

101 on Oral Nicotine Pouches

Oral nicotine pouches are small, smokeless tobacco products that contain nicotine powder, flavorings and other chemicals. They are placed between the lip and gum, and the nicotine powder dissolves, releasing nicotine into the bloodstream through the lining of the mouth.

Insufficient Safety Data

These products are relatively new to the market, lack long-term data on health effects, and contain harmful toxins.

To date, 20 varieties of Zyn pouches have received marketing authorization from the FDA and can be legally sold in the U.S. Other tobacco companies are selling products without FDA authorization, meaning most nicotine pouches are being sold illegally.



Not Approved as Cessation Aid

The FDA has not approved these products to help people quit tobacco, and nicotine pouches have not been scientifically shown to help people who smoke cigarettes, quit.

The safety and effectiveness of oral nicotine pouches as a harm reduction approach or quit therapy have not been established, but on the basis of the FDA authorization of reduced risk for certain snus products, it is likely that nicotine pouches that contain fewer toxicants have the potential to reduce tobacco-related harm if someone who uses combustible cigarettes switches **completely** and not used in combination with other tobacco products.

Dual Use and Addiction

Most users do not quit tobacco or switch completely to oral nicotine pouches; they **use both** pouches and conventional cigarettes, maintaining nicotine dependence.

Any nicotine use by youth is a problem.

Nicotine can have a profound and long-lasting effect on the adolescent brain, including negatively affecting:

- executive function
- impulse control
- attention span
- working memory
- learning

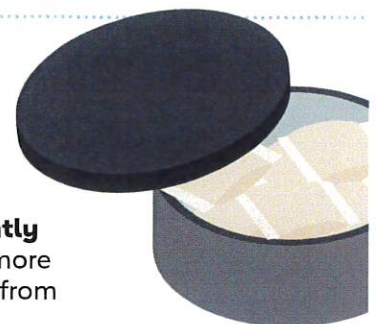


Youth Risk

In 2024...

480,000

Middle and high school students reported **currently using** nicotine pouches, more than double the number from 2021²



Adolescents are more susceptible to nicotine addiction even at low doses, which makes the higher doses in newer tobacco products even more concerning. Studies have suggested that nicotine alters fear and anxiety responses, and contributes to the development, maintenance and recurrence of anxiety disorders.



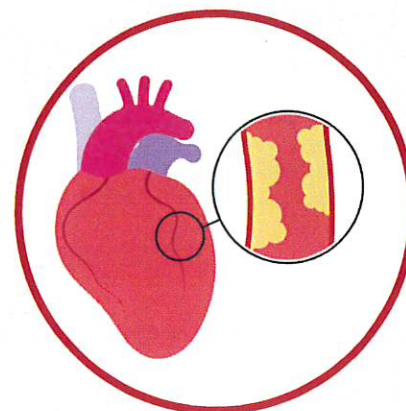


Nicotine Harms

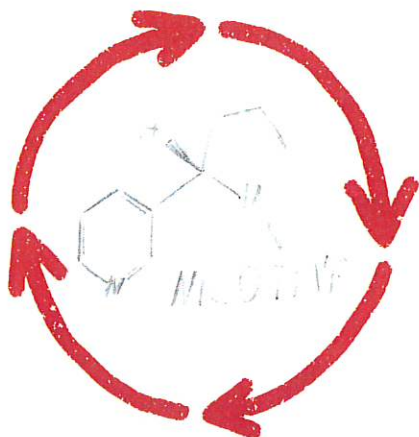
Nicotine pouches deliver similar amounts of nicotine as combustible cigarettes. Nicotine raises the risk of cardiovascular disease, including heart attack and stroke.

Nicotine is **highly addictive** and has serious effects on the body. It **increases blood pressure, raises heart rate and narrows arteries**, putting extra strain on the heart. Over time, it can contribute to hardened arteries, which increases the risk of heart attacks and strokes.

Additionally, some nicotine pouches contain even higher levels of nicotine than combustible cigarettes, making them even more addictive. **Nicotine pouches may present less risk. They do still expose users to harmful and potentially harmful constituents.**



The nicotine addiction cycle



Nicotine follows the same **destructive addiction cycles** as other harmful addictive products. Nicotine may **temporarily** induce stimulation and pleasure and reduce stress and anxiety and may **temporarily** improve concentration, reaction time and performance of certain tasks, especially for adults.

However, as nicotine leaves the system, numerous **withdrawal symptoms** - including irritability, depressed mood, restlessness, anxiety, problems getting along with friends and family, difficulty concentrating, increased hunger and eating, insomnia and craving for nicotine - arrive. The symptoms are alleviated once nicotine is again used, feeding the addiction cycle. With continued use, a person **builds up a tolerance** requiring **higher nicotine content** or **more frequent use** to experience the same physical and mental effects. Over time, tolerance to this new dosage occurs, requiring another increase in the substance use.

This **cycle of addiction** is especially concerning for **young people**. Many who use tobacco mistakenly believe tobacco products can relieve stress or anxiety. However, once the cycle of withdrawal symptoms start, the user feels temporary relief if they consume nicotine again. **This gives a false sense that nicotine relieves stress and anxiety when it is actually the cause.**

**Join the American Heart Association as we work to end nicotine addiction.
Text HEART to 46839 or visit www.HeartPowered.org**