

Nicotine

Nicotine

*Nicotine is a naturally produced alkaloid in the nightshade family of plants (most predominantly in tobacco and *Duboisia hopwoodii*) and is widely used*

Nicotine is a naturally produced alkaloid in the nightshade family of plants (most predominantly in tobacco and *Duboisia hopwoodii*) and is widely used recreationally as a stimulant and anxiolytic. As a pharmaceutical drug, it is used for smoking cessation to relieve withdrawal symptoms. Nicotine acts as a receptor agonist at most nicotinic acetylcholine receptors (nAChRs), except at two nicotinic receptor subunits (nAChR α 9 and nAChR α 10) where it acts as a receptor antagonist.

Nicotine constitutes approximately 0.6–3.0% of the dry weight of tobacco. Nicotine is also present in trace amounts — measured in parts per billion — in edible plants in the family Solanaceae, including potatoes, tomatoes, and eggplants, and sources disagree on whether this has any biological significance to human consumers. It functions as an antiherbivore toxin; consequently, nicotine was widely used as an insecticide in the past, and neonicotinoids (structurally similar to nicotine), such as imidacloprid, are some of the most effective and widely used insecticides.

Nicotine is highly addictive. Slow-release forms (gums and patches, when used correctly) can be less addictive and help in quitting. Animal research suggests that monoamine oxidase inhibitors present in tobacco smoke may enhance nicotine's addictive properties. An average cigarette yields about 2 mg of absorbed nicotine.

The estimated lower dose limit for fatal outcomes is 500–1,000 mg of ingested nicotine for an adult (6.5–13 mg/kg). Nicotine addiction involves drug-reinforced behavior, compulsive use, and relapse following abstinence. Nicotine dependence involves tolerance, sensitization, physical dependence, and psychological dependence, which can cause distress. Nicotine withdrawal symptoms include depression, stress, anxiety, irritability, difficulty concentrating, and sleep disturbances. Mild nicotine withdrawal symptoms are measurable in unrestricted smokers, who experience normal moods only as their blood nicotine levels peak, with each cigarette. On quitting, withdrawal symptoms worsen sharply, then gradually improve to a normal state.

Nicotine use as a tool for quitting smoking has a good safety history. Animal studies suggest that nicotine may adversely affect cognitive development in adolescence, but the relevance of these findings to human brain development is disputed. At low amounts, it has a mild analgesic effect. According to the International Agency for Research on Cancer, "nicotine is not generally considered to be a carcinogen".

The Surgeon General of the United States indicates that evidence is inadequate to infer the presence or absence of a causal relationship between exposure to nicotine and risk for cancer. Nicotine has been shown to produce birth defects in humans and is considered a teratogen. The median lethal dose of nicotine in humans is unknown. High doses are known to cause nicotine poisoning, organ failure, and death through paralysis of respiratory muscles, though serious or fatal overdoses are rare.

Nicotine pouch

Nicotine pouches are small rectangles containing nicotine, flavorings and other ingredients. Unlike snus, they do not include tobacco leaf, dust, or stem

Nicotine pouches are small rectangles containing nicotine, flavorings and other ingredients. Unlike snus, they do not include tobacco leaf, dust, or stem. The nicotine may either be derived from tobacco plants or may be synthetic.

Like with snus or dipping tobacco the user puts a pouch between their lip and gum, and leaves it there while the nicotine and taste is being released. The nicotine enters the bloodstream via mucous membranes in the gums. When finished, the pouch is disposed of. The small pouches differ from chewing tobacco in that the user does not need to spit, since the contents of the pouches stay inside the pouches during use.

There is limited independent testing of the constituents, exposure, or biomarkers of effects for nicotine pouches, although independent research is now emerging. Since 2021, sales of nicotine pouches have grown with Zyn as the global leader. This popularity has led to controversy among government regulators who view the product's appeal to youth as concerning.

Nicotine poisoning

Nicotine poisoning describes the symptoms of the toxic effects of nicotine following ingestion, inhalation, or skin contact. Nicotine poisoning can potentially

Nicotine poisoning describes the symptoms of the toxic effects of nicotine following ingestion, inhalation, or skin contact. Nicotine poisoning can potentially be deadly, though serious or fatal overdoses are rare. Historically, most cases of nicotine poisoning have been the result of use of nicotine as an insecticide. More recent cases of poisoning typically appear to be in the form of Green Tobacco Sickness, or due to unintended ingestion of tobacco or tobacco products or consumption of nicotine-containing plants.

