

Legco
Panel on Health Services

16th July 2018

Dear Hon Members,
Please find herewith self-explanatory information on the nicotine content of the JUUL electronic nicotine delivery system. We also provide a cross section social media blog of JUULpod usage rates in USA.

We already sent you multiple reports showing how flavors and other contents of e-juice turn into DNA damaging, cancer causing aldehydes when heated, how nicotine affects the heart and other pathogenic contents of these nefarious devices.

The tobacco and vaping industries are, as stated by the industry in 1963, **'in the business of selling nicotine, an addictive drug'**. In the attachment you will see that world-renowned experts rate nicotine as being more addictive than heroin or cocaine.

One JUULpod contains (by their admission) 40 mg of nicotine benzoic salts. They further state that consuming one JUULpod is *equivalent to consuming one pack of cigarettes*. As with all such tobacco industry piffle, this is another major lie as we show herewith.

Please find attached the latest December 2017 Tar and Nicotine report from the Government Lab website. The numbers seem clear:

- One JUULpod contains as much nicotine as 20 packs of 20 sticks of Mevius One, Premium, Pianissimo, or Kent Core 1.
- One JUULpod contains as much nicotine as 4 packs of 20 sticks of Dunhill Gold or Marlboro Menthol.
- One JUULpod contains as much nicotine as 2 packs of 20 sticks of Marlboro Red, or Chunghwa Red

In USA many users use one or more JUULpods per day. That is how addictive ENDS are. This is why there is a nicotine addiction vaping epidemic in USA because the FDA waited too long to control them. JUUL just raised USD 650 million towards USD 1.2 billion for expanding sales worldwide.

We already sent you information on a ten-year longitudinal study in UK of 200,000 e-cig using adults and a further like study from the University of Georgia TCORS, which both show emphatically that ENDS products do NOT WORK as smoking cessation products or aids. They lead to dual use.

The only sensible way forward is to ban the importation, sale and use of these products, as our former sensible Health Department did for SNUS and snuff.

Yours sincerely,

James Middleton

Chairman

HK Cigarette Tar & Nicotine Chart BRAND (2017 December)				JUUL e-cig
	TAR YIELD	NICOTINE YIELD	NICOTINE YIELD	NICOTINE YIELD
	(mg/Cig)	(mg/Cig)	(mg/Pack)	(mg/Pod)
MEVIUS BLIZZARD MINT LSS FTKS SIDE SLIDE 20S BOX	1	0.1	2	40
MEVIUS ONE 1 FTKS ROUND 20S BOX	1	0.1	2	40
MEVIUS PREMIUM MENTHOL YELLOW 1MG 100S FT 20S	1	0.1	2	40
MEVIUS LSS PIANISSIMO ONE FT 20S BOX	1	0.1	2	40
KENT CORE 1 FTKS (NAKED-WRAP) 20S BOX	1	0.1	2	40
KENT (MINTEK) 1MG FTKS (NAKED-WRAP) 20S BOX	1	0.2	4	40
MEVIUS WIND BLUE 4 FTKS ROUND 20S BOX	4	0.4	8	40
KENT CORE 4 FTKS (NAKED-WRAP) 20S BOX	4	0.4	8	40
KENT NANOTEK 4 FTKS (NAKED-WRAP) 20S BOX	4	0.4	8	40
DUNHILL GOLD FTK (NAKED-WRAP) 20S BOX	4	0.5	10	40
BOHEM CIGAR MOJITO DOUBLE FT 20S BOX	4	0.5	10	40
ZHONG NAN HAI FIVE 5MG CHARCOAL FTKS 20S BOX	5	0.4	8	40
PALL MALL CHILLED FTKS (NAKED-WRAP) 20S BOX	5	0.4	8	40
ESSE BLUE SUPER SLIM FT 20S BOX (<= 90MM)	5	0.5	10	40
ESSE MENTHOL SUPER SLIM FT 20S BOX (<= 90MM)	5	0.5	10	40
MEVIUS PREMIUM MENTHOL YELLOW 5MG FT 20S BOX	5	0.5	10	40
MEVIUS SILVER MENTHOL FTKS ROUND 20S BOX	5	0.5	10	40
MARLBORO REFINED MENTHOL FTKS 20S BOX	6	0.5	10	40
MARLBORO ADVANCE SILVER 6MG FTKS 20S BOX	6	0.5	10	40
MARLBORO DOUBLE BURST FTKS 20S BOX	6	0.5	10	40
WINNER SUPER COOL FTKS 20S BOX (<= 90MM)	6	0.6	12	40
CAPRI SLIMS FT 20S BOX (NAKED-WRAP)	6	0.6	12	40
DUNHILL BLUE FTK (NAKED-WRAP) 20S BOX	6	0.7	14	40
LUCKY STRIKE CHOICE DOUBLE CLICK (PURPLE GREEN) FTKS	7	0.6	12	40
LUCKY STRIKE CHOICE DOUBLE CLICK (YELLOW GREEN) FTKS	7	0.6	12	40
CHESTERFIELD MINT BURST FTKS 20S BOX	7	0.6	12	40
MARLBORO DOUBLE BLACK FTKS 20S BOX	7	0.6	12	40
DAVIDOFF GOLD FT 20S BOX	7	0.6	12	40
WINSTON BLUE FTKS 20S ROUND CORNER BOX (<=90 MM)	7	0.6	12	40
LUCKY STRIKE CLICK BOOST (GREEN) (NAKED-WRAP) FTKS 20S	7	0.6	12	40
CAMEL BLUE FTKS 20S BOX (<=90 MM)	7	0.6	12	40
MEVIUS GREEN MENTHOL FTKS ROUND 20S BOX	7	0.6	12	40
MEVIUS PREMIUM MENTHOL YELLOW 8MG ROUND FT 20S	7	0.7	14	40
MEVIUS SKY BLUE 7 FTKS ROUND 20S BOX	7	0.7	14	40
MARLBORO MINT STORM FTKS 20S BOX	7	0.7	14	40
PALL MALL CLICK ON (GREEN) FTKS (NAKED-WRAP) 20S BOX	7	0.7	14	40
MARLBORO GOLD FTKS 20S BOX	8	0.6	12	40
LUCKY STRIKE FRESH FTKS (NAKED-WRAP) 20S BOX	8	0.6	12	40
MARLBORO BLACK MENTHOL FTKS 20S BOX	8	0.6	12	40
MARLBORO WHITE MENTHOL FTKS 20S BOX	8	0.6	12	40
KENT CORE 8 FTKS (NAKED-WRAP) 20S BOX	8	0.7	14	40
CHESTERFIELD MENTHOL FTKS 20S BOX	8	0.7	14	40
PALL MALL COOL FTKS (NAKED-WRAP) 20S BOX	8	0.7	14	40
PALL MALL BLUE FTKS (NAKED-WRAP) 20S BOX	8	0.7	14	40

