

Science AMA Series: We're Deborah Ossip, Ph.D., and Scott McIntosh, Ph.D., directors of the Smoking Research Program at the University of Rochester in Rochester, New York. We study tobacco use and interventions to quit. AMA!

Quit-Smoking¹ and r/Science AMAs¹

¹Affiliation not available

April 17, 2023

Abstract

Hi Reddit! I'm Dr. Deborah Ossip and I have been studying smoking behavior in teens and adults for more than 30 years. My research focus has included e-cigarettes and I am principal investigator on two NIH-funded projects around tobacco use, including one striving to engage underserved populations to call quitlines. I direct the University of Rochester Medical Center's Smoking Research Program. I am also a Member Delegate for North America for the Society for Research on Nicotine and Tobacco and a member of various other local, state, national, and international committees, working groups, and advisory boards for tobacco prevention and control issues. I'm Dr. Scott McIntosh and I have been studying nicotine addiction and stop-smoking interventions for approximately 20 years. I have been involved with e-cigarette research in recent years and am the principal investigator of an NCI clinical trial investigating the use of web-assisted tobacco interventions (WATI) for community college students. I serve as Associate Director of the Smoking Research Program at the University of Rochester Medical Center and am Director of the Center for a Tobacco-Free Finger Lakes. We're here to answer questions about e-cigs based on the latest research. We can also answer questions about nicotine addiction and what current research says about strategies to quit smoking. We'll start answering questions at 1 p.m. EST.

[REDDIT](#)

Science AMA Series: We're Deborah Ossip, Ph.D., and Scott McIntosh, Ph.D., directors of the Smoking Research Program at the University of Rochester in Rochester, New York. We study tobacco use and interventions to quit. **AMA!**

QUIT-SMOKING [R/SCIENCE](#)

Hi Reddit!

I'm Dr. Deborah Ossip and I have been studying smoking behavior in teens and adults for more than 30 years. My research focus has included e-cigarettes and I am principal investigator on two NIH-funded projects around tobacco use, including one striving to engage underserved populations to call quitlines. I direct the University of Rochester Medical Center's Smoking Research Program. I am also a Member Delegate for North America for the Society for Research on Nicotine and Tobacco and a member of various other local, state, national, and international committees, working groups, and advisory boards for tobacco prevention and control issues. I'm Dr. Scott McIntosh and I have been studying nicotine addiction and stop-smoking interventions for approximately 20 years. I have been involved with e-cigarette research in recent years and am the principal investigator of an NCI clinical trial investigating the use of web-assisted tobacco interventions (WATI) for community college students. I serve as Associate Director of the Smoking Research Program at the University of Rochester Medical Center and am Director of the Center for a Tobacco-Free Finger Lakes. We're here to answer questions about e-cigs based on the latest research. We can also answer questions about nicotine addiction and what current research says about strategies to quit smoking. **We'll start answering questions at 1 p.m. EST.**

[READ REVIEWS](#)

[WRITE A REVIEW](#)

CORRESPONDENCE:

DATE RECEIVED:
August 12, 2017

DOI:
10.15200/winn.150245.52255

ARCHIVED:
August 11, 2017

CITATION:
Quit-Smoking , r/Science ,
Science AMA Series: We're
Deborah Ossip, Ph.D., and
Scott McIntosh, Ph.D.,
directors of the Smoking
Research Program at the
University of Rochester in
Rochester, New York. We
study tobacco use and
interventions to quit. AMA!, *The*

Thank you so much for this AMA, it's exactly what I have been looking for (and many others, I'm sure). I am 37, and a smoker. I have been smoking regularly (on average 15 cigarettes/day) for 18 years. I have "quit" several times and always found my way back to these evil things. I've chosen a quit date and downloaded an app for help, but I know that this is really up to me. What I want to know is what sort of recovery can I expect for my body? As of now I have no health issues that I am aware of, but I have developed a smokers cough over the past year. Nothing major, just enough that it reminds me I need to quit. I know that I have damaged my body, i just want to know if any of this damage can be undone. EDIT: I understand that my question is not specific to the information that you are offering, still I hope you have some insight on this based on your experience.

