

A vaccine to quit smoking!

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Researchers at The Scripps Research Institute (TSRI) have designed a new effective nicotine vaccine which they believe could help smokers and even drug addicts quit.

Nicotine vaccines train the body to see nicotine as a foreign invader. To prompt this immune response, scientists have tried attaching nicotine derivatives called haptens to a larger carrier protein used in other approved vaccines.

The body reacts to the vaccine by creating antibodies to bind specifically to nicotine molecules. When a person later uses tobacco, the anti-nicotine antibodies stop the nicotine molecules from entering the central nervous system and ever reaching the brain.

"This study provides new hope that one could make a nicotine vaccine that succeeds in clinical trials," said Mr Kim Janda, lead author of the study.

The study is published in the Journal of Medicinal Chemistry.