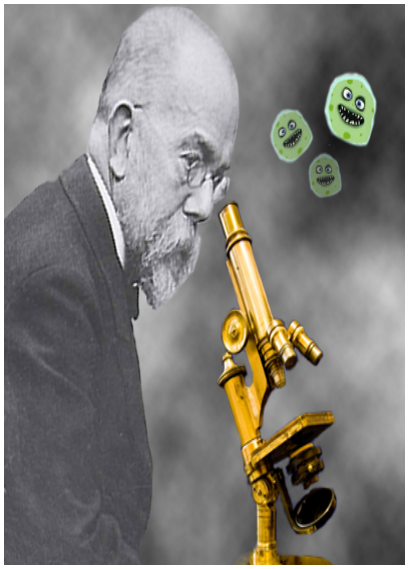


**Robert Koch ( 1843 – 1910 )**

is a very important character for our health today. He is the one who studied the bacteria that caused tuberculosis, anthax and cholrea, each of them an illness in the 18th century. Because of this extraordinary studies he won the nobel prize twice in 1905, in physiology and medicine and started to help people all over the world with his knowledge.

Before he became as famous as he is now, it was a long journey for him. He was born on the 11th of September 1843 in a small village called Clausthal-Zellerfeld. At the age of 5 he taught himself to read the newspaper and during his life reading became a passion of him. After school he wanted to study medicine. It was not easy for him to get a university place because his family was poor. He tried and he made it. In 1866 he began to study medicine in Goettingen ( Germany ). His main interest was pathology and infectious diseases, as tubercolosis. After his studies he began to work as a military surgeon during the France-Prussian war from 1870 – 1872. His career goes on when he became a medical officer. During the time Koch invented four criterias that cause an infection.

1. A microorganism is always present with a disease.
2. The microorganism must be isolated from the diseased host and grown in pure culture, for example in the laboratory.
3. The cultured microbe will cause a disease when it is transferred to a healthy host.
4. The same type of microorganism must be isolated from the infected host caused by the experiment.

These four criteria are the main development of Robert Koch and have influence today. Another important medical influence of him was his newspaper in 1876 and 1877 about special treatments of bacteria. Ferdinand Cohn, a botanist from the University of Breslau, took part in

his newspaper from 1876 and published it, too. With his article he described for example the preparation of bacteria. All in all, his main efforts were and are caused by his studies about tuberculosis. Koch discovered the bacteria that caused tuberculosis by isolating this organism. With this discovery he inspired many young medicines to work on his theory. One character is, for example, Paul Ehrlich. Paul Ehrlich is a German physician and scientist who discovered immunology, chemotherapy and hematology.

After this great discovery he worked in the imperial health office in 1880 and the university medical school in Germany's capital Berlin. From 1891 to 1904 he got the position as the head of the Institute of Infectious Diseases in Berlin. Today the Institute is called Robert Koch Institute which shows his great influence and they wanted and want to honor Robert Koch.
On the 9th April 1910 he suffers a heart attack from which he could not recover. He died on the 27th of May 1910 in Baden Baden at the age of 66 because of its influence on his health.
So what about his social life?
His family was his father Hermann Koch, who worked in the local mines and after time he became the overseer of the mines in the region. His mother was Mathilde Julie Henriette Biewend whose father worked in the mines as an inspector. She loved the nature and gave her passion to Robert. The family had thirteen children but two of them died at an early age.
Koch had two wives. Emma Fraatz whom he married in the mid 1860s. They had a daughter called Gertrude, born in 1868. In 1893 his marriage with Emma Fraatz ended and he married Hedwig Freiberg. They were married since dead.
All in all Robert Koch saved many lifes because of his strong will to discover the human and especially the reasons for diseases and how to handle with it.