Standard textbooks, databases, and safety sheets consistently state that the lethal dose of nicotine for adults is 60 mg or less (30–60 mg), but there is overwhelming data indicating that more than 500 mg of oral nicotine is required to kill an adult.

Children may become ill following ingestion of one cigarette; ingestion of more than this may cause a child to become severely ill. The nicotine in the e-liquid of an electronic cigarette can be hazardous to infants and children, through accidental ingestion or skin contact. In some cases children have become poisoned by topical medicinal creams which contain nicotine.

People who harvest or cultivate tobacco may experience Green Tobacco Sickness (GTS), a type of nicotine poisoning caused by skin contact with wet tobacco leaves. This occurs most commonly in young, inexperienced tobacco harvesters who do not consume tobacco.

Nicotine (disambiguation)

Look up nicotine in Wiktionary, the free dictionary. Nicotine is a chemical compound. Nicotine may also refer to: Nicotine (novel), a 2016 novel by Nell

Nicotine is a chemical compound.

Nicotine may also refer to:

Nicotine (novel), a 2016 novel by Nell Zink

Nicotine (band), an Indian heavy metal band

Nicotine (album), a 2020 album by Trevor Daniel, or the title song

"Nicotine" (song), a 2013 song by Panic! at the Disco from Too Weird to Live, Too Rare to Die!

Nicotine, a client of the file-sharing software Soulseek

"Nicotine", a 2003 song by Anet from Talented Girl

Electronic cigarette

pulmonary disease. Nicotine is highly addictive. Limited evidence indicates that e-cigarettes are less addictive than smoking, with slower nicotine absorption

An electronic cigarette (e-cigarette), or vape, is a device that simulates tobacco smoking. It consists of an atomizer, a power source such as a battery, and a container such as a cartridge or tank. Instead of smoke, the user inhales vapor, often called "vaping".

The atomizer is a heating element that vaporizes a liquid solution called e-liquid that cools into an aerosol of tiny droplets, vapor and air. The vapor mainly comprises propylene glycol and/or glycerin, usually with nicotine and flavoring. Its exact composition varies, and depends on matters such as user behavior. E-cigarettes are activated by taking a puff or pressing a button. Some look like traditional cigarettes, and most kinds are reusable.

Vaping is less harmful than smoking, but still has health risks. Vaping affects asthma and chronic obstructive pulmonary disease. Nicotine is highly addictive. Limited evidence indicates that e-cigarettes are less addictive than smoking, with slower nicotine absorption rates.

E-cigarettes containing nicotine are more effective than nicotine replacement therapy (NRT) for smoking cessation, but have not been subject to the same rigorous testing that most nicotine replacement therapy products have.

Nicotine withdrawal

Nicotine withdrawal is a group of symptoms that occur in the first few weeks after stopping or decreasing use of nicotine. Symptoms include intense cravings

Nicotine withdrawal is a group of symptoms that occur in the first few weeks after stopping or decreasing use of nicotine. Symptoms include intense cravings for nicotine, anger or irritability, anxiety, depression, impatience, trouble sleeping, restlessness, hunger, weight gain, and difficulty concentrating. Withdrawal symptoms make it harder to quit nicotine products, and many smoking cessation methods aim to reduce these symptoms. Smoking cessation programs can help increase the chances of success. Nicotine withdrawal is recognized in both the American Psychiatric Association Diagnostic and Statistical Manual (DSM) and the WHO International Classification of Diseases (ICD).

Nicotinic acetylcholine receptor

Nicotinic acetylcholine receptors, or nAChRs, are receptor polypeptides that respond to the neurotransmitter acetylcholine. Nicotinic receptors also respond

Nicotinic acetylcholine receptors, or nAChRs, are receptor polypeptides that respond to the neurotransmitter acetylcholine. Nicotinic receptors also respond to drugs such as the agonist nicotine. They are found in the central and peripheral nervous system, muscle, and many other tissues of many organisms. At the neuromuscular junction they are the primary receptor in muscle for motor nerve-muscle communication that controls muscle contraction. In the peripheral nervous system: (1) they transmit outgoing signals from the presynaptic to the postsynaptic cells within the sympathetic and parasympathetic nervous system; and (2) they are the receptors found on skeletal muscle that receives acetylcholine released to signal for muscular contraction. In the immune system, nAChRs regulate inflammatory processes and signal through distinct intracellular pathways. In insects, the cholinergic system is limited to the central nervous system.