PALL MALL KRYSTAL STORM FTKS (NAKED-WRAP) 20S BOX	8	0.7	14	40
CAPRI SUPERSLIMS FT (NAKED-WRAP) 20S BOX	8	0.7	14	40
PALL MALL (BLUE) CLICK ON FTKS (NAKED-WRAP) 20S BOX	8	0.7	14	40
LUCKY STRIKE BLUE FTK (NAKED-WRAP) 20S BOX	8	0.7	14	40
MEVIUS SKY BLUE LSS FTKS SIDE SLIDE 20S BOX	8	0.8	16	40
DAVIDOFF CLASSIC FTKS 20S BOX	9	0.7	14	40
MEVIUS ORIGINAL BLUE 9 FTKS ROUND 20S BOX	9	0.7	14	40
FURONGWANG (BLUE BOX) FT 20S BOX (<= 90MM)	9	0.8	16	40
WINSTON MORE BLUE FTKS ROUND CORNER 20S BOX	9	0.8	16	40
DOUBLE HAPPINESS (9 MG) FTKS 20S BOX (<= 90MM)	9	0.9	18	40
WINSTON CLASSIC FTKS 20S SOFT PACK (<=90 MM)	10	0.8	16	40
MARLBORO FLAVOR MIX FTKS 20S BOX	10	0.8	16	40
WINSTON CLASSIC FTKS 20S ROUND CORNER BOX	10	0.8	16	40
CAMEL FTKS 20S BOX (<= 90 MM)	10	0.9	18	40
DUNHILL RED FTK (NAKED-WRAP) 20S BOX	10	0.9	18	40
LESSER PANDA FT 20S BOX (<= 90MM)	10	0.9	18	40
DOUBLE HAPPINESS FTKS 20S BOX	11	0.9	18	40
YUXI FT 20S BOX	11	1	20	40
MARLBORO MENTHOL FTKS 20S BOX	12	0.9	18	40
FURONGWANG 20S BOX	12	1	20	40
LIQUN FTKS 20S BOX	12	1	20	40
PALL MALL (RED) CLICK ON FTKS (NAKED-WRAP) 20S BOX	12	1	20	40
PALL MALL RED FTKS (NAKED-WRAP) 20S BOX	12	1	20	40
WUYESHEN FT 20S RED BOX	12	1	20	40
CHUNGHWA FTKS 20S SOFT PACK	12	1.1	22	40
DOUBLE HAPPINESS FTKS CLASSIC DELUXE 20S BOX	12	1.3	26	40
WEALTH FTKS 20S SOFT PACK (<=90 MM)	13	1	20	40
MARLBORO RED FTKS 20S BOX	13	1	20	40
GENTORI FILTER KING SIZE 20S PACK	13	1	20	40
CHUNGHWA (RED) FTKS 20S BOX	13	1	20	40
WINSTON MORE RED FTKS ROUND CORNER 20S BOX	13	1	20	40
MARLBORO RED 20S SOFT PACK	13	1	20	40
LUCKY STRIKE ORIGINAL RED FTK (NAKED-WRAP) 20S BOX	13	1	20	40
WUYESHEN FT 20S GOLD BOX	13	1.1	22	40
VICEROY RED FTKS 20S BOX (<= 90MM) (NAKED-WRAP)	14	1	20	40
DOUBLE HAPPINESS FTKS 20S SOFT PACK	14	1.1	22	40

Source: HK Govt Lab

https://www.govtlab.gov.hk/english/pub_tnrpt.htm#print=1

<https://support.juul.com/home/learn/faqs/juulpod-basics>

JUUL Nicotine content: 0.7mL with 5% nicotine by weight+A1:E87 approx. 40 mg per pod based upon 59 mg/mL

How long do JUUL pods last you?

https://www.reddit.com/r/juul/comments/7twj7v/how_long_do_your_pods_last_you/

- [rvlv](#) 20-30 minutes
- [Bkurtz12](#) Usually a couple of days, **some of my friends can go through one in an hour**- idk how they do it
- [vnz11](#) Alright so I bought a **Mint pack today at 8am and finished all of them at 2am...**
- [DukeofTriangles](#) No, but I used to smoke cigs whenever I drink and still never noticed any heart issues. I wouldn't say I was a regular smoker, but **since I got the Juul I smoke a lot more**. No heart issues, the only issue i have ever had was when I smoked a mint pod and it would break me out (I have pretty mild to severe eczema) so I don't use the mint ones anymore.
- [SeeBZedBoy](#) About **2 days**. People always seem shocked when I tell them how much a 4 pack of pods cost...then I tell them the same amount of cigarettes would cost \$56, they're like "Oh...."
- [karts9](#) Cool Cucumber **I go through 2 a day on average**
- [wilhelmina-T69z](#) a day 😊 I wish I had more self control
- [jsagdc](#) 1-2 Days
- [M0rph33u5](#) Barely a day RIP
- [dmac4800](#) A day
- [Meowmeow69me](#) **Mhm i go through one a day and I'm surprised i haven't seen anyone say the same. If a pod lasts me longer than 24 hours it'd be a miracle, do I have a problem? When I smoked cigarettes I only smoked a pack every two days. My Juul habit concerns me even though I use it to not smoke cigarettes.**

<https://edition.cnn.com/2018/03/15/health/juul-e-cigarette-partner/index.html>

Juul e-cigarettes and teens: 'Health problem of the decade'?