[GeneralStirlingPrice](#)

Dr. McIntosh: I am almost out of time, so I picked your post for my last response. I wish I could keep going - lots of great questions! Your body can expect "Recovery Symptoms" - and you should be aware that your smokers' cough might actually get WORSE! But only in the short term. After several weeks and months, your cough should start to improve (be sure to keep your doctor in the loop the whole time). After 24 -72 hours, the carbon monoxide and nicotine get eliminated from your body. After only 8 hours, your oxygen levels increase - with your circulation improving by 2-3 months. After only 24 hours

Winnower 4:e150245.52255 ,
2017 , DOI:
[10.15200/winn.150245.52255](https://doi.org/10.15200/winn.150245.52255)

© et al. This article is distributed under the terms of the [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and redistribution in any medium, provided that the original author and source are credited.



your risk for a heart attack starts to drop. After 15 years (I know that sounds like a long time), your risk for a heart attack is the same as for someone who has NEVER smoked (statistically speaking). Your risk for lung cancer will definitely decline, but may not ever reach zero (the bad news), but the good news is that it's cut in half after 10 years. By 9 months, coughing, sinus problems and shortness of breath decrease and you have more energy. So yes - you can "undo" some of the damage, and definitely PREVENT more damage. Best of luck - you can quit for good this time!

[deleted]

[\[deleted\]](#)

Drs. Ossip and McIntosh: Congratulations on quitting smoking! Research shows that, for most people, the benefits of quitting smoking far exceeds the risks associated with weight gain. Tackle these as two separate problems. If you have what it took to quit smoking, you have what it takes to tackle weight gain. Work with your healthcare provider and check out online resources.

Have either of you smoked for a considerable period of time?

[rebellionite](#)

Drs. Ossip and McIntosh: Both tried it, never stayed with it (long ago!). Doing what we do keeps us from ever considering "going back!" We've sat with patients waiting to go into surgery for incurable lung cancer caused by smoking, and we've witnessed the fear. That's why we've dedicated our careers to do what we can to help people avoid ever being in that situation (for something that CAN be prevented).

What are the differences in damage between cigars, cigarettes, pipe tobacco, and marijuana?

[xNe0n_Lights](#)

Dr. Ossip: You see the most damage from tobacco smoke and other combustible (burned) products at the sites that they directly touch. So for example cigarette smoke (which is inhaled into the lungs) causes the greatest damage to the respiratory system. For people who use products that stay in the mouth (cigars, smokeless / spit tobacco), the main damage happens in the mouth, tongue, throat, etc. - although damage occurs elsewhere in the body as well. Cigarette smokers who switch to cigars and pipes tend to inhale those products as well - leading to damage in the lungs. Research has been harder to come by for marijuana - both as a controlled substance or as a potential emerging treatment (medical marijuana). In general, any combustible product that is smoked has been shown to cause damage. For medical marijuana, there are other ways to use it that don't involve smoking or vaping.

I was astounded at how effective Chantix was for me, but I've heard lots of anecdotal reports of it really affecting people mentally. I have bipolar, but suffered no mental side effects from Chantix. Any ideas why it's effective for some and not others?

[rayjizzlejohnsizzle](#)

Drs. Ossip and McIntosh: We are PhD researchers, not medical doctors, so be sure to check with your healthcare provider for personal medication and health questions. If people don't follow the directions on the package closely, then there can be a wide variation in why it's effective for some, not others, and why side effects vary. A recent large study (The EAGLES Study) showed that, overall, the main

cessation medications were not too different from one another in terms of side-effects. However, how individuals are affected by medications depends a lot on their genetic makeup, other medical conditions, situational factors, and a host of other variables. This is why, as prescriptions, some of these medications are supervised by healthcare providers. Congratulations, by the way!

I quit almost 2 years ago cold turkey after trying many times unsuccessfully. I never tried any aids but ended up just not being around other people who smoke. However, I crave a smoke almost weekly. Is this normal? Will it eventually go away?

[LogicalMellowPerson](#)

Drs. Ossip and McIntosh: (Some good answers already, by the way!). Yes, it's well within the range of "normal". Generally, the cravings become less frequently over time, for some they may stop completely, and for others they may still happen from time to time. It may be helpful to pay attention to particular situations that bring on the craving, or if there may be a pattern. Then you could look for specific coping strategies for that situation. Calling a "quit line" is an excellent (free) way to talk to someone about a variety of strategies. In the US, you can call 1-800-QUIT-NOW

Hi,

I'm a respiratory nurse and would love to know your thoughts on smoking cessation interventions in people who have mental health conditions that impact them significantly. I find this population really difficult to engage in discussions about smoking cessation.

Thanks!

[ProcrastinatorNat](#)

Dr. McIntosh: People with mental health issues smoke at a higher rate than the general adult population. Some do get "secondary gains" from nicotine (in any form) such as attenuating the neurological "gating" experienced by persons with schizophrenia, or such as self-medicating for anxiety or depression. Nicotine replacement therapy under the supervision of a doctor may be the best "front line" approach to cessation for many such persons. Also, if not contraindicated, both Chantix and Zyban decrease a person's "urge" to smoke and can lessen the withdrawal symptoms. Strategies like "motivational interviewing" (meeting people "where they are" in their own smoking and quitting experiences) have been shown to help engage with smokers who are reluctant to make a quit attempt.

