

The Medical Revolution

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The Ancient Egyptians

Long ago, people turned to myths and legends if they were sick. They believed that disease was caused by bad spirits or spiritual beings.

The cure was often to get rid of the disease using spells, prayers to the gods, or magic potions. These were thought to away the bad spirits inside.



An Egyptian coin with a doctor, bowl, and snake



A book of ancient spells and potions



The Sphinx and pyramids, Egypt



An ancient Egyptian mummy ready for the afterlife

The ancient Egyptians believed in an “afterlife” which was like a second life—a time when the spirit lived after death. As part of this, they believed that it was important to preserve the body well. Even though the spirit left the body, it needed to return to the body from time to time.

The body was washed, and some of the internal organs were removed. Then the body was dried, bathed in oils, and wrapped.



Mummies and a sarcophagus in the British Museum, London

Hippocrates (460-370 BC)

Hippocrates, an ancient Greek physician, is often called “the father of medicine.” He was admired as a doctor and a teacher. He believed the work of the doctor and the work of a priest should be kept separate. He also believed that all disease has a natural cause, not a spiritual one.

Because Hippocrates was admired by so many people, it is hard to know what is true about his life. We have about 60 medical texts with his name on them, but

Many new doctors take the “Hippocratic Oath” to never harm their patients.

most of them were not written by him. He is credited with the “Hippocratic Oath,” which doctors still use today. However, he probably did not write it.



An ancient book about Hippocrates



Hippocrates

A Healthy Mind Is a Healthy Body

The ancient Romans are known for their huge cities, wonderful art, and the development of democracy among many other things.

Few people know, however, that the Romans were among the first to believe that being clean is good for our health.

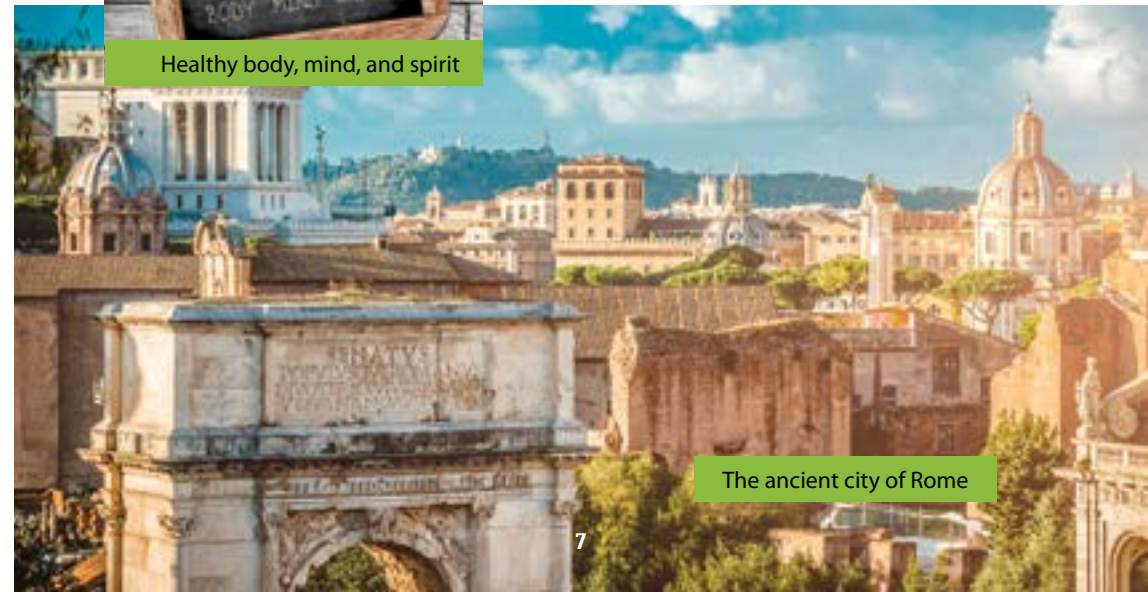


Roman baths in England

They were the first civilization to set up a public health system to benefit the whole population.



