Older vaccines for polio and tuberculosis could 'rev up' the body's immune system to counter COVID-19

Two tried-and-true vaccines — a century-old inoculation against tuberculosis and a decades-old polio vaccine once given as a sugar cube — are being evaluated to see if they can offer limited protection against the coronavirus.

Tests are already underway to see if the TB vaccine can slow the novel coronavirus, while other researchers writing in a scientific journal [June 11] propose using the polio vaccine, which once was melted on children's tongues.

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New vaccines aim to teach the body's immune system to recognize and destroy the coronavirus, but scientists are only now beginning to test them in people. Vaccines developed against TB and polio have already been used in millions of people and could offer a low-risk way to rev up the body's first line of defense — the innate immune system — against a broad array of pathogens, including the coronavirus.

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Scientists are betting on an underappreciated facet of the body's immune system. Vaccines are designed to teach it to develop a memory of a particular pathogen. But over the years, vaccines that use live, weakened pathogens have been shown to have potent off-target effects, activating other components of the immune response to beat back other infections, including respiratory diseases.

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If shown effective, those vaccines could potentially provide protection against the second wave of coronavirus, which is likely to crest before a covid-specific vaccine is widely available.

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