lose traditions associated with local varieties of foods, for example, the Carlin Pea from Kent used to be served on Carlin Sunday during the festival of Lent; they were served to children at the end of a church service.
- fruit, vegetables and animals have lower genetic resilience – this means they have limited genes (smaller gene pool) to cope with a changing climate, pests, and diseases.
- we see the complete extinction of particular varieties of foods.
- a threat to the health of our environment and the variety of foods that are part of a balanced diet and essential for our good health.

Visiting The Museum of English Rural Life

Where have our foods come from?

Purpose

Map out locally-produced foods featured in our galleries. The activity will encourage familiarisation with English counties and place names.

Prep time

Spend ten minutes printing out maps of English counties or produce one larger map which can be laid out on the floor or attached to a cork pin board. The cork pin board could be a light-weight A3 or A2 size, carried around which you bring from school.

Activity time

Spend 20–30 minutes, using our ideas of places to visit in our galleries (listed further below).

Resources

- Map of English counties (provided on the next page)
- Pencils
- Cork pin board with a larger size map: foods could be featured on the map using cocktail sticks with labels or small flags attached to them
- Clipboards (museum has A4 size clipboards)

What to do

Children use printed A4 maps (print before you visit) or come back to a larger A3 map you have printed. This is ideally attached to a cork pin board where your class can pin or write things.

To help, we have signposted different areas of the galleries that make reference to specific foods (see further on pp11–13).

Explore the galleries and look for examples of foods (meats, fruits, and vegetables) that have been produced, or processed in, different parts of England. On the map, mark out the name of the food and the local name if there is one, for example, cheese from Yorkshire known as Wensleydale.

Back at school, find out more about some of these foods the children have found. When were they first developed? Where does their name come from and what does it mean or refer to? Are there old or new recipes that use these foods which you could try?

Additionally

Look for local tools or techniques used for making local foods, such as cheeses (Forces for Change gallery) or hop stilts used for collecting hops for beer (Our Country Lives gallery).

Wagon Walk

The wagons on display have been made in a variety of ways to suit different regions of England, often depending on what and where they were carrying things. The diversity of locally-produced foods across England also meant that a diversity of farm equipment and transport such as wagons developed. Find three different wagons: Where are they from? What did they carry? What made them different to other wagons nearby?

Map of English counties today

Gallery locations related to local foods

The range of traditional varieties of foods used across the English landscape are evident in the Museum's photos, objects, and artefacts, many of which are on display and listed below.

A Year on the Farm gallery

- An open book showing a variety of apples from Herefordshire, a county renowned even today for its apple growing and orchards.
- *Seasonal Chef* interactive: an interactive screen where students decide which ingredients to choose for a meal, based on the seasonality and availability of foods.

Town and Country gallery

- Framed poster *Grow your own food*, referring to wartime efforts in the 1940s to encourage every bit of land to be cultivated.

  Think about what effect this had on the countryside and environment. 97% of wildflower meadows have been lost since the Second World War; most were ploughed up and often later treated with fertilisers, herbicides, and pesticides to grow crops.

This gallery provides the opportunity to discover more about the Woman's Farm and Garden Association and the Women's Land Army, and how women both play and have played a pivotal role in the production of food in England.

Making Rural England gallery

- In the Hearth and Home display there are a variety of artefacts related to sugar and spices, for example a spice box, a spice measure, and sugar cutters. There is also a large album to look through showing how a recipe would have been presented, a government promotion of a nutritional diet from the 1950s and preserves from the garden in 1942.

Forces for Change gallery

- In the selective breeding section of this gallery there is a huge framed display showing many past varieties of seeds and grasses used in agriculture. This provides a talking point about how fewer varieties of seeds and grasses are used in modern farming. This display is an essential record of what was once grown.
  - **New Zealand and grasses**
    When sheep were introduced into New Zealand from the late-eighteenth century onwards, the original local grasses were no good for feeding animals such as sheep, or for crop production, so British ones were introduced instead. What impact has introducing non-native grasses had on the New Zealand countryside?
  - **Thatched houses and grasses**
    Thatched roofs of cottages and houses are replaced periodically and are often made from the straw of food crops such as wheat. The very inner layers of a thatched roof are left and not replaced with some dating back to the 13th and 14th centuries. By looking at these inner layers, people studying how our food and farming has changed over time are able to look at the varieties of crops used in the thatch and what was being grown/cultivated locally at the time. Modern heritage varieties are based on these and used in artisan-type breads and other foodstuffs. John Letts produces heritage flour made from heritage crops that reflect the variety and biodiversity of early crops.
- Cheese map and English cheese geography: a display showing artefacts related to cheese-making and a map to match magnetic pieces of local cheeses such as Barkham Blue, Stilton, and Applebys.