By Ana B. Ibarra, California Healthline

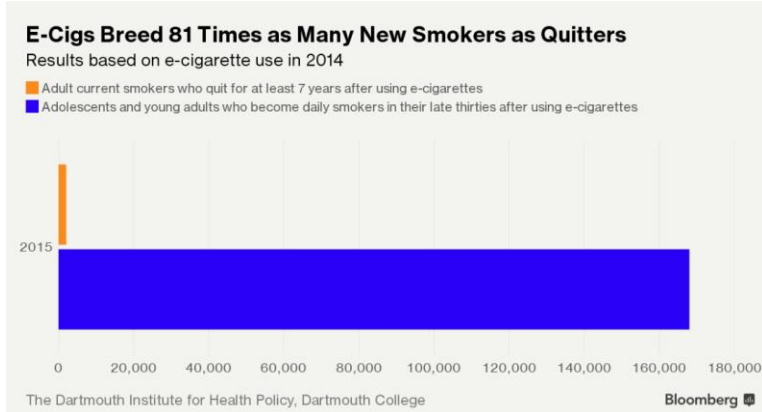
<https://edition.cnn.com/2018/04/06/health/high-schools-vaping-epidemic/index.html>

Vaping now an epidemic among US high schoolers

By Roni Selig, Davide Cannaviccio and Charlotte Hawks, CNN

The vile child addicting tobacco industry was, and still is, in the business of selling nicotine – nothing changed - Just the new electronic nicotine delivery system and call it ‘vaping’ instead of ‘smoking’

<https://www.bloomberg.com/news/articles/2018-03-14/e-cigarette-study-says-they-lead-to-more-smokers-than-they-stop>



Implications of Battelle Hippo I & II and The Griffith Filter

In this **July, 1963** [Brown & Williamson](#) report, [Addison Yeaman](#), General Counsel for Brown & Williamson, discusses strategies the tobacco industry can use to continue to manufacture and sell its products in the face of adverse Surgeon General's warnings and dire health claims. This document contains the famous quote:

“Moreover, nicotine is addictive...We are, then, in the business of selling nicotine, an addictive drug...”

[https://www.sourcewatch.org/index.php/%22Moreover,_nicotine_is_addictive...%22\(Brown_%26_Williamson,_1963\)](https://www.sourcewatch.org/index.php/%22Moreover,_nicotine_is_addictive...%22(Brown_%26_Williamson,_1963))

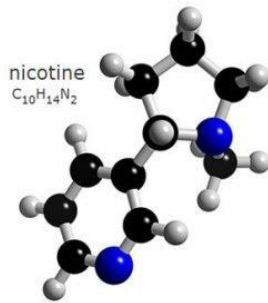
April 1964



Why is Nicotine Addictive?

According to [National Institute of Drug Abuse](https://www.nida.nih.gov/publications/2014/nicotine-addiction), nicotine gets its addictive nature by activating a reward pathway in the brain's circuitry. The chemical that makes you crave nicotine is called neurotransmitter dopamine. Long-term users experience changes in their brain induced by nicotine that lead to addiction.

<https://vapingdaily.com/quit-smoking/nicotine-dependence-and-freedom/>



How addictive it is depends on many factors, mainly on how it enters your body. The fastest way for a drug to have its impact is by smoking or [vaping](#) it, which is why smokers get hooked on tobacco. When you use nicotine, whether through smoking or through vaping [vape juices and e-liquids](#), *it takes about ten seconds to reach your brain after entering your body, as it's instantly absorbed by your bloodstream and transported to all the organs of your body.* When nicotine reaches the brain, it makes the brain release adrenaline, that gives the user a feeling of high. This feeling is extremely pleasurable but doesn't last long. After a little while, the user feels tired and down, wanting the high again.

These cravings force the user to keep taking nicotine; however, the human body is naturally tolerant to nicotine. As you continue to take nicotine for a while, your body starts to require higher amounts of it to get the same high. This repeated cycle of nicotine cravings leads to addiction, which is very hard to break. Below are the most common triggers relapse triggers, familiar to every smoker:

The amount hormones released by your body changes when you start taking nicotine. However, when you stop, it has to readjust, which is very hard, and causes a hormone imbalance. The end result is that your body is in a continuous state of adjusting hormones after your abstinence. This state of the body is commonly known as withdrawal, which can be very hard to cope with.

Depending on the body, current state of mind, and circumstances, breaking addiction can be harder for some people than others. Several researches show that teenagers are more sensitive to nicotine and get addicted more easily. [According to CDC](#), 90% of cigarette smokers try their first smoke by age 18, and 99% by age 26.

Nicotine Addiction vs Other Addictions

Some experts believe heroin and cocaine are the two most addictive drugs, with nicotine in the third spot. Taking a look at the ratings of different drugs published in New York Times, on Aug 2, 1994 by two highly regarded experts reveals **that nicotine tops the charts when it comes to dependence, and also is the highest ranked overall drug addiction:**

Rating by Dr. Jack E. Henningfield of the National Institute on Drug Abuse

(1 = Most serious 6 = Least serious)

Substance	Withdrawal	Reinforcement	Tolerance	Dependence	Intoxication
Nicotine	3	4	2	1	5
Heroin	2	2	1	2	2
Cocaine	4	1	4	3	3
Alcohol	1	3	3	4	1
Caffeine	5	6	5	5	6
Marijuana	6	5	6	6	4

Rating by Dr. Neal L. Benowitz of the University of California at San Francisco[/su_table]

(1 = Most serious 6 = Least serious)

Substance	Withdrawal	Reinforcement	Tolerance	Dependence	Intoxication
Nicotine	3	4	4	1	6
Heroin	2	2	2	2	2
Cocaine	3	1	1	3	3
Alcohol	1	3	4	4	1
Caffeine	4	5	3	5	5
Marijuana	5	6	5	6	4

No matter what substance you consider, there are some serious users and then there are some infrequent, amateur users. To understand how overpowering a substance can be, we can compare the percentage of people who, after having used a substance, can still contain themselves to occasional use. In his book [About Addictions: Notes from Psychology, Neuroscience, and NLP](#), the famous author Richard Gray mentions large government surveys that show how many addicts of different substances are regular users and how many are occasional users.