The nicotinic receptors are considered cholinergic receptors, because they respond to acetylcholine. Nicotinic receptors get their name from nicotine, which selectively binds to nicotinic receptors but not to other acetylcholine receptors. (The other type of acetylcholine receptor, the muscarinic receptor, likewise gets its name from a chemical that selectively attaches to that receptor: muscarine.; acetylcholine itself binds to both muscarinic and nicotinic acetylcholine receptors.)

As ionotropic receptors, nAChRs are directly linked to ion channels. Some evidence suggests that these receptors can also use second messengers (as metabotropic receptors do) in some cases. Nicotinic acetylcholine receptors are the best-studied of the ionotropic receptors.

Since nicotinic receptors help transmit outgoing signals for the sympathetic and parasympathetic systems, nicotinic receptor antagonists such as hexamethonium interfere with the transmission of these signals. Thus, for example, nicotinic receptor antagonists interfere with the baroreflex that normally corrects changes in blood pressure by sympathetic and parasympathetic stimulation of the heart.

Nicotine replacement therapy

Nicotine replacement therapy (NRT) is a medically approved way to treat people with tobacco use disorder by taking nicotine through means other than tobacco

Nicotine replacement therapy (NRT) is a medically approved way to treat people with tobacco use disorder by taking nicotine through means other than tobacco. It is used to help with quitting smoking or stopping chewing tobacco. It increases the chance of quitting tobacco smoking by about 55%. Often it is used along with other behavioral techniques. NRT has also been used to treat ulcerative colitis. Types of NRT include the adhesive patch, chewing gum, lozenges, nose spray, and inhaler. The use of multiple types of NRT at a time may increase effectiveness.

Common side effects depend on the formulation of nicotine. Common side effects with the gum include nausea, hiccups, and irritation of the mouth. Common side effects with the patch include skin irritation and a dry mouth while the inhaler commonly results in a cough, runny nose, or headaches. Serious risks include nicotine poisoning and continued addiction. They do not appear to increase the risk of heart attacks. There are possible harms to the baby if used during pregnancy. Nicotine replacement therapy works by reducing cravings caused by nicotine addiction.

They were first approved for use in 1984, in the United States. Nicotine replacement products are on the World Health Organization's List of Essential Medicines. They are available as generic medications.

Zyn

"ZYN") is a Swedish brand of nicotine pouches. Zyn pouches are designed to be placed between the gums and lip, allowing nicotine to be absorbed into the bloodstream

Zyn (stylized in all caps as "ZYN") is a Swedish brand of nicotine pouches. Zyn pouches are designed to be placed between the gums and lip, allowing nicotine to be absorbed into the bloodstream through the soft tissue. They are available in several variants with different nicotine strengths and flavours. While often compared to snus, nicotine pouches do not contain any tobacco, but remain addictive due to their nicotine content.

The brand was created by Swedish Match, a subsidiary of Philip Morris International since 2022. It is mainly distributed in the United States, where it represented over 70% of the nicotine pouch industry in 2023, but it is also available in Scandinavia, the UK and other countries, primarily in Europe.

Nicotine salt

Nicotine salts are salts formed from nicotine and an acid. They are found naturally in tobacco leaves. Various acids can be used, leading to different

Nicotine salts are salts formed from nicotine and an acid. They are found naturally in tobacco leaves. Various acids can be used, leading to different conjugate bases paired with the ammonium form of nicotine.

[https://www.vlk-](https://www.vlk-24.net/cdn.cloudflare.net/=20438855/dwithdrawe/bpresumeo/wexecutet/nepal+culture+shock+a+survival+guide+to+)

[24.net.cdn.cloudflare.net/=20438855/dwithdrawe/bpresumeo/wexecutet/nepal+culture+shock+a+survival+guide+to+](https://www.vlk-24.net/cdn.cloudflare.net/=20438855/dwithdrawe/bpresumeo/wexecutet/nepal+culture+shock+a+survival+guide+to+)

[https://www.vlk-](https://www.vlk-24.net/cdn.cloudflare.net/@97478046/wrebuildq/fpresumed/lproposei/yg+cruze+workshop+manual.pdf)

[24.net.cdn.cloudflare.net/@97478046/wrebuildq/fpresumed/lproposei/yg+cruze+workshop+manual.pdf](https://www.vlk-24.net/cdn.cloudflare.net/@97478046/wrebuildq/fpresumed/lproposei/yg+cruze+workshop+manual.pdf)

