

How to Quit Smoking, Vaping or Dipping Tobacco | Dr. Andrew Huberman

Vaping is actually harder to quit than cigarette smoking for most people. Does that mean that cigarette smoking is fairly easy to quit for most people? No. 70% of people who smoke cigarettes report that they would like to quit if they thought they could. The success rate of quitting smoking when people try to go just cold turkey just quit with no assistance whatsoever. They might tell their family and friends, "Hey, I'm quitting. That's it, it's exceedingly low. It's 5%." So 5% of the people that say that's it, "I'm not smoking again despite cancer diagnosis, I'm not smoking again despite the fear of the negative health effects on that, I'm not gonna ever smoke again. Despite the financial cost, the uh health cost, I mean I could list off the a huge number of things that it does that are negative but you already know these or you've heard them, you know makes your skin worse. It um as I mentioned it, it uh lowers libido, it disrupts hormones, it disrupts vascular function, brain function, does all these terrible things, and yet most people who try and quit simply can't. And of the 5% that succeed in quitting, a full 65% of them relapse within a year. So that's a very depressing picture. But it's not to say that people cannot quit. In fact, they can. There are a couple of methods that have been shown to help people quit. Some are behavioral and some are pharmacologic. I just wanna touch on the behavioral ones first because it turns out that there's a quite powerful method for quitting nicotine ingestion by way of cigarette smoking which also carries over to vaping. This is beautiful work that's been done by my colleague in fact close collaborator. Although I was not involved in the research that I'm about to describe at Stanford and his name is Doctor David Spiegel. He is our Associate Chair of Psychiatry. He's been a guest on the Huberman lab podcast and he is a world expert, if not the world expert in the clinical applications of hypnosis. Now when I say hypnosis, a lot of people think stage hypnosis which is the hypnotist trying to get people to do certain things and say certain things, not necessarily against their will because they actually have to agree. But the hypnotist is dictating what the person thinks, says, and does. Clinical hypnosis is vastly different from that. Clinical hypnosis is where the person, the patient actually directs their own brain changes toward a specific emotional or behavioral goal. Work from Doctor David Spiegel's laboratory done in 1993. But that now has been repeated many many times, is carried over into some more modern studies. And I'll provide

links to those studies in the show note caption so that you can access them Those studies have shown that using a specific form of hypnosis people can achieve complete and total cessation of cigarette smoking And there's no reason to believe this doesn't also carry over to vaping through one single hypnosis session And the success rates are incredibly high when one considers that normally it would be only a 5% success rate The success rate with this particular hypnosis developed at Stanford School of Medicine by Doctor David Spiegel is 23% of people who do this hypnosis one time succeed in quitting smoking now in the old days which actually wasn't that long ago uh before the advent of smartphones and before the internet took off to the extent that it has Now this was done by having someone come into the clinic and doctor Spiegel himself or one of his colleagues would take somebody through the hypnosis Nowadays you can access this hypnosis There's a wonderful app that was developed by Doctor David Spiegel and others It's called Reverie Rev Er I've talked about this app a few times on the podcast before because there are hypnosis scripts within the app for enhancing sleep for improving ability to fall asleep if you wake up in the middle of the night for focus And a number of other behavioral and emotional changes There's also a function in the Reverie app for smoking cessation which exactly parallels the sort of in laboratory and in clinic approaches that Doctor Spiegel would use were you to show up at his clinic or in his laboratory And since that's not possible for the large number of people out there if you or somebody else is trying to quit smoking or vaping or dipping or snuffing for that matter I strongly encourage you to check out the Reverie app You can find it easily by going to [reverie dot com](http://reverie.com) It's available in various formats Some of it is available free Some of it is behind a paywall but given the tremendously negative impact of smoking vaping dipping and snuffing the hypnosis for smoking cessation that reverie has seems at least to me as a very powerful and worthwhile resource So please check that out if you're somebody who's trying to quit ingesting nicotine by any of the four methods that I just described Now of course there are other methods that people have used to successfully quit smoking or vaping or other forms of nicotine delivery And there's actually an excellent review on this topic So before diving into a few of the specifics about some of the pharmacology of using nicotine itself to quit smoking or nicotine itself to quit vaping or the use of various things even Ssr's antidepressants to quit smoking or vaping I just wanna point you to a review article that if you'd like to get a complete survey of all the options that are available There's an

