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Lining of children's noses better at fighting COVID-19: Australian study

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But the trend was markedly less pronounced in the case of Omicron



University of Queensland (UQ), Australia led research has found the lining of children's noses is better at inhibiting SARS-CoV-2 infections than adult noses.

Dr Kirsty Short from UQ's School of Chemistry and Molecular Biosciences said it might be one reason why children's immune responses have so far proven more effective at avoiding and fighting COVID-19.

"Children have a lower COVID-19 infection rate and milder symptoms than adults, but the reasons for this have been unknown. We've shown the lining of children's noses has a more pro-inflammatory response to the ancestral SARS-CoV-2 than adult noses. But we found it's a different ball game when it come to the Omicron variant", said Dr Short.

The research team exposed the samples of nasal lining cells from 23 healthy children and 15 healthy adults to SARS-CoV-2.

The results showed the virus replicated less efficiently in the children's nasal cells, as well as a heightened antiviral response.

"Future clinical studies will be needed to validate these preliminary findings in a larger population and to determine the role of other factors, such as antibodies in protecting children from SARS-CoV-2 infection", added Dr Short.