5: Pulses around the world

Primary Schoolchildren - Ages 8-11

Aims:

To explore cultural contexts of pulses throughout history and in modern times.

Objectives:

- Students will compare diets around the world and throughout history.
- Students will develop their understanding of how different pulses are used in different dishes around the world.
- Students will consider how different countries / cultures use pulses to meet their dietary needs and the role global trade plays in that process.

Resources:

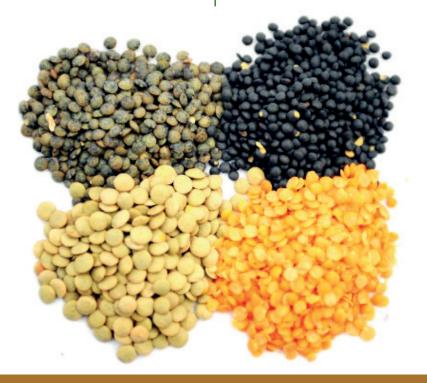
- 1. World map (from teacher pack).
- 2. Diets through the ages fact sheet (from teacher pack).
- 3. Modern diets fact sheet (from teacher pack).
- 4. National dishes that use pulses fact sheet (from teacher pack).
- 5. Pulse import and export data fact sheet (from teacher pack).

Suggestions for further development:

- Research how your own country uses pulses. Do they play a major part in your diet? Does your country grow more or less pulses than it needs? How does the trade in pulses affect your country?
- For further reading: Hungry Planet, What The World Eats by Peter Menzel.



People enjoy pulses across the world.



5: Pulses around the world

TIME

DFTAILS

TIME **DFTAILS**

20mins

Teacher will introduce the topic to the pupils by posing the question "Over ten thousand years ago what did early humans eat?" (wild animals, wild grains, wild berries, root vegetables and nuts). How does this compare to the modern human diet? What do we still eat, and what do we eat that is 'new'? (More simple carbohydrates: wheat, rice, processed sugars, oil and fat, pulses). Do you know why our diets have changed? Does your idea of 'cavemen' include farming? Are modern diets the same all over the world?

After the starter discussion, pupils can be shown a wall map of the world (resource 1), and tested on their geographical knowledge. They need to know where North America, Europe, Middle East, Asia, Latin America, Africa and Oceana (Australasia) are. In small groups pupils will be given resources (resource 2 and 3) outlining the make-up of our diets today in the regions listed above and some national dishes from around the world. They must use the resources to answer a series of questions.

Each group can present their findings to the class as though they are making a news report or mini-documentary. As they are doing so, pupils should consider the following questions:

30mins

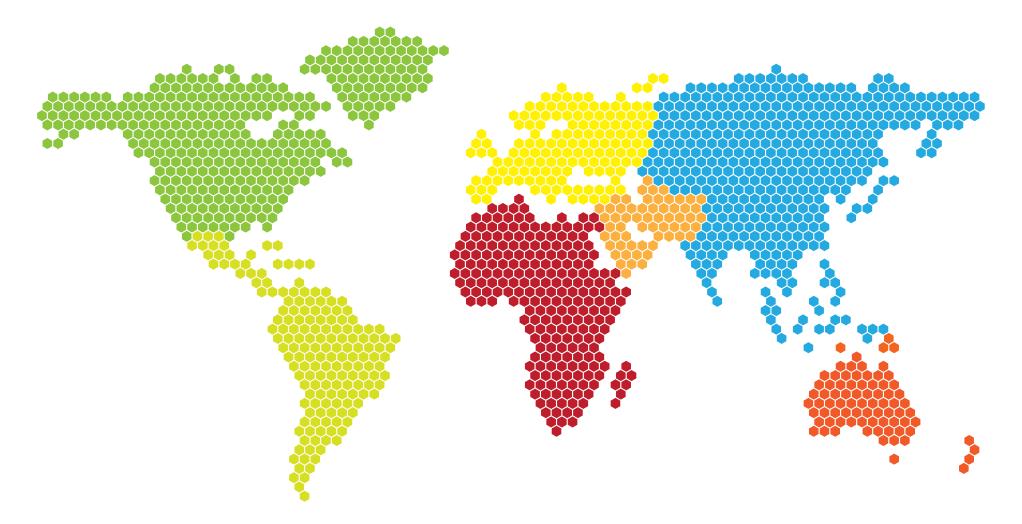
What were the diets of people 50,000 years ago? How and why did people's diets start to change 10,000 years ago? What about in more modern times? How does the role of pulses compare in the different regions and in modern diets? Looking at the list of national dishes (resource 4) are there any similarities or differences in the dishes around the world that pupils can find?

10mins

More pulses are consumed in some regions, and less so in others. Pupils will be given resource 5 and, using the information, discuss the following questions. Can you say which countries consume more pulses than others? If a country consumes more pulses than it can grow, what are the options for acquiring more? Some countries grow more pulses than they consume, and trade these with other countries. On the class map, link the countries that might trade in pulses, using arrows to show the direction the pulses take. India, China and the USA are some of the biggest importers and exporters of pulses. Can you calculate the net difference for these countries?

