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# Penicillin -

is an antibiotic with a broad antimicrobial effect. It is the first effective medicine against many serious diseases, in particular syphilis and gangrene.



# Discovery story

In 1896, the Italian doctor Bartolomeo Gozio, studying the causes of mold damage to rice, developed a formula of an antibiotic similar to penicillin. Due to the fact that he could not offer the practical use of the new medicine, his discovery was forgotten. In 1897, the French military doctor Ernest Duchenne noted that Arabian grooms collect mold from raw saddles and treat horse wounds with it. Duchenne carefully examined the mold, tested it on guinea pigs and revealed its destructive effect on typhoid fever.



# Discovery story

In 1928, the British scientist Alexander Fleming conducted an ordinary experiment in the study of the resistance of the human body to bacterial infections. He found that some colonies of staphylococcal cultures left by him in laboratory dishes were infected with the *Penicillium Notatum* mold strain.

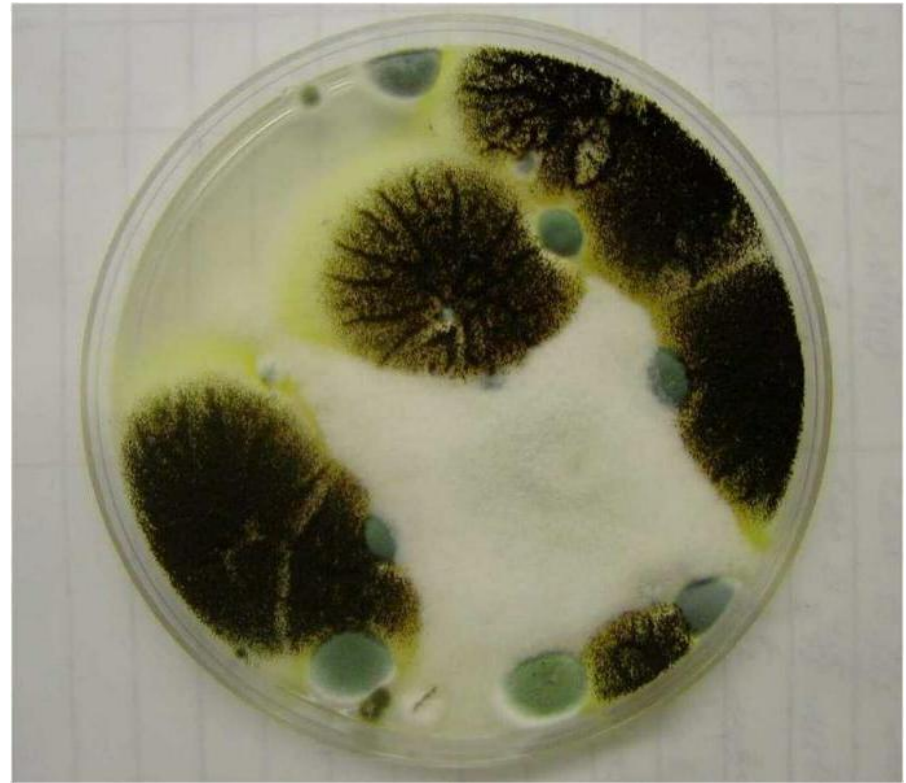
Fleming underestimated his discovery, believing that it would be very difficult to get the medicine. Oxford scholars Howard Flory and Ernst Chane continued his work. In 1940, they isolated the drug in its pure form and studied its therapeutic properties. February 12, 1941.



# Research by Russian and Soviet scientists

In the USSR, the first samples of penicillin were received by microbiologists Zinaida Ermolieva and Tamara Balezina. In 1942, they discovered a *Penicillium Crustosum* strain producing penicillin. During the tests, the drug showed much greater activity than its English and American counterparts.

In 1945, tests of penicillin, developed according to the Western model, began in the Soviet Union. The technology of its production was mastered by the Research Institute of Epidemiology and Hygiene of the Red Army under the leadership of Nikolai Kopylov.



# Confession

Mass production of penicillin was established during World War II. According to some estimates, thanks to this antibiotic during the war years and after it, about 200 million people were saved. The discovery of this drug has been repeatedly recognized as one of the most important scientific achievements in the history of mankind. Most modern antibiotics were created after studying the therapeutic properties of penicillin.



# Thanks for attention!