Hi there!

I'm curious about the use of e-cigarettes to quit smoking. My husband switched successfully got his nicotine use down from 12mg when he first switched to 3mg now, but my dad tried to do the same and quickly went back to rolled tobacco (cigarillos mostly). His reason for going back is that there isn't, what he calls, "a burn". Is there some reason for this? My dad was smoking for much longer; does length of use affect the success of intervention? Have you seen any success with using e-cigarettes over loose tobacco?

Thanks for doing this AMA!!

[NordicAphasia](#)

This is Dr. Ossip: Smokers do report missing the "burn." Anecdotally, smokers report that hard cinnamon candies help to give that burning sensation, and there is some evidence that lemon juice can

alleviate cravings because of burn in that back of the throat.

Hi there!

I'm curious about the use of e-cigarettes to quit smoking. My husband switched successfully got his nicotine use down from 12mg when he first switched to 3mg now, but my dad tried to do the same and quickly went back to rolled tobacco (cigarillos mostly). His reason for going back is that there isn't, what he calls, "a burn". Is there some reason for this? My dad was smoking for much longer; does length of use affect the success of intervention? Have you seen any success with using e-cigarettes over loose tobacco?

Thanks for doing this AMA!!

[NordicAphasia](#)

This is Dr. Scott McIntosh: Smokers do get used to the Burn or other specific feelings in the throat, and so they miss it when trying to quit. One strategy could be to use the Nicotine Inhaler, which is prescription and provides some of that feeling in the throat. E-cigarettes could do that, but they also have many toxins and carcinogens and short-term effects on lung tissues.

Hello, and thanks for the AMA!

I'm just wondering... Are there people among your team that do smoke? Is this something you make fun of because they can't seem to stop?

[sellaie](#)

Dr. Ossip: We know how hard it can be to quit We routinely have team members who have been tobacco users in the past - so we are exquisitely sensitive to the challenges people have when they are trying to quit, as well as the tremendous sense of satisfaction they have when they persist and finally make it!

I started vaping about a year ago. I was bored and I've only smoked 2 cigs in my life. Vaping is a habit I don't mind and I've lately switched to 0mg ejuice.

How bad is this habit for my health? My wife doesn't like me spending \$10 a month on ejuice but I really enjoy vaping.

[showersareevil](#)

Drs. McIntosh and Ossip: For most people, products without nicotine aren't usually a long-lasting habit. And of course with nicotine added, it's more than a habit - it's an addiction. For products without nicotine, like in your case, it's important to know that the flavorings alone can be harmful to your health (including specific flavors themselves like cinnamon and cherry). We don't know the full impact from the wide variety of flavors that are out there. A flavor may be perfectly safe to eat (that is, "approved" for food consumption), but is NOT safe to vaporize and inhale into your lungs. So don't be fooled by products that advertise they are only using safe or approved flavorings. There are currently no FDA approved vaping products.

Hi Dr. Ossip and Dr. McIntosh,

I'm a first year dental student learning about SBIRT (Screening, Brief Intervention, and Referral to Treatment for those of you who don't know) and my role in helping patients quit dangerous tobacco/alcohol/drug habits. I was wondering if you had any advice on how to most effectively utilize my role as a future dentist to encourage my patients to quit? Are there certain approaches that are more effective than others? Thanks!

[DomonuT](#)

Dr. McIntosh: It's great to read about your commitment! Dentists are really "on the front lines" and have an excellent opportunity for a teachable moment. The SBIRT strategy is a good place to start; intervention can include your advice to quit, and referral can include the national quitline (800-QUIT-NOW) and website (smokefree.gov).

On average what have you found as the most effective way to quit using nicotine products after getting addicted?

[bearsrbig](#)

Dr. Ossip: If you mean "nicotine products" such as cigarettes, e-cigarettes, and other tobacco products, then there are medications have been shown to work (e.g., Chantix/Champix, bupropion, and Nicotine Replacement Therapies - NRT - check with your doctor or pharmacist, healthcare provider, etc.). These work best in combination with the use of coping strategies, talking to your doctor or a quit coach, and online resources (such as at smokefree.gov). Most of all - don't give up!

Are E-Ciggarattes proven to be not as bad for you as tobacco? Is tobacco that claims to be "additive free" (like American Spirits) more healthy then tobacco that does not claim to be? Thanks for taking the time to do this ama.