Healthy body, mind, and spirit



The ancient city of Rome



A Roman aqueduct carrying water into Segovia, Spain

Roman toilets

The Romans realized that we could become sick from unclean kitchens, dirty toilets, and from drinking bad water. So they brought fresh water into the cities by pipes and aqueducts. They built public baths where people could wash. They put toilets in their homes.

The Greek physician Galen, who lived in Rome for a few years, was one of the first to study the human body in detail. He described the organs of the body such as the heart, stomach, and brain. He, like Hippocrates, believed that there were four major systems in the body. Blood, Galen thought, was the most important one. Blood letting started with the ancient Egyptians, but because of Galen's theories,

it became a very common treatment. He believed that by cutting the body to let out blood, the disease was also being let out.



A re-enactment of the ancient treatment of blood letting

Paracelsus (1493-1541)

As Hippocrates is called the “father of medicine,” so Paracelsus is called the “father of modern medicine.” Paracelsus united medicine and chemistry. He made and used treatments containing chemical compounds.



Paracelsus

Paracelsus also rejected the idea that religious teachings could cure people of illnesses. For many years, he traveled a lot. Everywhere he went, he learned from the people. He believed that experience was knowledge and that he could learn from old wives, gypsies, etc.—not just scholars.

Paracelsus looked for causes of diseases. He knew that goiter was connected to minerals, especially lead, in drinking water. He also understood that miners got sick from the air they breathed. He treated and cured many diseases.



Treatment of disease around 1570



Bottles and chemicals

Comprehension Questions

1. Long ago, people believed their illnesses would be cured by...
 - (a) magic.
 - (b) prayers.
 - (c) potions.
 - (d) All of the above
2. The ancient Egyptians wanted to ... dead bodies.
 - (a) kill
 - (b) preserve
 - (c) have other
 - (d) bury
3. Hippocrates wanted to separate...
 - (a) diseases and treatments.
 - (b) doctors and nurses.
 - (c) medicine and religion.
 - (d) healthy people and bad spirits.
4. ...were the first to set up public health systems.
 - (a) The ancient Egyptians
 - (b) The Greeks
 - (c) The Romans
 - (d) Modern people
5. The Royal Society...
 - (a) invented the scientific method.
 - (b) gave scientists advice.
 - (c) was a place for doctors to meet in secret.
 - (d) was expensive to join.
6. Edward Jenner...
 - (a) made the first vaccine.
 - (b) died of smallpox.
 - (c) was a city doctor.
 - (d) All of the above
7. The father of modern medicine was...
 - (a) Hippocrates.
 - (b) Paracelsus.
 - (c) Galen.
 - (d) Louis Pasteur.
8. The founder of anatomy was...
 - (a) Andreas Vesalius.
 - (b) Zacharias Jansen.
 - (c) Antonie van Leeuwenhoek.
 - (d) Agostino Bassi.
9. Who told surgeons to disinfect their surgical tools?
 - (a) Ignaz Semmelweis
 - (b) Robert Koch
 - (c) Agostino Bassi
 - (d) Joseph Lister
10. ...discovered that microorganisms do not grow in very clean places.
 - (a) Agostino Bassi
 - (b) Hippocrates
 - (c) Robert Koch
 - (d) Louis Pasteur

Glossary

- **admire** to have a very high opinion of someone or something
- **anatomy** the science of studying the human body's organs
- **aqueduct** a structure like a bridge that carries water
- **chemistry** the science of studying substances and how they combine
- **goiter** a large swelling at the front of the neck
- **microorganism** a living thing that is too small to be seen without a microscope
- **microscope** a scientific instrument used to make very small objects look bigger
- **myth** an idea that is not true but is believed by many people
- **organ** a part of the body with its own function such as the brain, heart, stomach, etc.
- **patient** a sick person being treated by a doctor or nurse
- **potion** a drink said to have magic powers
- **religious** based on the belief in a god or gods
- **rival** a person who competes with another because they want the same thing
- **scar** to cause a mark on the body that never goes away
- **theory** an idea that explains something

Key 1. (d) 2. (b) 3. (c) 4. (c) 5. (b) 6. (a) 7. (b) 8. (a) 9. (d) 10. (d)