[https://www.vlk-](https://www.vlk-24.net/cdn.cloudflare.net/-36400969/gwithdrawp/xpresumez/osupportb/revue+technique+auto+le+bmw+e46.pdf)

[24.net.cdn.cloudflare.net/-36400969/gwithdrawp/xpresumez/osupportb/revue+technique+auto+le+bmw+e46.pdf](https://www.vlk-24.net/cdn.cloudflare.net/-36400969/gwithdrawp/xpresumez/osupportb/revue+technique+auto+le+bmw+e46.pdf)

[https://www.vlk-](https://www.vlk-24.net/cdn.cloudflare.net/^86758357/bexhaustt/ypresumes/iproposec/1200+words+for+the+ssat+isee+for+private+a)

[24.net.cdn.cloudflare.net/^86758357/bexhaustt/ypresumes/iproposec/1200+words+for+the+ssat+isee+for+private+a](https://www.vlk-24.net/cdn.cloudflare.net/^86758357/bexhaustt/ypresumes/iproposec/1200+words+for+the+ssat+isee+for+private+a)

[https://www.vlk-](https://www.vlk-24.net/cdn.cloudflare.net/^15326412/iehaustj/lincreaseb/kconfusea/2006+honda+accord+coupe+owners+manual+1)

[24.net.cdn.cloudflare.net/^15326412/iehaustj/lincreaseb/kconfusea/2006+honda+accord+coupe+owners+manual+1](https://www.vlk-24.net/cdn.cloudflare.net/^15326412/iehaustj/lincreaseb/kconfusea/2006+honda+accord+coupe+owners+manual+1)

[https://www.vlk-](https://www.vlk-24.net/cdn.cloudflare.net/@80319612/jrebuildh/minterpretl/qexecutee/german+conversation+demystified+with+two)

[24.net.cdn.cloudflare.net/@80319612/jrebuildh/minterpretl/qexecutee/german+conversation+demystified+with+two](https://www.vlk-24.net/cdn.cloudflare.net/@80319612/jrebuildh/minterpretl/qexecutee/german+conversation+demystified+with+two)

[https://www.vlk-](https://www.vlk-24.net/cdn.cloudflare.net/!66695647/upformmr/kinterpretb/mproposen/atlas+of+tumor+pathology+4th+series+tumor)

[24.net.cdn.cloudflare.net/!66695647/upformmr/kinterpretb/mproposen/atlas+of+tumor+pathology+4th+series+tumor](https://www.vlk-24.net/cdn.cloudflare.net/!66695647/upformmr/kinterpretb/mproposen/atlas+of+tumor+pathology+4th+series+tumor)

[https://www.vlk-](https://www.vlk-24.net/cdn.cloudflare.net/^22019509/fexhaustm/iinterpretl/eexecutea/the+smithsonian+of+books.pdf)

[24.net.cdn.cloudflare.net/^22019509/fexhaustm/iinterpretl/eexecutea/the+smithsonian+of+books.pdf](https://www.vlk-24.net/cdn.cloudflare.net/^22019509/fexhaustm/iinterpretl/eexecutea/the+smithsonian+of+books.pdf)

[https://www.vlk-](https://www.vlk-24.net/cdn.cloudflare.net/-75689597/tconfrontd/cdistinguishp/lsupporth/nietzsche+beyond+good+and+evil+prelude+to+a+philosophy+of+the+)

[24.net.cdn.cloudflare.net/-75689597/tconfrontd/cdistinguishp/lsupporth/nietzsche+beyond+good+and+evil+prelude+to+a+philosophy+of+the+](https://www.vlk-24.net/cdn.cloudflare.net/-75689597/tconfrontd/cdistinguishp/lsupporth/nietzsche+beyond+good+and+evil+prelude+to+a+philosophy+of+the+)

[https://www.vlk-](https://www.vlk-24.net/cdn.cloudflare.net/@51167334/ewithdrawl/zincreasec/xexecuter/financial+accounting+theory+and+analysis+)

[24.net.cdn.cloudflare.net/@51167334/ewithdrawl/zincreasec/xexecuter/financial+accounting+theory+and+analysis+](https://www.vlk-24.net/cdn.cloudflare.net/@51167334/ewithdrawl/zincreasec/xexecuter/financial+accounting+theory+and+analysis+)