Substance	% Regular Users	% Occasional Users
Alcohol	15	85
Cocaine	8	82
Tobacco cigarettes (nicotine)	90	10

Although there will always be a difference of opinion when it comes to the most addictive substance, it is a fact that nicotine is one of the top three, **if not the topmost addictive substance.**

Nicotine is it a Stimulant?

Your heart is one of the most important parts of the body to be affected by nicotine. Your heart rate can increase as part of a craving or during use, often while you are smoking, or using a [vape](#). Your body reacts to the drug being introduced into your system by increasing your heart rate. As you may know, your heart needs to keep a certain rhythm to be healthy. Speeding it up during exercise is a good workout for your heart, but it is unhealthy for your heart rate to increase when you are inactive, and that is exactly the state of most people when they smoke.

This can cause long-term heart problems, which include cardiac infarction, heart disease and more. The longer you smoke, the more stress you are putting on your heart increases your risk of a heart problem.

Nicotine also stimulates your respiratory and vascular system. People who are craving nicotine may have faster breathing. Their anxiousness and nervousness caused by the nicotine can cause irregularly high breathing which in turn limits their physical abilities.

An increase of blood pressure, which is standard for nicotine users, is also dangerous. This puts your heart at risk and creates an unhealthy environment for many of your bodily systems.

It is important to understand that nicotine is both a stimulant and a sedative. While it creates stimulating effects, it also relaxes the body and creates a state of gentle euphoria. This is part of what makes it so addictive. That buzz that many smokers feel makes the other effects feel not as strong. The higher the concentrations of nicotine are, the greater the sense of euphoria will be.

Nicotine also activates the portion of the brain that rewards the body. This reward center is responsible for a lot of the motivation people feel. Regular nicotine users feel like they need that cigarette as a reward for getting through the day, surviving a few hours of work or for passing a test. They will say that the nicotine relaxes them, though in many ways it does the exact opposite. What it actually does it make them feel like they are being treated or rewarded by having that cigarette.

This causes severe addiction, and any of the people who try to quit do not succeed because of it.

Nicotine Is it Actually a Drug?

Those who say that nicotine is not a drug are likely trying to say that it is not a hard drug like cocaine or PCP. However, it is most definitely a drug, as defining drugs go, any substance that has a physiological effect on the body when ingested or otherwise deposited into the body is a drug.

What that means is that the substance changes the way the body is functioning or would function naturally. This is something that doesn't provide anything the body needs but is introduced to change the way the body operates.

Nicotine falls into that category easily, because of the [effects it has on the body](#). Let's look at some of those effects. **The physiological effects include its addictive properties, its pharmacologic effects, and its psychodynamic effects.** We'll break down each of these categories further and what those effects include.

Most people understand that nicotine is addictive. It creates both physical and mental addiction. Withdrawal from it produces a number of symptoms, including anxiousness, nervousness, shaking, moodiness, depression, inattentiveness, and cravings. Those who smoke for a while then quit find themselves struggling to overcome these side effects and beat their cravings.

It is difficult for those who have become addicted to cease their habit. They often require outside help in the form of counselling, therapy or coaching to assist them in quitting their nicotine addiction.

When small amounts of nicotine enter the body, pharmacologic effects begin to affect it. With nicotine, these include **an increased heart rate, higher chance of heart stroke** and an increase in how much oxygen your body consumes. **Basically, your heart is working overtime when nicotine is inside your body.**

Psychodynamic effects are similar to psychological effects. They change your mental state. With nicotine, these effects are a sense of euphoria, increased awareness and a state of relaxation.

How Addictive Is Nicotine?

Humans can experience addiction in two ways: psychologically and physically. An example of psychological addiction is doing something extremely thrilling, e.g. gambling, bungee jumping, skydiving, driving too fast. These activities trigger reward centers of the brain; however, don't have any physical impact on the body. We can relate it to classical conditioning as shown by Pavlov's dog experiment, where a dog started to associate certain signals (such as the ringing of a bell) with food and would start drooling on those signals, even when there was no food.

On the other hand, physical addictions tend to result in physical withdrawal symptoms, e.g. when a person suddenly stops drinking or taking a drug they are addicted to. What really makes **nicotine extremely addictive is that it's one of the very few addictions that has both physical and psychological impact.** On top of that, it also has social impact i.e. when you meet your other smoker friends, you start getting the urge to smoke (or use [vapor cigarettes](#)). So, in addition to affecting you physiologically, nicotine also affects you socially, and this is why most experts agree that nicotine is one of, if not the, hardest addictions to break.

Mental vs Physical Nicotine Addiction

Physical Nicotine Addiction

Every time someone smokes, nicotine enters the brain almost immediately. Receptors in the brain absorb the substance and then dopamine is released, resulting in a feeling of happiness or calm, according to the American Cancer Society. This is the starting point of physical addiction. As more cigarettes are smoked, more nicotine receptors are made. This leads to more and more nicotine being needed in order to achieve the same feelings of calm, resulting in the smoking of more cigarettes. As the body becomes accustomed to having this constant flow of nicotine, symptoms like anxiety and stress can manifest if a cigarette break is missed. Once this cycle begins, physical addiction has occurred.

The physical addiction to nicotine is what most people think of when they consider the addictive properties of cigarettes. It's also the addiction most smoking cessation aids target and treats. This is because when cigarettes are discontinued, strong physical symptoms can occur as the brain deals with a lack of nicotine. Nicotine replacement products, for instance, supply a stream of nicotine to offset these symptoms, without the need to smoke. This nicotine is slowly lowered until the addiction is no longer present. Medications may work by "turning off" the nicotine receptors in the brain, reducing cravings.

