



Suitable for
Ages 8+

Time Required:
1 hour

Branch
Session

Poos from the past

How much can poo tell us about the past? Investigate the diets of different civilisations by excavating their poo.

Background

Archaeological poos are called 'coprolites' which means fossilised faeces. Coprolites contain loads of evidence to help us learn about people in the past. **We can discover what they ate, how they prepared their food, their health and hygiene and even how ancient societies understood sanitation and cleanliness.**

Archaeologists use different scientific techniques to analyse coprolite. Studying samples under a microscope can reveal plant matter (e.g. seeds), bone matter or lipids (fats). Neolithic coprolite from Durrington Walls near Stone Henge were scanned using micro-computed tomography (microCT) and revealed digested bone fragments.

One of the largest human coprolites discovered was from an excavation beneath Lloyds Bank in York and dated to the Viking period. The

unfortunate person who produced this 20cm long, 5cm wide faeces suffered from a severe infestation of parasitic worms. The coprolite was found to contain thousands of eggs from Whipworm and Maw-worm (*Ascaris*) - parasitic nematodes which live in the large intestine.



*Neolithic coprolite samples from Durrington Walls
Source: Parasitology*



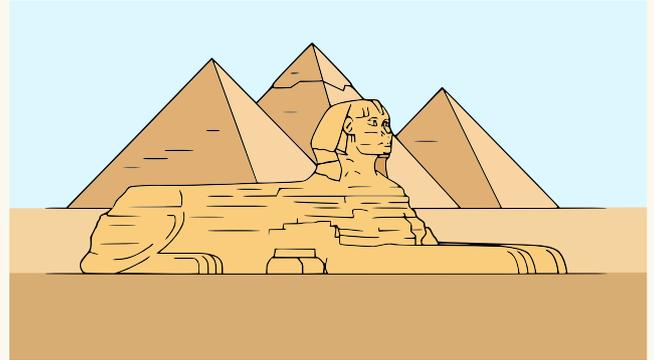
*Coprolite discovered at the Viking-age levels of York.
Source: York Archaeology*



Poo Recipes

Ancient Egyptian (3,200 BC – 395 AD)

- Bread made from wheat and beer made from barley were important elements of the Egyptian diet – the River Nile flood plains provided fertile farm land for crops.
- There is lots of evidence of ancient Egyptians using caraway seeds in both cooking and medicine.
- Herodotus (a Greek writer) wrote that workers often ate radishes and onions for their lunch! Labourers on the pyramids were paid their wages in food rations.
- Rich people did not eat fish too often (it was considered to be a poor person's food), instead they ate meat.
- Cherries were also a luxury only eaten by the rich. Cherries were only available as an import during the Roman period (30 BC – 395 AD)
- When someone died and was mummified, food was placed in their tomb for their journey to the afterlife!



Evidence in the poo	Roughly how many
Caraway seeds (used in cooking and medicine)	Lots
Bread grains (e.g dried pearl barley or other grains)	Lots
Small stones – to show quernstone grinding of bread	5-10
Date stones	1
Melon (white seeds) or watermelon seeds (black seeds)	5-10
Lentils	Lots
Cherry stones	1-2



Roman (43 – 446 AD in Britain, in the West 753BC – 476 AD)

- Julius Caesar first tried to conquer Britain in 55 BC; but it wasn't until 43 AD that Emperor Claudius finished the job! The Romans brought many 'new' foods with them: garlic, leeks, cabbages, peas, thyme, rosemary.
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- They also brought foods and spices they traded from other countries like olive oil (from Spain, Africa and Italy) and pepper, cinnamon and ginger (from India and China).
- During feasts wealthy guests would eat so much that they would vomit in a room called a 'Vomitorium' and then carry on eating!
- Poorer people did not have their own kitchens because they lived so close together, instead they ate takeaways or went to cheap eating houses called 'Popinaes'.



Evidence in the poo	Roughly how many
Melon seeds (white seeds)	Lots
Olive stones	2 or 3
Small stones – to show quernstone grinding of bread	5
Orange or lemon pips	2
Bread grains (e.g dried pearl barley or other grains)	Lots
Date stones	1-2
Whole spices such as peppercorns, cloves or broken cinnamon sticks	1-2



Viking (787 – 1066 AD in Britain)

- Poor Viking people would add pine-tree bark to their meals to add bulk and provide a source of vitamin C (not that they knew this at the time!).
- Viking food was served in small wooden bowls and eaten with iron knives, wooden spoons and fingers – no forks!
- Fish and meat were often salted, dried in the wind or smoked over a fire to help preserve food over the winter months
- Food was often cooked in a clay cooking pot or a cauldron, hung from a chain or supported on a tripod. The 'cauldron snake' was a spiced sausage cooked like this.



- The Lloyds Bank Coprolite from York was full of cereal bran revealing a diet dominated by bread. However other archaeological evidence from Viking houses and yards excavated in York shows that Norse settlers people ate a more varied diet with plenty of seasonal vegetables, fruits and fish.

Evidence in the poo	Roughly how many
Fish bones (cut clear plastic string or fishing wire into small pieces)	3-5
Dried peas	4-5
Small stones – to show quernstone grinding of bread	5-10
Apple pips	2-6
Bread grains (e.g dried pearl barley or other grains)	Lots
Cherry or plum stones	1-2



Tudor (1485-1603 AD)



- The first Tudor monarch was Henry VII (reign 1485-1509), and the last was Elizabeth I (reign 1558-1603). Potatoes were introduced in Elizabeth I's reign, but only the wealthy could afford them!
- Other 'new' foods came to Britain as a result of voyages to the 'New World': tomatoes, peppers, maize and turkey.
- People in Tudor times ate with knives and spoons – no forks until the late 1600s.
- Bread was eaten at every meal.
- Food was seasoned with spices imported from eastern Asia such as nutmeg, cloves, pepper and cinnamon.
- Meat was not eaten on a Friday or during Lent - only fish was allowed.
- Poor people did not eat much meat, their staple food was 'pottage' - a thick soup/broth made of anything they could get their hands on!

Evidence in the poo	Roughly how many
Fish bones (cut clear plastic string or fishing wire into small pieces)	3-5
Bread grains (e.g dried pearl barley or other grains)	Lots
Whole spices such as peppercorns, cloves or broken cinnamon sticks	2-3
Apple pips	2-6
Cherry or plum stones	3-4
Peas	3-4
Seeds from bell peppers or tomatoes	3-4