

Some more vulnerable to nicotine addiction than others: study

September 29 2015



Finding has implications for prevention and treatment as use of electronic cigarettes grows, researcher says.

(HealthDay)—Some people are more likely than others to get hooked quickly on cigarettes, new research suggests.

The finding is based on what researchers say is the first effort ever to analyze exactly how people react the first time they come into contact with a small amount of [nicotine](#).

"When you give people nicotine for the first time, most people don't like it. It's different from many other addictive drugs, for which most people say they enjoy the first experience and would try it again," said study author Roland Griffiths, a professor of psychiatry and behavioral sciences at the Johns Hopkins University School of Medicine in Baltimore.

In a university news release, he said the study suggests "there are definitely some people who are nicotine avoiders and others who are nicotine choosers, and there are probably genetic or metabolic vulnerabilities that make people fall into one group or the other."

Griffiths and his colleagues discussed their findings in a recent issue of *Psychopharmacology*.

To explore [nicotine addiction](#), investigators focused on 18 healthy adults who had never smoked or had only ever smoked a few cigarettes.

But instead of giving them a regular cigarette, the team offered participants pills containing nicotine equivalent to one-tenth the level of a normal smoke for several weeks, as well as an identical-looking dummy pill. The volunteers did not know if they were taking nicotine or the placebo. They were only told they were taking pills that could contain caffeine, sugar, ginseng, chamomile, theobromine, kava or nicotine.

"We attempted to develop conditions in which people could learn to become familiar with the subtle mood-altering effects of very low doses of nicotine, with the goal of uncovering the reinforcing effects of nicotine," Griffiths explained.

Aside from noting reactions (such as relaxation, changes in energy levels and concentration, light-headedness, drowsiness and jitters), all participants were asked to try to identify when they were consuming dummy pills and when they were consuming actual nicotine.

In the end, half were able to routinely identify the nicotine, citing improved concentration, alertness, energy and mood. The other half were unable to identify it accurately and described their reaction to nicotine in negative terms.

The study team said this implies that when it comes to nicotine susceptibility, some people are "avoiders" while others are "choosers."

Griffiths said he hoped the findings would lead to new ways of preventing and treating addiction, a topic of growing importance as the market expands for electronic cigarettes.

More information: There's more on at nicotine addiction [U.S. National Institute on Drug Abuse](#).

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Citation: Some more vulnerable to nicotine addiction than others: study (2015, September 29) retrieved 9 April 2024 from <https://medicalxpress.com/news/2015-09-vulnerable-nicotine-addiction.html>

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