Psychological Addiction

This type of addiction is less talked about, and until recently, less often treated in those who try to quit smoking. According to the Respiratory Health Association in Chicago, psychological, mental, or emotional addiction involves the rituals, feelings, or people associated with smoking. For instance, someone who smokes while enjoying their morning cup of coffee or breakfast may find that he/she lights up each morning without even thinking about it. It becomes an engrained part of one's day so that it is no longer a conscious choice. To some, smoking may also elicit feelings of love, relaxation, or peace if they are used to lighting up during certain situations or while interacting with certain people. For instance, the common stereotype of smoking after sex rings true for many people. The feelings of closeness one has with his or her partner, combined with

the natural endorphin and oxytocin rush may be intertwined with smoking. Most people feel relaxed, loved, satisfied, and happy after sexual interactions: feelings which can easily be inappropriately linked to the act of smoking when it is performed directly after such acts.

These emotional ties can be harder to break for some, as there are no medications available to help with these attachments.

Treatments for Physical and Psychological Addictions

Physical addictions may be treated using prescription medications, nicotine replacement therapies, and relaxation techniques to help ward off cravings. Mental addiction can be harder to shake, as some smokers may not even realize why they are craving a cigarette at specific times, or they may light up before even realizing they are doing so. Counselling can help these people talk through feelings of loss or to work through stressful situations in which they'd normally turn to cigarettes. Being mindful of when cigarettes are most desired and keeping distractions nearby can also help.

Once the nicotine addiction has been diminished, the mental addiction can be dealt with, allowing smokers to quit at their own pace.

FAQ

JUUL support.juul.com/home/learn/faqs/juulpod-basics

JUUL

JUULpod Basics

How does a JUULpod work?

JUUL uses a closed loop temperature control algorithm designed to deliver the ideal amount of power at any given time to the JUULpod. The liquid is heated using an industry standard wick and nichrome coil system.

What is the nicotine concentration?

Each JUULpod is designed to contain approximately 0.7mL with 5% nicotine by weight (approx. 40 mg per pod based upon 59 mg/mL) at time of manufacture. One JUULpod is intended to replace 1 pack of cigarettes, with ~200 puffs. However, individual smoking and vaping patterns may vary and nicotine content may decrease over an extended period of time.

How many cigarettes = 1 pod?

One JUULpod is intended to replace 1 pack of cigarettes, with ~200 puffs. However, individual smoking and vaping patterns may vary and nicotine content may decrease over an extended period of time.

How should I store my JUULpods? Do they expire?

JUULpods are meant to be consumed soon after purchase and while they will not expire after one year, you may experience a natural flavor or quality decrease after one year. It's best to store JUULpods at room temperature in a dry environment in their sealed compartments until use.

How do I dispose of a JUULpod?

JUULpods are closed systems and are not intended to be refilled. They can be thrown away in a regular trash can.

Are you going to make non-nicotine e-liquid?

At this time all our JUULpods include nicotine. Our Product team is constantly working on new developments but we currently do not offer non-nicotine options. Please subscribe to our newsletter to keep up with the latest JUUL developments.

What is in JUULpod e-liquid?

After years of research, JUUL Labs developed its proprietary e-liquid formula, which is mixed under strict quality controlled processes utilizing industry leading U.S. partners.

Our ingredients include glycerol, propylene glycol, natural oils, extracts and flavor, nicotine and benzoic acid.

- Glycerol and Propylene Glycol have commonly used humectants in vaporization liquids, and also used in a number of consumer products like toothpaste.
- Benzoic Acid is a naturally occurring acid found in the tobacco plant, which is a part of our proprietary formulation that makes JUUL the ultimate vaping experience.
- As a policy, our development and manufacturing process does not add diacetyl and acetylpropionyl (or 2,3-pentanedione) as flavor ingredients.
- Nicotine content: 0.7mL with 5% nicotine by weight (approx. 40 mg per pod based upon 59 mg/mL, ~ to the nicotine yield of a pack of cigarettes).

If you have further questions or concerns about the health impact of vaping or ingestion of nicotine, we recommend that you consult with your health care professional.

Can I buy JUUL e-liquid in bulk?

We are not selling our e-liquid in bulk form. At this time our e-liquid is only available in our pods.

Can I refill JUULpods with my own e-liquid?

For health and safety concerns, please do not attempt to refill your JUULpods. To maintain product quality JUULpods are not designed for refills nor re-use.

Can I open the JUULpod?

For health and safety concerns, please do not attempt to refill or open your JUULpods. To maintain product quality JUULpods are not designed for refills nor re-use.

What's the best way to puff on a JUULpod?

JUULpods are built for easy, smooth drawing and are designed to produce an optimal vapor and nicotine experience under normal drawing pressure. It may take a little extra suction on the first draw to get the JUULpod going, but the JUUL Care Team always recommends a gentle puff on the mouthpiece. Avoid aggressively puffing or using extreme suction as this can force liquid up into the air path. It's best to avoid squeezing the mouthpiece between your teeth or lips - this pressure may also force liquid up into the air path and cause leaking. When inserting your JUULpod, place your fingers on the outer edges of the hard plastic mouthpiece to avoid squeezing the JUULpod as it clicks into place.

Where is the Batch Code on my JUULpods?

The JUULpod Batch Code is located on the back of the cardboard packaging just below the perforation. It is also printed on the reverse side of the JUULpod foil blister pack. The number may be 6-12 characters.



Welcome to JUUL HK (JUUL HONG KONG)

Your only JUUL HK store in Hong
Kong

JUUL HK News

Store closed from 19-25 June.

About Us



Your only JUUL shop in HK

Your JUUL HK store - We know how amazing JUUL is but how difficult it is to get your JUUL in HK. That is why we strive to sell only JUUL here to you!



