# Health









## Health Fleam

**Fleam** — this instrument was used to puncture veins as part of the blood letting process which was called 'breathing a vein'. Medieval physicians believed that people had four 'humours' in their bodies — yellow bile, black bile, phlegm and blood. If you were ill you may have had too much of one humour and it had to be taken out. Bleeding you by opening a vein with a fleam was one option for doing this.

## How do we know about fleams?

Fleams are described in medieval medical texts and illustrated in medieval manuscripts, and have been found during archaeological digs.





# Health Leech in jar

Leech in jar — leeches were used to remove blood from the body, by sucking it out. When the leech bites the patient it injects a chemical called an anticoagulant into the wound. This stops the blood clotting and could mean that the wound will bleed for up to ten hours. The leech could drink blood for about two hours. Medieval physicians believed that people had four 'humours' in their bodies — yellow bile, black bile, phlegm and blood. If you were ill they thought it was because you had too much of one humour and it had to be taken out.

# & Cadw



## How do we know about the medieval use of leeches?

The medieval use of leeches in medicine is described in medieval medical texts and illustrated in medieval manuscripts.



# Health Trepan

**Trepan** — trepanning is the oldest surgical operation in history, and a trepan is an instrument used to drill a hole through the skull. If you had a bang on the head, and your brain started to bleed, you could die. By drilling a hole in your skull the blood could be let out and this might save your life. The skin on your head would be cut and moved out of the way first and then the drilling would start. The physician would cut a disk of bone from your skull. Afterwards, the original piece of bone or a perhaps a silver coin would be used to seal the hole in your skull before the skin was replaced and stitched up.

## How do we know about trepans?

Trepans are described in medieval medical texts, illustrated in medieval manuscripts and archaeologists have discovered skulls with trepanning holes in them, where bone re-growth shows that people had survived the operation. Some of these skulls date back to the prehistoric period.





# Health Tooth forceps

**Tooth forceps** — these look like pliers and are used to hold a tooth firmly when it is being pulled out. A surgeon or barber surgeon would first waggle the tooth to loosen it in the jaw bone and then pull it out very carefully using these forceps. If he held the tooth too tight in the forceps it may crush or break. It was a great skill. Don't forget, no anaesthetic was used to stop the pain during this operation.

#### How do we know about tooth forceps?

Tooth forceps are described in medieval medical texts and are illustrated in medieval manuscripts, and examples have been found during archaeological digs.





## Health Ball cauterising iron

**Ball cauterising iron** — if you had a wound or injury that was bleeding badly a red hot cauterising iron was used to burn the blood vessels closed and stop the bleed. Although this might save a life, this would have been very painful and probably would have destroyed much of the tissue (muscle, fat and skin) around the wound causing more distress to the patient and possible infection. A surgeon would have a collection of irons kept hot in the fire, one for every type of wound or injury. This is where the phrase 'having many irons in the fire' comes from.

## How do we know about ball cauterising irons?

Cauterising irons of many shapes and sizes are described in medical texts and illustrated in medieval manuscripts. Some examples which have been found during archaeological excavations are on display in museums.





## Health Flat circle cauterising iron

Flat circle cauterising iron — a cauterising iron was not just used to stop bleeding. It may also be used to burn a blister on the skin known as a counter irritant. Medieval physicians believed that people had four 'humours' in their bodies — yellow bile, black bile, phlegm and blood and the idea was to draw the bad humour up to the skin from the area that was injured or the point of pain. When you burst a blister a fluid comes out and medieval physicians thought that this was the humour coming out of the body.

## How do we know about flat circle cauterising irons?

Cauterising irons of many shapes and sizes are described in medical texts and illustrated in medieval manuscripts. Some examples which have been found during archaeological digs are on display in museums.





## Health Tooth(worm) cauterising instruments

**Tooth(worm) cauterising instruments** — medieval people believed that toothache was caused by tiny worms eating the tooth from inside. One way to get rid of the worms was to entice them out by holding your head over a candle. The worm would crawl towards the light and fall out of the tooth. The other way was to burn the worm inside the tooth with a red hot piece of wire. The wire was pushed through a tube so that you did not burn your mouth, through the tooth and into the worm, killing it. Of course you then had a hole in your tooth which could fill up with food, which would rot and make you very ill.

## How do we know about tooth cauterising tools?

Tooth worm cauterising instruments are described in medieval medical texts and illustrated in medieval manuscripts.



#Cadv

# Health Clyster syringe

**Clyster syringe** — if you had a bad stomach or couldn't go to the toilet then the physician may decide to give you an enema. This could be a mixture of warm water, milk and salt or even boar's bile and vinegar! The mixture was placed into the clyster syringe and the syringe inserted into your bottom. The mixture was then squirted into your bottom, which would make you go to the toilet.

## How do we know about clyster syringes?

Clyster syringes are described in medieval medical texts and illustrated in many medieval manuscripts.





# Health Uroscopy Jordan

**Uroscopy Jordan** — in medieval times, if people were ill they would wee into the uroscopy jordan, and the physician would look at the colour, then smell, and perhaps even taste the urine to make a diagnosis. He would have a chart showing the different colours of wee and this would give him an idea of what was wrong. For example, if the wee is very light yellow that's normal. If the wee is dark yellow or even brown you need to drink more water. If it's red or green there is something seriously wrong. If it smells strong then they thought the patient was strong and if it tasted sweet then the physician will tell the patient to eat fewer sweet foods. Of course, don't forget, this is what they believed in medieval times.

#### How do we know about uroscopy jordans?

Jordans are described and illustrated in medical texts. A few uroscopy charts also exist and several jordans are on display in museums.



# Health Wool and egg

**Wool and egg** — the wool was soaked in the egg white and applied to a bleeding wound, in much the same way as we use sticking plasters today. It would have been held in place by tying a piece of cloth over it, just like a modern bandage. The egg white would help stop the bleeding and the wool kept the egg white on the wound. When it dried the egg white would also form a skin over the wound that would allow it to heal. In the mid 1500s the surgeon Ambroise Pare mixed egg white with with turpentine and rose oil and used that instead of a red hot cauterising iron to stop a wound bleeding. It worked.

## How do we know about wool and eggs?

This technique is described in medieval medical texts. The Pare development is described by Pare himself in his notes.





Llywodraeth Cynulliad Cymru Welsh Assembly Government

# Health Honey jar

**Honey jar** — for thousands of years honey was used directly on the skin, in the way that we use antiseptic cream, and on wounds after they had been stitched up. Germs cannot live in honey, so it was a soothing and an effective remedy. It is still used in medicine today.





## How do we know about the medicinal use of honey?

The use of honey is described in medical texts from antiquity to the present day.