Resource 1 World map





Resource 2a Diets through the ages



Before 10,000 BC

Palaeolithic Period Diet before 10,000 BC (before farming)

plant

animal

Wild:

Meats (e.g. gazelle, antelope, deer)

Grains

Berries

Roots

After 10,000 BC

Neolithic Period Diet after 10,000 BC (with the start of farming)

plant

65% | 35% animal

Farmed:

Meats (e.g. sheep, cattle, pigs, goats)

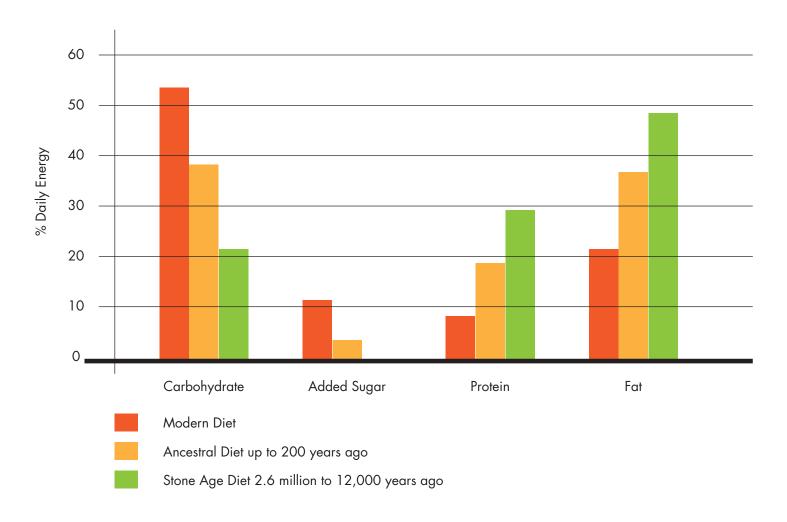
Grains

Pulses / Fruit / Vegetables

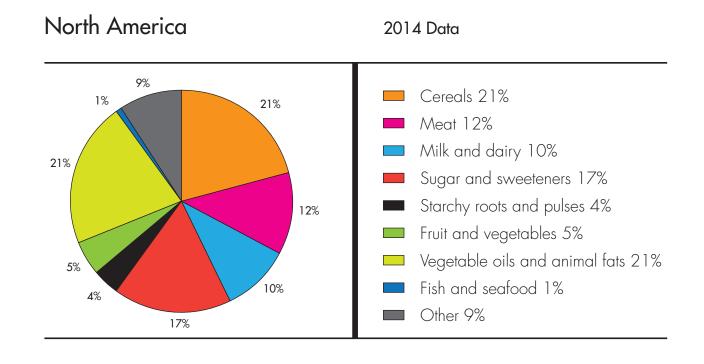
Dairy

Resource 2b Diets through the ages

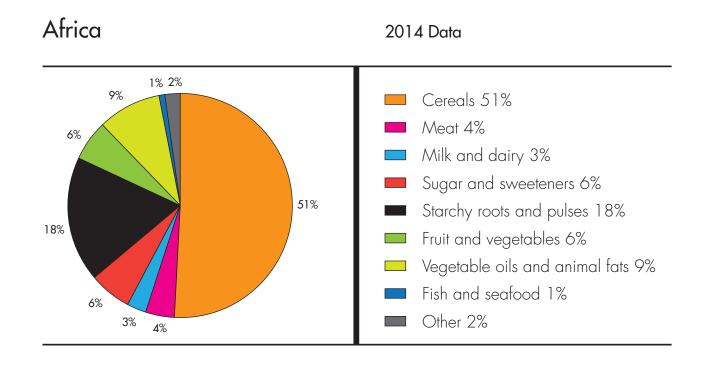




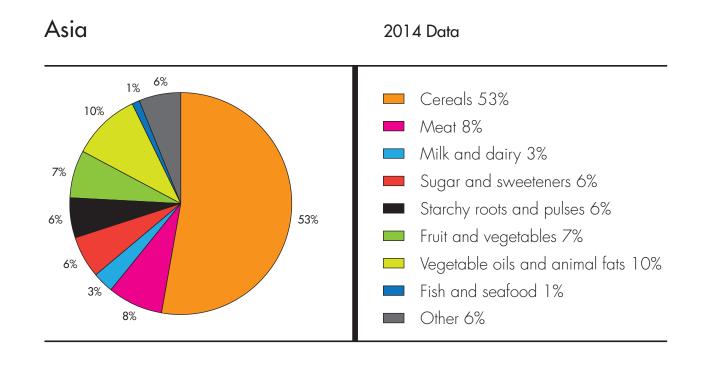




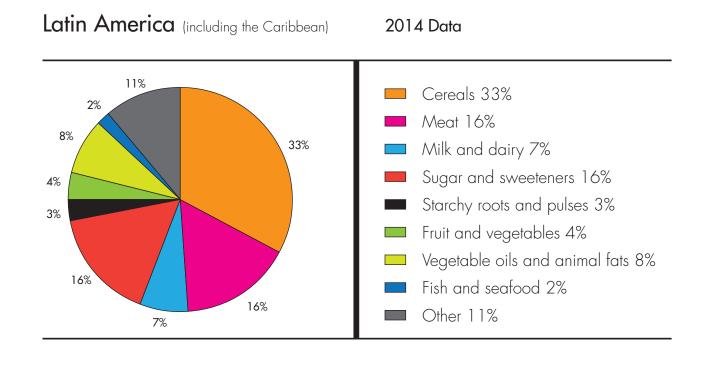




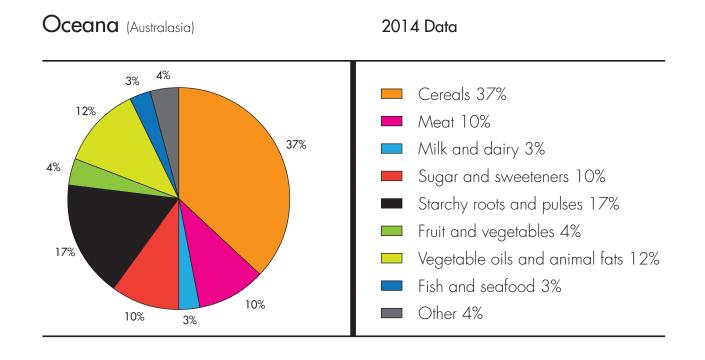




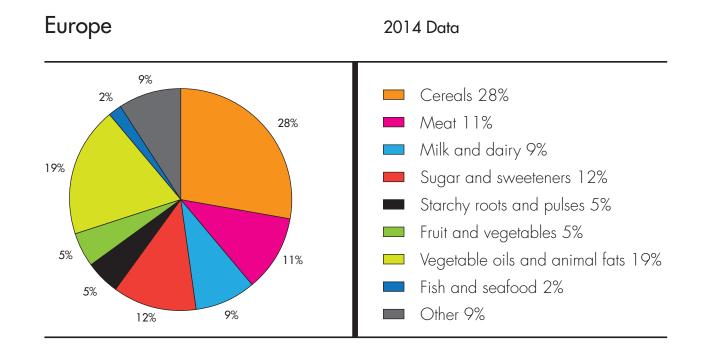












Resource 4 National dishes that use pulses









People enjoy pulses in their meals and snacks right across the world.

Take a look at the list of national dishes below all of which use pulses as an important ingredient.

Can you spot the similarities in some of these dishes wherever they are being cooked across the world? Have you tried any of these dishes and what did you think of them?

Country	Dish	Description
Brazil	Feijoada	Slow-cooked stew with black beans, meat and sausages
Costa Rica	Gallo pinto	Stir fried black beans and rice with spices
Egypt	Ful medames	Slow-cooked stew of smashed fava beans
England	Baked beans	Haricot bean stew in a tomato-based sauce
Finland	Hernekeitto	Soup with ham and green peas
France	Cassoulet	Slow cooked stew with meat, sausages and haricot beans