Complete JUUL collection

Not only do we have all JUUL pod flavors in stock, but we also have the limited edition of JUUL - Gold and Navy



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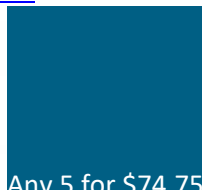
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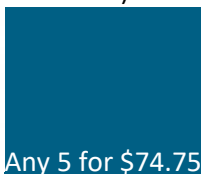
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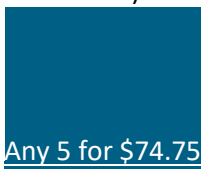
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[5% nicotine by weight \(50mg nicotine\)](#)

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(226 Customer Reviews)



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\$15.95

(98 Customer Reviews)



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[JUUL Fruit Medley Flavor Pods \(Pack of 4\)](#)
[5% nicotine by weight \(50mg nicotine\)](#)

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\$15.95

(39 Customer Reviews)



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[JUUL Classic Tobacco Pods \(Pack of 4\)](#)
[5% nicotine by weight \(50mg nicotine\)](#)

\$15.95

(19 Customer Reviews)

JUUL Flavors

There are a variety of JUUL flavors available at the Electric Tobacconist® USA, ranging from classic Virginia Tobacco to rich Crème Brûlée. If you like a sweet vape, you'll love the fruitier JUUL flavors, including Fruit Medley and the ever-popular Mango! Whatever your preference may be, there's a JUUL flavor for you.

JUUL flavor refills come in pods, and once you've finished one, they're easy to change. To replace your refill cartridge, simply pop the old pod out from the top of the device and slot your new JUUL refill in!

New JUUL Flavor Options for 2018:

Pods were originally available in six different flavor varieties: Tabac, Mint, Fruit, Brulé, Mango and Multi. As of 2018, these flavor names have been simplified, presumably to clarify their taste, to the following: Virginia Tobacco, Cool Mint, Fruit Medley and Creme Brûlée.

Each pack comes with four cartridges (with the Multi option offering one of each flavor), with each pod delivering roughly 200 puffs before it runs out.

Each pod flavor delivers an outstanding amount of vapor for its size and type of product!

JUUL Flavors at the Electric Tobacconist®

You can buy the [JUUL V3 Kit](#) & our full JUUL flavor range online at The Electric Tobacconist® USA with free domestic shipping on orders over \$20. We offer a choice of payment options: **pay using credit card or PayPal**.

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[Home](#) » [Publications](#) » [Research Reports](#) » [Tobacco, Nicotine, and E-Cigarettes](#) » **Is nicotine addictive?**

Tobacco, Nicotine, and E-Cigarettes

Is nicotine addictive?

Yes. Most smokers use tobacco regularly because they are addicted to nicotine. Addiction is characterized by compulsive drug-seeking and use, even in the face of negative health consequences. The majority of smokers would like to stop smoking, and each year about half try to quit permanently. Yet, **only about 6 percent of smokers are able to quit in a given year.**²⁵ Most smokers will need to make multiple attempts before they are able to quit permanently.²² Medications including varenicline, and some antidepressants (e.g. bupropion), and nicotine-replacement therapy, can help in many cases (see "[What are treatments for tobacco dependence?](#)").²⁶

A transient surge of endorphins in the reward circuits of the brain causes a slight, brief euphoria when nicotine is administered. This surge is much briefer than the "high" associated with other drugs. However, like other drugs of abuse, nicotine increases levels of the neurotransmitter dopamine in these reward circuits,^{20,21,27} which reinforces the behavior of taking the drug. Repeated exposure alters these circuits' sensitivity to dopamine and leads to changes in other brain circuits involved in learning, stress, and self-control. For many tobacco users, the long-term brain changes induced by continued nicotine exposure result in addiction, which involves withdrawal symptoms when not smoking, and difficulty adhering to the resolution to quit.^{28,29}

The *pharmacokinetic* properties of nicotine, or the way it is processed by the body, contribute to its addictiveness.²⁴ When cigarette smoke enters the lungs, nicotine is absorbed rapidly in the blood and delivered quickly to the brain, so that **nicotine levels peak within 10 seconds of inhalation.** But the acute effects of nicotine also dissipate quickly, along with the associated feelings of reward; this rapid cycle causes the smoker to continue dosing to maintain the drug's pleasurable effects and prevent withdrawal symptoms.³⁰

Withdrawal occurs as a result of dependence, when the body becomes used to having the drug in the system. Being without nicotine for too long can cause a regular user to experience irritability, craving, depression, anxiety, cognitive and attention deficits, sleep disturbances, and increased appetite. These withdrawal symptoms may begin within a few hours after the last cigarette, quickly driving people back to tobacco use.

When a person quits smoking, withdrawal symptoms peak within the first few days of the last cigarette smoked and usually subside within a few weeks.³¹ For some people, however, symptoms may persist for months, and the severity of withdrawal symptoms appears to be influenced by a person's genes.^{30,31}

In addition to its pleasurable effects, nicotine also temporarily boosts aspects of cognition, such as the ability to sustain attention and hold information in memory. However, long-term smoking is associated with cognitive decline and risk of Alzheimer's Disease, suggesting that short-term nicotine-related enhancement does not outweigh long-term consequences for cognitive functioning.³² In addition, people in withdrawal from nicotine experience neurocognitive deficits such as problems with attention or memory.³³ These neurocognitive withdrawal symptoms are increasingly recognized as a contributor to continued smoking.³⁴ A small research study also suggested that withdrawal may impair sleep for severely dependent smokers, and that this may additionally contribute to relapse.³⁵

In addition to the drug's impact on multiple neurotransmitters and their receptors,³⁰ many behavioral factors can affect the

severity of withdrawal symptoms. For many people who smoke, the feel, smell, and sight of a cigarette and the ritual of obtaining, handling, lighting, and smoking the cigarette are all associated with the pleasurable effects of smoking and can make withdrawal or craving worse.³⁶ Learning processes in the brain associate these cues with nicotine-induced dopamine surges in the reward system²¹—similar to what occurs with other drug addictions. Nicotine replacement therapies such as gum, patches, and inhalers, and other medications approved for the treatment of nicotine addiction may help alleviate the physiological aspects of withdrawal^{37–39} (see "[What are treatments for tobacco dependence?](#)"); however, cravings often persist because of the power of these cues. Behavioral therapies can help smokers identify environmental triggers of craving so they can use strategies to avoid these triggers and manage the feelings that arise when triggers cannot be.^{40,41}

Are there other chemicals that may contribute to tobacco addiction?