[TreyBlaziken](#)

Drs. Ossip and McIntosh. Even "additive free" cigarettes have natural tobacco - which has over 47 known carcinogens, no less carbon monoxide, etc. E-Cigs are not a regulated product. We do not know what the health effects of users of e-cigarettes will be in the long run. The short-term effects include "oxidative stress", nicotine addiction, and measurable effects on the development of the brains of adolescents / young adults. Some e-cigarettes have 6 times the amount of Copper, higher levels of other heavy metals, toxins that harm lung and other tissues, and they have carcinogens. If you are trying to quit, there are many available and free treatment options. Best to try to quit tobacco, e-cigarettes and other products completely. Talk to your doctor, call 1-800-QUIT-NOW or go to www.smokefree.gov .

Hi, thanks for doing an AMA!

I find that so often social smokers who might smoke 2-3 cigarettes one night per week get lumped in with serous habitual smokers who smoke 20+ per day. Is your stance that no amount of tobacco use is ever justifiable? Is there any data on the long term effects of smoking, say, 1-2 cigarettes per day?

Thank you!

[-domi-](#)

Drs. Ossip & McIntosh: There is no safe level of smoking.

Is there a brand of cigarettes that has a significant increase or decrease in illness?

[superseamen47](#)

Drs. Ossip and McIntosh: No. All combustible cigarettes are harmful. Brands that claim to be "natural" (or to have "no additives" - just plain tobacco) still have dozens of cancer causing and many more other disease causing chemicals.

Hello! I quit smoking about 10 months ago and boy was it a ride! I use e-cigarettes as kind of a buffer between the smoking and non-smoking World. Although, I never used e-juice with nicotine in it- the e-cigarette was only there to help curve those intense cravings with the act of smoking not necessarily getting the nicotine. Now I can honestly say I haven't smoked or consumed any form of nicotine in the past 10 months. Cold-turkey does wonders!

I guess my question is, why do I find myself sometimes craving a cigarette even after this long? I dream about them sometimes. In fact, I had a dream about smoking last night. I always wake up disappointed in myself when I smoke in my dreams, but it makes me think about other rest of the day. Why does this happen?

[TheBloviator](#)

Dr. Ossip: Congratulations on quitting! It sounds like, you have also quit e-cigs (including non-nicotine versions), which is great. 10 months is still a very short time since quitting, so give it more time before the cravings or dreams go away. They do get less frequent and less intense over time - this varies by person - even years later, a particular smell or situation can bring back this old memory. You can then feel very fortunate that it is only a memory.

What receptors in the brain respond to nicotine and what healthier things activate these same receptors.

[neuropathica](#)

Drs. Ossip and McIntosh: The nicotine receptors and pathways can be activated more safely by the various FDA approved medications for quitting. Healthy physical activity can activate these pathways, can reduce cravings, and can reduce withdrawal symptoms.

My alma mater!

What is your opinion about the safety of ecigs as a long term alternative to smoking cigarettes? Some people (me) used them to quit smoking but then never stopped using them.

edit: thanks for the correction, "guy who uses quotes incorrectly"

[dnap123](#)

Drs. Ossip and McIntosh: Congratulations on quitting smoking cigarettes, but the effects of long-term use of e-cigs is the subject of a lot of debate in the research community. These are not yet regulated products. There are no standards for e-cigarettes. Research has shown some worrisome short-term health effects, and we simply don't know yet what the long term effects will be. Our best read at this point is - why take the chance? Quit everything. If you still feel you need nicotine, there are nicotine replacement therapy products available over the counter that are FDA approved - speak with your

healthcare provider or pharmacist.

What surprised you most in your latest set of studies?

[siskelslovechild](#)

Dr. McIntosh: Through work led by the Rahman Laborator at the University of Rochester, we learned that a popular e-cigarette brand had SIX times the level of Copper as a traditional cigarette!

What do you think the best way to quit smoking is?

[pornishhen](#)

Dr. McIntosh: Link up with the best available treatment (800-QUIT-NOW ; <http://www.smokefree.gov>), talk to your healthcare provider, and KEEP TRYING. The "best way" is different for everybody, but you can do it.

What's on your garbage plate?

[Corvax1266](#)

Dr. McIntosh: Ha! I haven't to Nick's yet, actually.

I currently live in Chile where smoking is very normal and many people smoke every chance they get. What can I do or what can we do to help the country as a whole realize how bad smoking is and begin to quit? The labels already have the gross photos of dead insides.

