

Edward Jenner

Edward Jenner was a country doctor in Gloucestershire. Using careful scientific methods he investigated the claim that people who had cowpox didn't get smallpox. In 1796 Jenner injected a small boy, James Phipps, with pus from the sores of Sarah Nelmes, a milkmaid with cowpox. Jenner then infected James with smallpox but he didn't catch the disease. Jenner did lots of experiments to prove that his theory was true and published his findings in 1798. He coined the term vaccination, using the Latin word for cow, vacca. In 1840, vaccination against smallpox was made free for infants. In 1853 it was made compulsory. The vaccine was a success – it contributed to a big fall in the number of smallpox cases in Britain.



Source A: Drawing of infection of milkmaid Sarah Nelmes as part of Jenner's experiment into vaccination for smallpox.



An inquiry into the causes and effects of the variolæ vaccinæ : a disease discovered in some of the western counties of England, particularly Gloucestershire, and known by the name of the cow pox, 1798, E.i.06, Pybus (Professor Frederick) Collection, Newcastle University Special Collections, GB 186.

Activities:

Study Source A and read the text at the top of this page.

- 1) Who was Sarah Nelmes?
- 2) What can you see on her hand?
- 3) What did Jenner do with the pus from these sores?
- 4) Why did Jenner intentionally infect the 8 year old boy James Phipps with cowpox?

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Source B: Extract from Jenner's book, An Inquiry into the Causes and Effects of the Variolæ Vaccinæ', 1798 in which he describes how James Phipps, an 8 year old boy was given cow pox from the pus of the milkmaid Sarah Nelmes, and was then given the more deadly smallpox virus and never developed the disease proving that vaccination worked.

[34]

In order to ascertain whether the boy, after feeling so slight an affection of the system from the Cow-pox virus, was secure from the contagion of the Small-pox, he was inoculated the 1st of July following with variolous matter, immediately taken from a pustule. Several slight punctures and incisions were made on both his arms, and the matter was carefully inserted, but no disease followed. The same

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Activities:

Study Source B and read the introductory text on the previous page.

1. Did the boy (James Phipps) get unwell with cowpox? Pick out a phrase from the source to show this.
2. Did the boy (James Phipps) develop smallpox? Pick out a phrase from the source to show this.
3. What did Jenner's experiment show?

Exam Style Question:

How useful is **Source B** to an historian studying vaccination? Explain your answer using **Source B** and your contextual knowledge. (8 marks)

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