Greece	Fasolada	Tomato-based soup with cannellini beans and olive oil
India	Dahl	Slow-cooked stew of split peas, beans and spices
Israel	Falafel	Deep fried ball of smashed chick peas, fava beans and spices
Italy	Minestrone	Tomato-based soup with cannellini beans, vegetables and pasta
Mexico	Chili con carne	Slow-cooked stew with beef, red kidney beans and spices
Morocco	Harira	Tomato-based soup with lamb, lentils, chickpeas, yellow split peas and spices
Nigeria	Akara	Deep fried ball of smashed black-eyed beans and spices
Romania	Fasole cu carnati	Smoked sausage and haricot bean stew in a tomato-based sauce
Uganda	Mugoyo	Smashed sweet potatoes and red kidney beans

Resource 5

Pulse import export data fact sheets



Worlds biggest pulse importers (by metric ton)

1	®	India	3,418,356
2	Å	Egypt	3,027,188
3	*}	China	1,106,173
4	C	Pakistan	433,999
5		Brazil	373,260
6		USA	351,625
7	C *	Turkey	334,846
8		Italy	296,094
9		Spain	275,548
10	G	Algeria	264,030

Worlds biggest pulse exporters (by metric ton)

1	Canada	4,393,035
2 * *	Australia	1,495,892
3	Myanmar	921,116
4	USA	869,743
5 * :	China	731,757
6	India	652,766
7	Russian Fed	551,531
8	France	344,948
9	Argentina	237,091
10	Mexico	125,919
8 9	France Argentina	344,948 237,091

Import data for 136 countries available at http://agriexchange.apeda.gov.in/product_profile/Major_Imporing_Countries.aspx?categorycode=0305

Export data for 171 countries available at http://agriexchange.apeda.gov.in/product_profile/Major_Exporing_Countries.aspx?categorycode=0305