

Natural food preservative from bacteria isolated by scientists

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Researchers from the School of Life Sciences at Pondicherry University have recently isolated a bacterial protein from the intestine of chicken.

The researchers have obtained the natural food preservative from *Enterococcus faecalis* CV7 bacteria which were isolated from intestines of country chicken. Researchers cultured these bacteria in the lab under controlled conditions and isolated a short protein named bacteriocinCV7.

The research was conducted by the researchers Arul Venkatesan along with Venkatesh Perumal. They explained , "BacteriocinCV7 can be used as a natural food preservative, as we have seen that it inhibits the growth of Salmonella, a causal agent of food poisoning. The demand for natural food preservatives has dramatically increased amongst consumers owing to the need for healthy, safe, and fresh products."

"Studies showed that BacteriocinCV7 remained functional even at high temperatures of 90 degree Celsius and killed disease-causing microbes in food in less than 18 hours even at a low concentration of 1gram per liter. Therefore, using

bacteriocinCV7 can reduce use of synthetic preservatives and make food safe for consumers”, said Venkatesan.

"Bacteriocin CV7 can also be used as a probiotic for poultry to control infections in place of synthetic antibiotics. This will make food safe for humans in the long run. The scientists have found that bacteriocinCV7 is non-toxic and safe by testing it on cultured human cell lines”, he also added.

The research results have been published journal Food Science and Technology.