Research is showing that nicotine may not be the only ingredient in tobacco that affects its addictive potential.

Smoking is linked with a marked decrease in the levels of monoamine oxidase (MAO), an important enzyme that is responsible for the breakdown of dopamine, as well as a reduction in MAO binding sites in the brain.⁴² This change is likely caused by some as-yet-unidentified ingredient in tobacco smoke other than nicotine, because we know that nicotine itself does not dramatically alter MAO levels. Animal research suggests that MAO inhibition makes nicotine more reinforcing, but more studies are needed to determine whether MAO inhibition affects human tobacco dependence.⁴²

Animal research has also shown that acetaldehyde, another chemical in tobacco smoke created by the burning of sugars added as sweeteners, dramatically increases the reinforcing properties of nicotine and may also contribute to tobacco addiction.⁴³

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This page was last updated January 2018



NIH... Turning Discovery Into Health®

Just one cigarette could lead to a life time habit

[news-medical.net/news/20180111/Just-one-cigarette-could-lead-to-a-life-time-habit.aspx](https://www.news-medical.net/news/20180111/Just-one-cigarette-could-lead-to-a-life-time-habit.aspx)

January 11, 2018



By Dr Ananya Mandal, MD, January 11, 2018

According to researchers at the Queen Mary University of London, trying out **a single cigarette could raise the risk of taking up smoking as a habit for two thirds of the individuals.** The study titled, “What Proportion of People Who Try One Cigarette Become Daily Smokers? A Meta-Analysis of Representative Surveys”, was published in the November 2017 issue of the journal *Nicotine & Tobacco Research* and **outlined data on smoking among over 215,000 people in surveys from UK, US, Australia and New Zealand.**



Image Credit: Preeda2531 / Shutterstock

The team of researchers collected data from 216314 individuals in the eight surveys through the Global Health Data Exchange. They had initially accessed 2776 surveys globally and finally only 8 of these met their criteria and provided them with detailed and complete accessible data to analyze.

They noted that of the 60 percent of the participants who tried smoking for a single time, 68.9% went on to become full-fledged smokers who smoked daily. These eight surveys that they used were all involving English speaking populations and came between 2000 and 2016 from the developed nations. The number of people who took up smoking after their initial experiment is termed as “conversion rate” by the researchers.

Lead researcher Peter Hajek explained that this was the first time that such an information was revealed and it is worth a note that cigarettes do have the potential to become a habit after just a single experience in such a large number of individuals. He explained that the actual numbers may be bigger. This is mainly because the study included eight surveys, each of which have been conducted in different manners using different methodologies and study designs. The range percentages of people who took up smoking after a single smoking experience was between 60.9 percent in one survey to up to 76.9 percent in another survey.

Related Stories

An earlier study in 2007 had looked at 1246 sixth-grade students belonging to in six communities in Massachusetts. They had found that 10 percent of the participants became addicted to nicotine within two days of smoking their first cigarettes and a quarter were into the habit by a month. A single cigarette is not free from harm says the 2010 U.S. Surgeon General report and can raise the risk of acute health problems as well as long term risk of heart disease and heart attacks. According to Hajek only 19 percent of 11- to 15-year-olds in the UK have ever tried a cigarette and this means the number of kids getting hooked onto cigarettes has reduced significantly from the past. Among adults the number of smokers has gone down by 19.9 percent between 2010 and 2016.

Hajek declared at the end of the study that he is a consultant and has obtained funds for research from manufacturers of medications that assist in cessation of smoking. This could be conflict of interest feel some experts. However, it is undisputable that young people should be discouraged to try their first cigarettes and warned about the harmful effects of even a single light.

Source:

<https://academic.oup.com/ntr/advance-article-abstract/doi/10.1093/ntr/ntx243/4591649?redirectedFrom=fulltext>



Department of Health Tobacco Control Office
Hong Kong Attn: Dr Jeff Lee

16 July 2018

Dear Sir,

Underage sales enforcement under Cap 371 Sec 15A

- 1) Since the inception of Tobacco Control office please advise the number of
 - a) prosecutions and b) convictions for the itemised offences under Cap 371 Sec 15A?

- 2) For reasons best known to the Food and Health Bureau, Hong Kong has no tobacco retailer licensing scheme, hence no compliance inspection scheme. How many prosecutions have taken place against bars/restaurants /shops/ newspaper vendors /hawkers etc selling cigarettes who have no required displays under Sec 15B?

The Legislation

Part 4A Prohibition on Selling or Giving of Tobacco Products* (Part 4A added 91 of 1994 s. 15) Editorial Note: *(Amended 93 of 1997 s. 18)

15A. Prohibition on selling or giving of tobacco products, etc.

- (1) No person shall sell any cigarette, cigarette tobacco, cigar or pipe tobacco to **any person under the age of 18 years.**
- (2) No person shall, for the purposes of promotion or advertisement, give any cigarette, cigarette tobacco, cigar or pipe tobacco to any person. (Amended 93 of 1997 s. 19)
- (3) No person shall—
 - (a) sell, offer for sale or give a tobacco product to any person in exchange for a token;
 - (b) give to any person a tobacco product as a prize in any event or competition;
 - (c) give valuable consideration to any individual in order to induce him to buy a particular tobacco product or otherwise to promote to him that tobacco product;
 - (d) sell, offer for sale or possess for the purposes of sale a tobacco product which includes or is accompanied by a gift;
 - (e) sell, offer for sale or possess for the purposes of sale a tobacco product which includes or is accompanied by a token, stamp or raffle ticket, which may be exchanged for a gift, prize or discount on any product;
 - (f) sell, offer for sale or possess for the purposes of sale a non-tobacco product which includes or is accompanied by a tobacco product as a gift; (Amended 21 of 2006 s. 18)
 - (fa) sell, offer for sale or possess for the purposes of sale a tobacco product and a non-tobacco product as a single item; or (Added 21 of 2006 s. 18)
 - (g) give to any person any object which contains the name or trade name of any person associated with the marketing of cigarettes, cigarette tobacco, cigars or pipe tobacco or contains any trade mark or brand name of a tobacco product or any pictorial device or part thereof commonly associated therewith, and which is intended to be shown in public. (Added 93 of 1997 s. 19)

15B Display of sign when offering tobacco products for sale, etc.

