

Permafrost bacteria may slow down ageing: scientists

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Russian scientists claimed that a hardy type of bacteria recently discovered in the permafrost of Siberia could help slow down the ageing process.

A hardy type of bacteria recently discovered in the permafrost of Siberia could help slow down the ageing process, Russian scientists claimed on Tuesday.

The [species of bacteria](#) -- given the name Bacillus F -- was found in laboratory tests to have shown signs of slowing down the process of ageing on mice, the [Russian Academy of Sciences](#) (RAN) said.

The Siberian branch of the RAN said Bacillus F lags 3 million years behind similar bacteria in evolutionary terms, according to the characteristics of proteins and some other factors.

"Taking into consideration the unusual living environment, one can only marvel at the resilience of these bacteria," it said.

It added that the organisms found in Russia's northern region of Yakutia -- home to the coldest inhabited area on the planet -- reproduce at just 5 degrees Celsius.

"We just thought: since the bacteria were found in the [permafrost](#) where they were successfully preserved they will possibly have mechanisms of retaining viability," added Nadezhda Mironova, senior research scientist at the Institute of [Chemical Biology](#) and Fundamental Medicine of the Russian Academy of Sciences.

"This is what happened," she was quoted as saying.

Injections of the bacteria into mice have helped boost the natural defences of the animals as they grew older.

"Bacillus F injections have favourably affected the quality of being of the aging animals," the Russian scientists said.

"First and foremost, this concerns immunity and the speed of its activation."

Experiments have shown that metabolism in the tested mice have increased by 20 to 30 percent, the scientists said, adding that the [bacterium](#) may also reduce instances of senile blindness but not the emergence of tumours.

The Russian Academy of Sciences did not say how many mice were tested, adding more animals were needed for the experiments to be more reliable. The mice from a test group lived longer than those in a control group however, it said, calling the results "impressive."

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