

E-cigarettes: Making the switch >

Executive Summary:

Trying to quit smoking? Now you have a high tech option.

By Janeson Keeley

According to the Center for Disease Control, in 1964 42.4% of adults in the United States smoked cigarettes. By 2011, that number had dropped to 18.9%. As the effects of smoking became more widely known, smoking became less socially acceptable, more expensive, and limited by law in public places.

At the same time, smoking cessation aids such as nicotine gum, lozenges, patches, and inhalers were developed. Available only by prescription beginning in the 1980s, most are now available over

the counter in many drug, grocery, and variety stores.

So, if smoking is so expensive, socially unacceptable, and unhealthy, and smoking cessation aids are available, why hasn't everyone guit smoking?

Smoking has been proven to be highly addictive. In 2011, Caryn Lerman, Ph.D., director of the Tobacco Use Research Center at the University of Pennsylvania in Philadelphia, found that smokers whose PET scans showed a higher number of "mu-opiod" receptors enjoyed nicotine more and had a more difficult time quitting than those smokers with fewer receptors. Lerman concluded that, "For some people, genetic variations may make it more difficult to quit than for someone else who smokes the same amount for the same amount of time."

So what are those people with lots of mu-opoid receptors to do if they want to give up smoking when going cold turkey is not a viable solution?

The first option is a multi-modal smoking cessation treatment program. In some cases this may involve the use of medications such as Chantix. For those who cannot use Chantix – for instance, anyone with a history of depression – support groups may be helpful.

The second option is the long-term use of smoking cessation products: nicotine gum, lozenges, or patches. The FDA monitors these because they are marketed as "smoking cessation" aids. Their correct use is proscribed by a time limit after which the user is to be weaned completely off nicotine, but for some people long-term use of these serves to provide the nicotine without the tobacco. However, for those who don't like to chew gum, don't like the taste of lozenges, or develop allergies to the adhesive on nicotine patches, there's

another option: electronic cigarettes.

Chinese pharmacist Hon Lik patented the first nicotine-based electronic cigarette in 2003. In 2004 he manufactured and sold them in China, and they were soon sold internationally. They are not regulated by the FDA because they are marketed for smoking replacement rather than smoking cessation. Electronic cigarettes, also called e-cigarettes or "e-cigs", are now manufactured by many companies and are available in drug stores, tobacco stores, and on-line.

An electronic cigarette is made up of a chamber that contains liquid nicotine that is vaporized by an atomizer powered by a lithium battery. The vapor that is inhaled consists of water with a trace of nicotine. Exhaled is a smoke-looking odorless vapor.