excellent review on this It was published just a couple of years ago in 2020 And the title of the article is pharmacologic approach to smoking cessation and updated review for daily clinical practice And even though this is mainly focused on smoking cessation uh it carries over quite nicely to vaping and it details a number of statistics you know the fact that every year 700,000 or more people die because of smoking related diseases So there again you have the the uh negative health effects um that younger people are smoking that women are smoking more nowadays And that even though you see less smoking typically in the US and Canada and even in northern Europe some places there's still many many people are smoking who would like to quit But that 75% of people at least according to this review earlier I said 70% but estimates are as high as 75% of people who try to quit smoking relapse within the first week the first week they just go right back to it That's how powerfully reinforcing the nicotine is Remember it's the nicotine in the cigarette that's powerfully reinforcing But it's also the oral habit the motor habit you know there is this thing about density of sensory receptors in the lips People like bringing things to their lips um food cigarettes other lips In some cases et cetera there is a reinforcement pathway related to that for sort of obvious adaptive reasons And as a consequence there is a reinforcement both from the behavior and from the dopamine released from the nicotine itself And as I mentioned earlier from the positive reinforcement that comes from increased focus So the money that you make through work or your attentional ability or the fact that you're alert and people feel you present all of that funnels back into positive reinforcement behavioral reinforcement and then what we would call addiction So this review covers all of that and then steps beautifully through nicotine replacement therapy and various compounds Several of which I'm gonna talk about now which have been shown to increase that number that we talked about earlier of only 5% of people who try to quit with no other support pharmacologic or hypnosis or otherwise just say that's it I'm not gonna smoke again or I'm not gonna Vape again Only 5% of people succeed in doing that And even among those many end up relapsing later there are a couple pharmacologic approaches One of the main ones that's received a lot of attention in recent years is Bryon sometimes referred to by its commercial name wellbutrin Now Bryon is a compound that increases the release of dopamine and to a lesser extent epinephrine and some other neurochemicals as well It's used for the treatment of depression and for smoking cessation Now I wanna point out again I'm not a psychiatrist so I'm not telling you to take Bry Perrone A K

Wellbutrin but I'm gonna give you a little bit of the contour of what's typically done in terms of bupropion administration to help people get relief from some of the withdrawal symptoms of trying to quit smoking or vaping or other forms of nicotine ingestion. Typically bupropion is taken in 300 mg per day doses divided into two dosages of 100 and 200 mg each or sometimes there's a slow release formula. The dosages will vary from person to person. I wanna really emphasize that there is an increased seizure risk with bupropion. It only occurs in a small fraction of the population but nonetheless is a real concern for those members of the population. So for those of you with seizure risk whether you know it or not that's going to be a valid concern in terms of potential side effects. The other thing about prion is that has to be used with caution in patients that have liver disease or renal disease that can impact the amount that anyone can take. Meaning sometimes people have to take a much lower dose if they have renal disease or liver disease and sometimes they can't take it at all. Sometimes if people are taking benzodiazepines for whatever reason or other sedatives there are contraindications there. So Brr isn't a you know kind of one size fits all. Or magic bullet for quitting smoking nonetheless for people that can take it safely. And again this is a prescription drug a board certified psychiatrist or other physician is going to have to prescribe it for you if it's appropriate for you. And it moves that number of 5% success rate to about what one sees with the clinical hypnosis to about 20% of people will successfully overcome their nicotine or I should say their smoking or vaping addiction. Now it's important to ask why this would work right. I mean it's not as if bupropion is increasing nicotine per se. What it's doing is it's tapping on that mesolimbic reward pathway increasing dopamine or at least allowing dopamine levels to stay substantially elevated enough that people don't experience some of the drop in dopamine that leads to the withdrawal symptoms the lessening of mood et cetera. And it's no coincidence that Brr is also an antidepressant. It's a common antidepressant for people that experience negative side effects with the so called Ssris the selective serotonin reuptake inhibitors that prevent them from taking those things like lessen libido or appetite or in some cases increased appetite or any number of other side effects that some people not all but some people experience with Ssris they'll be prescribed Wellbutrin. Brr uh is the generic name. Uh So Wellbutrin being the commercial name again. Bupropion is what they'll be prescribed instead with the caveats of seizure risk renal disease liver disease et cetera. The outcomes with Wellbutrin for smoking cessation are pretty good. I mean if you think about an increase

