

New anti-typhoid gene discovered

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Singapore: Researchers have found a new variant of a gene that can confer five-fold protection against typhoid fever. The study published in the journal *Nature Genetics* suggested that the new discovery may help in developing better vaccines for typhoid fever, which affects millions every year.

The study co-author Ms Sarah Dunstan of the University of Melbourne said in a statement, "We found that carrying a particular form of the HLA-DRB1 gene provides natural resistance against typhoid fever." The gene was found to offer protection against infection by recognizing proteins from invading bacteria, thus stimulating an immune response.

The World Health Organization estimated that every year about 21 million people suffer from typhoid. The disease is caused by the *Salmonella typhi* or *paratyphi* bacteria carried in contaminated food or water.

Scientists also noted that currently, there were no approved vaccines for enteric fever caused by *S. Paratyphi* pathovars, potentially constituting a huge problem as the incidence of *S. Paratyphi A* infection is increasing in many countries across Asia.