- (1) Any person offering for sale, or promoting the sale, purchase, smoking or use of, cigarettes, cigarette tobacco, cigars or pipe tobacco shall place and keep in place in a prominent position at his premises or at the place of promotion a sign in English and Chinese to indicate that no cigarette, cigarette tobacco, cigar or pipe tobacco may be sold to any person under the age of 18 years or given to any person. (Amended 93 of 1997 s. 20)
- (2) A sign required by subsection (1) shall be of the prescribed description and shall be maintained in legible condition and good order by the person offering for sale, or promoting the sale, purchase, smoking or use of, cigarettes, cigarette tobacco, cigars or pipe tobacco.

Yours faithfully,

James Middleton

Chairman



From: dynamco@netvigator.com [redacted]
Sent: Sunday, 8 July 2018 11:58 AM
To: 'pmllee@dh.gov.hk' <pmllee@dh.gov.hk>
Cc: 'Dr. Judith Mackay' [redacted]; [redacted]
<hrmrlth@hkucc.hku.hk>; 'gracep92@hku.hk' <gracep92@hku.hk>; 'cslau@hku.hk' <cslau@hku.hk>; 'syho' <syho@hku.hk>
Subject: Number of cigarette smokers in Hong Kong under the age of 18

Tobacco Control Office
Hong Kong

Dear Sir,

What is the number of children under the age of 18 who are ever /daily / non-daily cigarette smokers by age group and sex?
For some reason HKG chooses to survey persons aged 15 and over which clouds and hides the actual ever /daily / non- daily users in kindergarten and youth under 18 age user group.

<https://tobaccocontrol.bmj.com/content/24/e2/e161>

This peer reviewed study found that the level of illicit cigarette use in in Hong Kong is :
" Illicit cigarette consumption was estimated to be about 8.2–15.4% of the total cigarette consumption in Hong Kong in 2012 with a midpoint estimate of 11.9%"

Since the mid term figure accurately reflects the actual illicit use here why is this data excluded from actual prevalence figures, even if an explanatory paragraph is required?

Kind regards,
James Middleton
Chairman
<http://cleartheair.org.hk>

Thematic Survey 64

Key indicators	2017 年統計調查結果* 2017 Survey findings*
<i>Current smokers</i>	
• Number of current smokers aged 15 and over at the time of enumeration	667 500 (691 600)
- <i>Daily smokers</i>	620 600 (646 400)
- <i>Non-daily smokers</i>	46 900 (45 200)
• Percentage of current smokers aged 15 and over at the time of enumeration among all persons aged 15 and over	10.8% (11.4%)
- <i>Daily smokers</i>	10.1% (10.6%)
- <i>Non-daily smokers</i>	0.8% (0.7%)

23/F, 8-Commercial Tower, 8 Sun Yip Street, Chai Wan, Hong Kong
Tel 25799398 26930136 Fax (+852) 26027153 Email chair@cleartheair.org.hk
<http://cleartheair.org.hk>

Singapore

<https://www.channelnewsasia.com/news/singapore/7-eleven-store-among-6-retailers-caught-selling-tobacco-products-10522276>

7-Eleven store among 6 retailers caught selling tobacco products to minors



An opaque cabinet that stores cigarettes and other tobacco products at a 7-Eleven store. (Photo: Monica Kotwani)
12 Jul 2018 10:37AM (Updated: 12 Jul 2018 10:40AM)

SINGAPORE: Several retailers, including a 7-Eleven outlet, have had action taken against them for selling cigarettes to minors under the age of 18 - including to one as young as 13, the Health Sciences Authority (HSA) said on Thursday (Jul 12).

One retailer, Mohamed Buhari Trading, had its tobacco retail licence revoked after it was caught selling cigarettes to a 17-year-old minor wearing their school uniform.

The retailer, located at 103 Teck Whye Lane, will no longer be able to sell tobacco products.

TOBACCO RETAIL LICENCES SUSPENDED

Five other retailers, including a 7-Eleven outlet in Simei, had their tobacco retail licences suspended for six months after selling cigarettes to under-18 minors for the first time.

According to HSA, one of the sellers had sold cigarettes to a 13-year-old and claimed she had not checked for any identification because she was unwell.

The other sellers had claimed that they had not requested for any identification because they were busy or that the minors looked older than they were.

The outlets with suspended licences are: Eng Lee & Co at 57 Lengkok Bahru, Hla Lay New at 303 Jurong East Street 32, Kee Guan Huat Supermarket at Blk 308 Clementi Avenue 4, Sathya Mini Mart at 242 Serangoon Avenue 3 and 7-Eleven at 30 Simei Street 3.

MEMBERS OF PUBLIC ALSO LIABLE IF CAUGHT SELLING CIGARETTES TO MINORS

HSA warned that sellers take the risk of contravening the laws if they assess age by mere physical appearance of the buyer.

Anyone caught selling tobacco products to persons below the age of 18 is liable, on conviction in court, to a maximum fine of up to S\$5,000 for the first offence and up to S\$10,000 for the second or subsequent offence.

In addition, the tobacco retail licence will be **suspended for six months for the first offence and revoked for the second offence.**

However, if an outlet is found selling tobacco products to under-18 minors in school uniforms or to those below the age of 12, their tobacco retail licence will be revoked even at the first offence, said HSA.

HSA has suspended a total of 73 tobacco retail licences and revoked 11 since 2015.

Members of the public are also liable if they are found to have bought tobacco products for under-18 minors.

If found guilty, they can face a maximum fine of up to S\$2,500 for the first offence and up to S\$5,000 for the second or subsequent offence.

Similarly, anyone caught giving or furnishing any tobacco product to a person below the age of 18 is liable, on conviction in court, to a maximum fine of up to S\$500 for the first offence and up to S\$1,000 for the second or subsequent offence.

Eighteen individuals have been caught for such offences since 2015.

Source: CNA/aa