from 5% to 20% that's pretty dramatic And yet I also want to refer back to the incredible success of the clinical hypnosis approach Again you can find that at reverie dot com the clinical hypnosis approach has a success rate of 23% So it's very closely aligned with if not exceeding the success rate With brr of course there are other pharmacologic approaches to quitting smoking or vaping All of them generally circle back to increasing dopamine and or norepinephrine in order to offset some of the withdrawal symptoms of smoking sensation or vaping cessation A very common approach for people to try and quit smoking or vaping is to use nicotine itself to try and prevent people from seeking nicotine through a cigarette or a Vape pen What I mean by that is people using a nicotine patch or nicotine gum or other nicotine delivery device that is not cigarettes and not vaping in order to maintain levels of nicotine in their bloodstream which of course means maintain levels of nicotine in their brain and body to the same extent that they would if they were smoking or vaping maybe even gradually taking down the total amount of nicotine in their brain and body by reducing the number or size of nicotine gum pieces that they ingest each day or keeping the patch on for a shorter amount of time or getting a lower dose patch that releases less nicotine total or overtime All of those approaches have been shown to be reasonably successful I get to the numbers in a few minutes but reasonably successful in allowing people to quit smoking or vaping again Most of the data is on cigarette smoking because vaping is a relatively new phenomenon Although quite troublingly it's a very rapidly increasing behavior especially in the young population So that's why I'm kind of lumping these two things together because I think very soon we are going to need an all out campaign for how to counter vaping addiction So what do we know about smoking cessation using nicotine itself is the patch best is nicotine gum best turns out that a combination of approaches is best So somewhat surprising But it is very clear from the literature that I was able to find that using nicotine patches for some period of time and then switching to a gum and then perhaps switching to an a nasal spray that's going to be the most effective Then the question is how long to continue each of those and whether or not to overlap them it seems as if doing one for about a week and then switching to another for about a week and then switching to another is one rational and reasonable approach that many people have used successfully why would that be Well it all has to do with the different rates of absorption of nicotine into the bloodstream and then the downstream consequences of that on the dopamine acetylcholine epinephrine and other systems of the brain and body

And while there hasn't been an extremely detailed study of the exact kinetics of you know how the nasal sprays versus the transdermal patches versus the gums et cetera work There's a logical structure to it that will immediately make sense to you First of all the transdermal patches provide a fairly steady state dopamine release across the day And oftentimes people are wearing them at night as well Uh This is relevant because if people are ingesting nicotine by way of smoking and vaping you know hopefully they're not waking up in the middle of the night just to smoke or vapor believe it or not some people do that But of course while people are asleep they are not smoking or vaping they always tell you don't fall asleep with a cigarette in your mouth you burn the whole house down but exceedingly rare to have people are smoking in their sleep So people wake up in the morning and because the half life of nicotine from smoking or vaping is very short anywhere from 1 to 2 hours they're essentially in a state of withdrawal at the point where they wake up in the morning How can I say that Well remember withdrawal sets in about four hours after the last ingestion of nicotine by cigarette or by inhalation from the Vape pen So people are waking up in nicotine withdrawal and then immediately going into the behavior of ingesting nicotine or very soon after waking from most people So nicotine patch is going to be very effective for a week or so Again talk to your physician about the best approach for this but then switching to a nasal spray or switching to nicotine gum for about a week which is gonna change the kinetics of that nicotine absorption into the bloodstream and change the release of dopamine and other neurochemicals within the brain that's going to keep the system intentionally off balance so that it never comes to expect one single pattern or amplitude of dopamine release And that is a very powerful way for a let's just call it a quitting method to work because as I've always said the most powerful schedule of dopamine is going to be this random intermittent reward This is what's used in the casinos in order to take your money And generally they do on average they take your money more than you take theirs and they take more of it Uh not just more often because they use this random intermittent schedule The random intermittent schedule is one in which you don't really know when the peaks and dopamine are going to arrive And so there isn't this expectation and craving and then all of a sudden when dopamine is released it's extremely high That's how they get you to continue playing even though basically you're losing money and your dopamine is dropping They elevated every once in a while Nicotine replacement can be used in a similar way But in a benevolent way in order to

help you get over smoking or vaping by keeping the total amounts of dopamine variable around the clock and by changing the amount of dopamine that's released it seems to help people behaviorally and psychologically because they don't come to expect having a particular amount of dopamine in their brain and blood at any given time