

Understanding Nicotine: The Facts, Not the Myths

Introduction

Nicotine is often misunderstood. Many people fear nicotine, largely due to misinformation and long-standing misconceptions. While nicotine is frequently blamed for the diseases associated with smoking, the real harm comes from the combustion of tobacco—not the nicotine itself. This white paper will help you understand what nicotine really is and what it does.

What is Nicotine?

Nicotine is a natural chemical found in the tobacco plant. Surprisingly, small amounts are also found in tomatoes, potatoes, and eggplants. Nicotine acts as a mild stimulant. It can make people feel increase alertness, improve focus, and even promote a sense of calm. Contrary to popular belief, it does not cause people to lose control or act violently. It does not cause hallucinations or make people drunk. This is important as you may hear that nicotine is addictive and you may instinctively think of a drug addict. Nothing is further from the truth.

Why Do People Use Nicotine?

People use nicotine because it makes them feel good. It helps reduce stress and anxiety for some people. It can also sharpen focus and improve memory for short periods.

Regular use can lead to dependence. This means people may crave nicotine and feel uncomfortable without it. Unlike addiction, people who use nicotine in its safer forms will be uncomfortable, but they can still function without it.

Is Nicotine Addictive?

The word addiction can mean different things. Smoking cigarettes often leads to strong addiction because of the combustion of all the chemicals within the product. Tobacco smoke contains compounds that act as monoamine oxidase (MAO) inhibitors, which can affect the breakdown of neurotransmitters like dopamine. This inhibition can potentially enhance nicotine's reward effects and contribute to addiction.¹

Using nicotine in safer forms, like patches, gums, vapes, or pouches, is less likely to lead to serious problems. Most people who use these products do not suffer the same harmful effects as people who smoke. It is better to say people can become dependent, not addicted, to nicotine in these safer forms.

1

[https://www.sciencedirect.com/science/article/abs/pii/S0161813X2200153X#:~:text=One%20hypothesis%20is%20that%20monoamine%20oxidase%20\(MAO\)%20inhibitors%20in%2C,increasing%20the%20effective%20reward%20signal.](https://www.sciencedirect.com/science/article/abs/pii/S0161813X2200153X#:~:text=One%20hypothesis%20is%20that%20monoamine%20oxidase%20(MAO)%20inhibitors%20in%2C,increasing%20the%20effective%20reward%20signal.)

Does Nicotine Cause Disease?

Nicotine is not the main cause of diseases linked to smoking. The real danger comes from the toxic chemicals produced by burning tobacco.

Nicotine does not cause cancer, lung disease, or most heart problems. Studies show people who use smokeless nicotine have a very low risk of serious health problems.² Nicotine, however, may raise the risk for people who already have serious heart disease.

What About Youth and Mental Health?

There are concerns about nicotine use by teenagers. Studies in humans have not shown clear long-term brain damage from nicotine use.³

Many people with mental health issues use nicotine. It may help them manage symptoms. However, nicotine is not a medical treatment and should not be used as one.

Is Nicotine Use Going Up?

More people are using safer nicotine products, like vapes and pouches. As a result, overall nicotine use may increase.

Even so, these products are far less harmful than smoking. This shift is already incrementally reducing the number of people harmed by tobacco, and is a positive step toward reducing tobacco-related diseases

What Should People Know?

The demand for nicotine is not going away. It is similar to how people still use alcohol and caffeine.

Many people still wrongly believe that nicotine causes cancer. In one study, over 60% of people who smoke in the U.S. thought this. Even many doctors are confused about the real risks. Instead of trying to stop nicotine use, we should focus on making it safer. Safer nicotine products are a better choice than smoking. The availability of low-risk nicotine alternatives is reshaping public health, allowing people to move away from smoking without abandoning nicotine entirely.

²

<https://cancer-code-europe.iarc.fr/index.php/en/ecac-12-ways/tobacco/199-nicotine-cause-cancer#:~:text=No.,in%20smoked%20or%20smokeless%20tobacco.>

³ <https://medicine.yale.edu/news/yale-medicine-magazine/article/how-nicotine-may-buffer-the-brain/>



Better education is essential to dispel myths and encourage informed choices. It can also help people who smoke switch to much safer alternatives. People deserve clear, evidence-based information to understand that **the danger lies in the smoke, *not the nicotine***.

Conclusion

Nicotine itself is not the main killer in tobacco use. The real danger comes from the smoke, not the nicotine. Whilst nicotine can cause dependence, the health risks are low when people use nicotine without combustion. Society must shift its focus from vilifying nicotine to promoting smoke-free alternatives that save lives. Citizens of all ages need clear and factual information and risk proportionate regulations. People deserve the truth so they can make informed choices about nicotine. The world is moving towards smoke-free nicotine, and this shift could save millions of lives. The public deserves the truth so they can make informed choices about nicotine—choices that are based on facts, not fear.

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Social Media Post Ideas:

Headline: Stop the Confusion: What Is Nicotine?

Copy: Nicotine is not the deadly part of smoking. It's a natural chemical found in tobacco and even small amounts in tomatoes and potatoes. It does not cause cancer or lung disease. The real danger comes from the toxic smoke of burning tobacco. #NicotineFacts
#HealthEducation #StopMisinformation

Headline: Why Do People Use Nicotine?

Copy: Nicotine makes some people feel calmer, more focused, and better able to manage stress. That's why people choose it. But using it safely matters. Smoke-free alternatives reduce risks dramatically compared to cigarettes. #NicotineAwareness #HarmReduction
#PublicHealth

Headline: Is Nicotine Addictive?

Copy: Cigarette smoking creates strong addiction due to toxic smoke and rapid nicotine delivery. Safer nicotine products like vapes and pouches have much lower risks. Dependence varies by product and person. Knowledge matters. #NicotineTruth #QuitSmoking
#HealthMatters

Headline: Does Nicotine Cause Cancer?

Copy: No. Science shows nicotine itself does NOT cause cancer. Burning tobacco does. This myth prevents people who smoke from switching to safer options like vaping or pouches. Let's set the record straight. #NicotineMyths #ScienceOverFear #HarmReduction

Headline: Youth, Mental Health, and Nicotine

Copy: There's no clear proof that nicotine damages young brains long-term. People with ADHD, anxiety, and depression often use nicotine to manage symptoms. It is not a treatment, but understanding this behaviour can improve public health responses. #MentalHealth
#NicotineAwareness #PublicHealth

Headline: A Safer Future for Nicotine Use

Copy: Safer nicotine products like vapes, pouches, and heated tobacco can cut health risks dramatically. We must move beyond outdated fears and focus on facts. Education saves lives. #SmokeFreeFuture #NicotineFacts #HealthEducation #HarmReduction