ORAL NICOTIANE PRODUCTS

ORAL NICOTINE PRODUCTS are primarily made from synthetic nicotine and contain various additives and chemicals. Instead of ground tobacco leaves, they use nicotine salt powder or solution. These products are intended for recreational use and are not US Food and Drug Administration (FDA)-approved as nicotine replacement therapy (NRT). While most come in a variety of flavors, California law prohibits the sale of flavored oral nicotine products.¹

POUCHES

Oral nicotine pouches are small bags filled with a finely ground nicotine powder. They may also contain flavors and sweeteners, and are placed inside the upper lip making them spit-less. Oral pouches come in varying levels of nicotine with the lowest dosage observed at 1.5 mg and the highest at 15 mg per pouch. Tin sizes range from 15 - 20 pouches, costs approximately \$5.00, and comes in a variety of flavors including fruit, mint, coffee, and cinnamon. Major tobacco companies sell oral nicotine pouches, such as Zyn (Philip Morris International), On! (Altria), and Velo (RJ Reynolds).

















Nicotine Pouches

GUM

Several US companies, including Lucy and Rogue, market nicotine gum for recreational use. These products are not proven to help tobacco users quit and cannot be marketed as cessation aids. Unregulated nicotine gum is used similarly to FDA-approved gum, with users chewing briefly and then "parking" it between the cheek and jaw. Lucy gum comes in 2mg, 4mg, and 6mg strengths, while Rogue offers 2mg and 4mg strengths. Packs contain 10-20 pieces and cost around \$4.00 to \$5.00 pre-tax.^{2,3}



Gum

LOZENGES AND TABLETS

Lozenges and tablets are a similar size and consistency to hard candies. Lozenges are designed to slowly dissolve in the user's mouth whereas tablets dissolve quicker.⁴ Nicotine strength varies from 2mg to 4mg per lozenge or tablet. Like other oral products, lozenges and tablets come in an assortment of flavors. The safety and use of nicotine lozenges can be confusing to users as one brand, Lucy, has received FDA approval to sell their lozenge as a NRT, but no other Lucy product has received this approval nor have similar lozenges by other tobacco and nicotine companies.⁵



Lozenges & Tablets

DISCONTINUED ORAL NICOTINE PRODUCTS

The development of oral products is familiar territory for tobacco and nicotine companies. In 2009, RJ Reynolds tested orbs, strips, and sticks, while Altria experimented with toothpicks dipped in a tobacco mixture. These products were briefly available but removed from US stores by 2013.6 Recently, companies introduced gummies, gum, toothpicks, tablets, and lozenges. In 2022, the FDA issued a warning to the main seller of nicotine gummies, leading to their market removal.7 RJ Reynolds and British American Tobacco also discontinued their Velo nicotine lozenges in the US.



Toothpicks & Gummies

ORAL NICOTIVE QUICK FACTS



National Popularity: Oral nicotine pouches have gained popularity in recent years, growing from 126 million units sold in a two-month period in 2019, to 808 million units sold in a two-month period in 2022.8

2_X

California Popularity: Current use of oral nicotine pouches doubled among high school students increasing from 0.6% in 2022, to 1.1% in 2023.9 Current prevalence among young adults (18-25 year olds) is 3.1%.10

Youth Use of Oral Nicotine Products

A 2022 study of adolescents in Southern California found that non-tobacco oral nicotine was the second most popular product type behind vaping devices with 3.4% of youth reporting ever use and 1.7% reported past 6-month use. These products were disproportionately used by Hispanic and Asian youth and young people who reported other tobacco use.¹¹

California Department of Public Health. (n.d.). California prohibits retailers
 from selling flavored tobacco products. Available at https://www.cdph.ca.gov/

Programs/CCDPHP/DCDIC/CTCB/Pages/CAFlavorTobaccoLaw.aspx

- Lucy. (2024). Gum. Available at https://lucy.co/products/gum?variant=41904007774394&selling_plan=711655610.
- Rogue. (2024). Nicotine Gum. Available at https://www.roguenicotine.com/gum/.
- Borowiecki, M, Emery, SL, & Kostygina, G. (2022). New recreational nicotine lozenges, tablets, gummies, and gum proliferate the US market. Tobacco Control. 33(3).
- Unger, JB, Barker, J, Boley Cruz, T, Leventhal, AM, & Pentz, MA. (2022). Lucynovel flavored nicotine gum, lozenges, and pouches: are they misleading consumers? Subst Use Misuse, 57(8):1328-1331.
- Craver, R. (2020). FDA orders removal of camel dissolvable products. Winston-Salem Journal. Available at https://journalnow.com/fda-orders-removal-of-camel-dissolvable-products-the-products-have-been-off-store-shelves-since/article_3a78244e-f30c-5e7c-af42-cfa880fc5093.html.
- Christensen, J. (2022). Nicotine gummies are a 'public health crisis just waiting to happen,' FDA says. CNN. Available at https://www.cnn.com/2022/09/16/ health/nicotine-gummies-wellness/index.html.

Oral Nicotine Health Effects

Long-term health effects of oral nicotine products are not yet known since these products are relatively new to the market. However, recent data has linked use of oral nicotine to mouth lesions, nausea, and throat pain.¹² Youth and young adult use of nicotine in any form is not safe or free of risk. Use of nicotine is associated with addiction and worsening symptoms of anxiety and depression.¹³

- Majmundar A, Okitondo C, Xue A, Asare S, Bandi P, & Nargis N. (2022). Nicotine Pouch Sales Trends in the US by Volume and Nicotine Concentration Levels From 2019 to 2022. JAMA Netw Open, 5(11):e2242235.
- Clodfelter, R., Dutra, L. M., Bradfield, B., Russell, S., Levine, B., & von Jaglinsky, A. (2023). Annual results report for the California Youth Tobacco Survey 2023. RTI International
- California Department of Public Health, California Tobacco Prevention Program.
 2023 Online California Adult Tobacco Survey. California Department of Public Health, 2024.
- Harlow, A.F., et al. (2022). Adolescent Use of Flavored Non-Tobacco Oral Nicotine Products. Pediatrics,150(3).
- Dowd AN, Thrul J, Czaplicki L, Kennedy RD, Moran MB, & Spindle TR. (2024). A Cross-Sectional Survey on Oral Nicotine Pouches: Characterizing Use-Motives, Topography, Dependence Levels, and Adverse Events. Nicotine Tob Res, 26(2):245-249.
- Truth Initiative. (2021). Colliding Crises: youth mental health and nicotine use. Available at https://truthinitiative.org/research-resources/emerging-tobacco-products/colliding-crises-youth-mental-health-and-nicotine-use.

