

Helping ex-smokers resist the urge

October 22 2012

A new inhibitor helps previously nicotine-addicted rats stay on the wagon, according to a study published on October 22nd in the *Journal of Experimental Medicine*.

Kicking the cigarette habit is difficult enough, but resisting the urge to light up in situations previously associated with smoking can be a quitter's downfall. But help may be at hand. A new inhibitor developed by Fang Liu and colleagues at the Centre for Addiction and Mental Health in Toronto helped ex-smoker rats resist that urge.

Liu and colleagues found that long-term [nicotine exposure](#) caused two [neurotransmitter receptors](#) to interact in the brain, and their inhibitor prevented this interaction. In rats trained to self-administer nicotine, the inhibitor had no effect on their propensity to indulge. But in "ex-smoker" rats (those weaned off nicotine), the inhibitor decreased the number of relapses after exposure to environmental cues previously associated with a nicotine fix.

If the inhibitor works the same way in humans, it may provide a powerful new way to reduce relapses in people who have quit smoking or [chewing tobacco](#).

More information: Li, S., et al. 2012. *J. Exp. Med.* [doi: 10.1084/jem.20121270](#)

Provided by Rockefeller University

Citation: Helping ex-smokers resist the urge (2012, October 22) retrieved 6 May 2024 from <https://medicalxpress.com/news/2012-10-ex-smokers-resist-urge.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.