John Letts, based near Oxford, is a farmer, master thatcher, baker and archaeobotanist. He is an enthusiastic ambassador for the grains that were grown and milled to produce the flour used in making the daily loaf hundreds of years ago.

Our Country Lives gallery

- The huge textile wall-hanging represents a farming landscape from a particular English county. It was made as part of the Festival of Britain in 1951 and reveals the regional character of the farmland in this country through its fields, buildings, animals, crops, and people.
- In this gallery there is space for your class to look carefully at the wall-hanging, record some of the different things that it shows, and to discuss how a farming landscape may differ today, some 70 years later.

Wagon Walk gallery

- The variety of wagons in this gallery reveals their different uses related to what they were carrying and the type of land they were moving over (the topography). For example, in Cornwall they were small and narrow to fit down the narrow lanes. On areas of England with heavy clay, the wheels needed extra grips known as strakes. The widths of wagons determined the width between railway tracks today.
- At the end of the Wagon Walk there is a display of the once local company Sutton Seeds' packet labels and marketing artwork revealing the variety of fruits and vegetables once being sold.

The MERL's outdoor gardens

During the spring and summer our outdoor gardens are planted out with vegetables. This provides the opportunity to see how vegetables are used in gardens and what some of them look like in the ground. For access, check with reception during or prior to your visit.

What next?

- Visit a farm and see **where foods come from** or Invite a local producer or farmer to come into school.

  LEAF (Linking Environment and Farming) is a leading organisation promoting sustainable food and farming. Their education website is **here**. They also take oart in **Open Farm Sundays**.

- Is there an apple or pear tree from your county? You could buy one and plant it at school. Are there some local varieties that have gone extinct in your area?

  If we lose local varieties of fruits does this matter?
  What do local varieties provide? How might they be adapted to regional differences, for example, in weather or traditions?

  Bernwode Fruit Trees in Buckinghamshire is one such place that sells rare and traditional varieties of fruit trees.

- Book a free tour with a local supermarket or supplier and consider budgets, ingredients, healthy choices, and menus.
- Bring in examples of locally-produced foods to taste, and why not make mini-sandwiches, frittatas, or omelettes.
- Plot on a map those local producers/suppliers of local foods within a 50 miles radius of your school and the varieties of local vegetables, fruit, or meat they supply. How easy are they to access? What are the benefits of shopping with them rather than a supermarket? Consider effects on our climate, how a warming climate might mean new and different varieties of foods can be grown, may have a profound impact on air quality, or result in different transport needs and requirements.
- **Internet food shopping**
  How has internet food shopping changed our lives?
  How much information can we get about the foods we buy? (In terms of where they come from and what's in them)

  Does this help reduce the miles food is travelling or increase it?

  Students to shop for a family for one week
  Explore cost, types of food students selected and items chosen by a few or all of the students. Which foods were selected?

  Questions to explore:
  Which foods / animals are important to our diet?
  Can we survive without these?

  Link to our **Diet Detectives video** and explore animal extinction.

Would this have an impact on you? Challenge/stretch point: why not explore extinction in more depth. What is at risk today? Does the extinction of a breed of farm animal/food product cause as much concern as the African elephant or black rhino? Should extinction of crafts (such as the making of English cricket balls) be viewed in the same way and if so, why?

Food production and its effects on our environment

Our learning resource, 'Where have all our songbirds gone?' provides more context on how farming and food production affects our wildlife and empowering activities for students to be proactive in lobbying for change.

Despite the loss of variety within particular types of food, having plenty of food to buy in our shops impacts both our local, national, and international environments. The use of chemicals, the loss of woodlands and forest, and the erosion of soils all affect the natural environment and the wildlife living in it, as well as the long-term production of food. Explore what these effects are and how healthy soils are the key to a healthy farmland landscape. Develop simple food chains showing what wildlife needs and what happens when a part of the food chain, such as insects, are knocked out by insecticides. For example:

a. Light and soil
   Apple tree
   Aphids (feeding on sap)
   Bird such as a house sparrow
   Bird of prey such as a sparrowhawk

b. Light and soil
   Sunflower
   Bumblebee (pollinating flowers)
   Harvest mouse
   Bird of prey such as a barn owl

The MERL Galleries