[hornuser](#)

Drs. Ossip and McIntosh: Many countries have the labels with gross photos, and that does have an effect (which can be most effective when the pictures are rotated with many variants and with new pictures - so people don't get too used to them). Packaging can be even more effective if there is a national "quitline" or other link to available resources. In the US, when the public became more aware of the effects of SECOND HAND SMOKE, it became easier to pass clean indoor air laws and other anti-tobacco laws. Also, it was a way for parents to realize the effects that their smoking has on their children.

How do i quit permanently?

[chubz4you](#)

Drs. McIntosh and Ossip: Congratulations on asking this - you can do it! It's often different for every person, but you can start by reviewing what has worked for you in the past to quit - even for a while - and why you went back to smoking. There are 7 FDA-approved "front-line" medications in the US that can help you quit permanently, and these can work best when combined with talking strategies (a quit coach at 800-QUIT-NOW [free], or your healthcare provider) - and online help (smokefree.gov in the US). Most importantly - don't give up until you succeed!

Hi, Dr. Ossip I was part of the research team with Dr. Quiñones, in Dominican República, we meet before. How are you :) ?

[Julsjd](#)

Dr. Ossip: Nice to hear from you. She is a terrific researcher! Good luck with your work.

Hi, Dr. Ossip I was part of the research team with Dr. Quiñones, in Dominican República, we meet before. How are you :) ?

[Julsjd](#)

Dr. McIntosh: Tell Z I said hello too! The Dominican Republic has been a trend setter in many ways for tobacco control!

Hi!

I'm a plant biotech grad student and casual cigarette smoker...

I know a few years ago, in collaboration with NC State and sponsored by Philip Morris, a smoking tobacco variety was edited to help dampen and reduce the levels of some of the most implicated compounds for causing cancer, NNN & TSNA.

Now I am still unsure why this never became available! What are your thoughts of using current gene technology to help recreate this project for the people who do care about their health, don't mind GMOs, and enjoy a casual cigarette on their porch with coffee in the early morning?

I would volunteer to do the research & transgenic work if we had a few thousand dollar donation!!!

[theskyisgreen](#)

Drs. McIntosh and Ossip: You might be what's called a "chipper" - someone who can occasionally smoke as you've described - without escalating your consumption. Only about 5% of regular tobacco users are chippers, so it's usually not considered a goal of treatment. We expect to see new products in the coming years, and the important considerations are whether they have been scientifically tested and regulatory decisions have been made about their safety.

I've smoked at least a pack a day for over 20 years. Every morning, after I work out, I run 2 miles. I thought that might "trick" my lungs into staying healthier. Am I just fooling myself?

[dorianblack](#)

Dr. McIntosh: You are staying healthier in some ways, so that's good, but remember that your body only needs to be EXPOSED to carcinogens and other toxins to be affected by smoking ("oxidative stress" and cancer, among other things).

I've been smoking for about three years now, however I first started smoking in social settings, and still do only smoke when I'm at a party or some other social function. I've also noticed that I never crave cigarettes in my day to day life, yet find it very difficult to avoid smoking when in a social setting. I have also never felt the need to turn to other tobacco products (e.g. snus, e-cigs) to satisfy any cravings.

My question to both/either of you is, what effect, psychological or otherwise, does the manner in which a person is introduced to smoking have on their dependency/relationship to tobacco?

[praise2ganesh](#)

Dr. Ossip: Absolutely and this is a great insight. In addition to the addictive aspects, there are very strong associations that develop between situations in which you usually smoke and cravings for a cigarette. About 5% of smokers can stay at this low level of social use only, but most will go on to a full addiction. So, this is a good time to practice strategies for NOT smoking in those social situations. Good luck!

I am leading an initiative at a University to go 100% tobacco free. What have you found are the best incentives to provide for both smokers and non-smokers to promote adherence to a new policy? We have a small grant available to us through the American Cancer Society and are hoping to use those funds for cessation programs and some incentives but I am open to hearing ideas that appeal to all members of the community- both smokers and nonsmokers. Thank you for all that you do!

[susanhashotpants](#)

Drs. Ossip & McIntosh: We published some of the "nuts and bolts" of this kind of an effort: <https://www.ncbi.nlm.nih.gov/pubmed/21298401>

Signage can do a lot of good. Having free nicotine replacement available is a good incentive for policy enforcers and can help send the message that "we are not anti-smoker, we are anti-smoking".

I quit successfully about six years ago, it helped to have a buddy I could call about it.

Now for my question. Is there any research (being done) about second hand smoke for either normal smoking or e-smoking?

How harmful is it?

[MrXian](#)

Dr. McIntosh: Yes, lots of research over many decades. Second hand smoke is considered a class / group "A" carcinogen. Second hand VAPOR is also being shown to be harmful - the flavors have toxins that can transfer to people by inhaling, touching, handling devices, etc.