

## Soon, a vaccine jab to prevent heart attack

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**Singapore:** Heart diseases, that are among the top killers across the globe can now be prevented with a vaccine. A breakthrough study published in the Journal of Immunology and Clinical research, by scientists at the La Jolla Institute for Allergy and Immunology disclosed the world's first vaccine for heart diseases that significantly reduced plaque buildup in arteries.

In the study, two mice peptides were incorporated into the concept testing procedure for mice. Vaccinated mice had 40 percent less arterial plaques than non-vaccinated mice.

Mr Klaus Ley, lead researcher said, "Over the years, many researchers have demonstrated the critical role of inflammation in heart diseases. Hence a vaccine for reducing inflammation in the arteries can positively reduce the plaque build-up."

Mr Ley explained that this vaccine was far different from the regular flu vaccines. "Through this approach, we would be teaching our immune system to tolerate certain molecules instead of treating them as foreign and attacking them. The vaccine works through desensitization process," he added.

Mr Ley and his team initially identified the peptides that attacked arteries in mice resulting in inflammation. The mouse peptides were used in the test vaccine to teach the body, through gradual exposure, to tolerate rather than attack those proteins.

Mr Ley added that a few more tests were to be conducted after which the vaccine would be ready for human trials in next three years.