Snus & Vapen – Zwischen Konvention, Trend und Risiko

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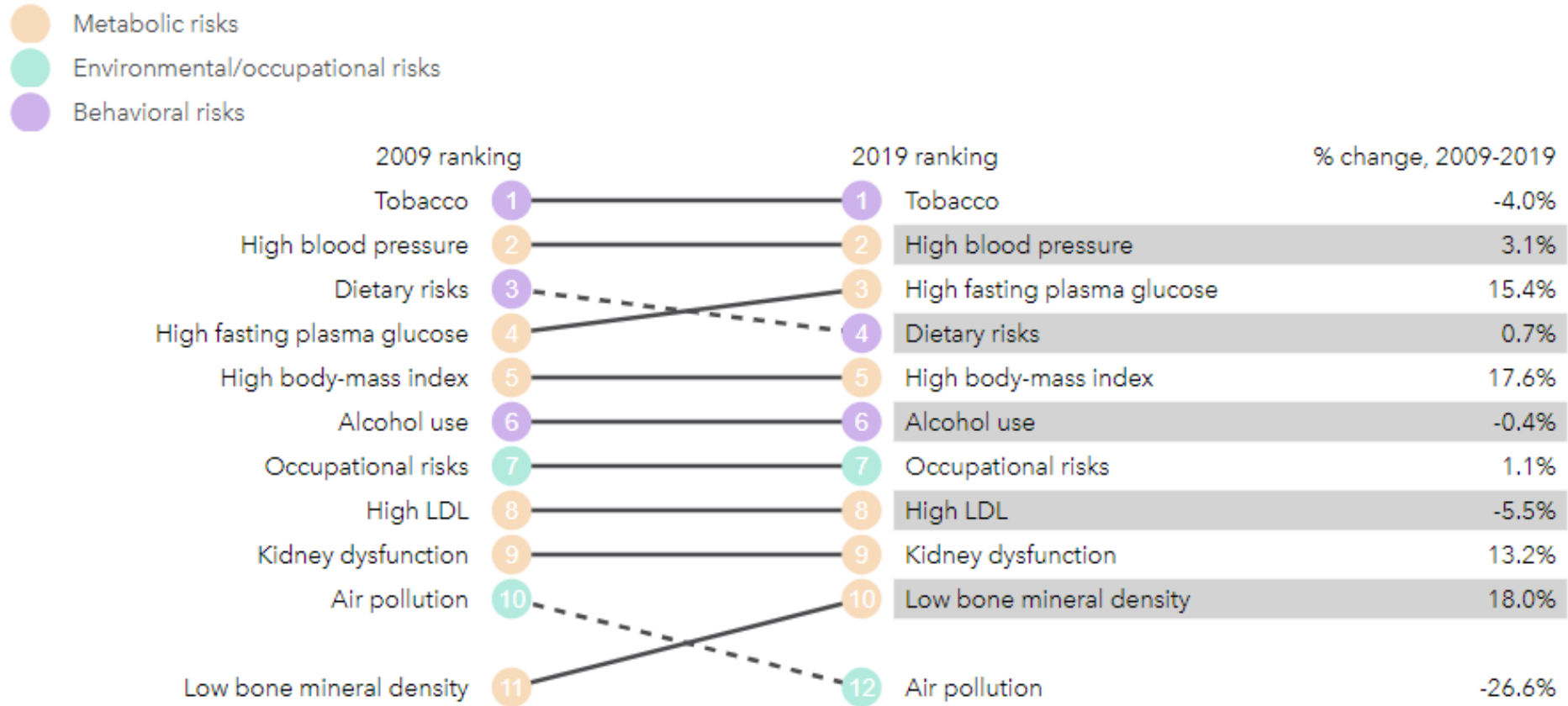
LUPS - 09.06.2026

Conflicts of Interest

Keine finanziellen Mittel oder Advisory Board Rolle für Tabak-, Pharma-, Cannabis-, oder Vaping-Industrie

What risk factors drive the most death and disability combined?



Top 10 risks contributing to total number of DALYs in 2019 and percent change 2009–2019, all ages combined

See related publication: https://doi.org/10.1016/S0140-6736(20)30752-2

http://www.healthdata.org/switzerland

Nikotin und Tabak Marktplatz Schweiz, 2026

Courtesy Prof. R. Auer, BIHAM

Cases

- « Eine ältere Patientin raucht seit langem und schafft es nicht, aufzuhören. Sie möchte nun eine **Vape** / e-Zigarette ausprobieren. Ist das eine gute Idee? »
- « Ein Jugendlicher, der nie geraucht hat, findet **Snus** cool. Er meint, das sei nicht so schädlich, und wir seien ja alle nach etwas süchtig. Stimmt das? »
- « Jemand behauptet, er sehe immer mehr Jugendliche, die vapen. Früher hätte man wenigstens noch richtigen, natürlichen Tabak geraucht. Das sei sicher wegen der aggressiven **Werbung** auf Instagram! »

www.menti.com code 2201 4139

Mentimeter

Replace this slide

Open Menti to edit

Tobacco smoking kills 5/10. How many die from these products?

- Tobacco smoking
- NRT chewing gum
- Vapes / e-cigarettes
- Heated tobacco
- Snus
- Nicotine pouches

0.0

0/10 10/10

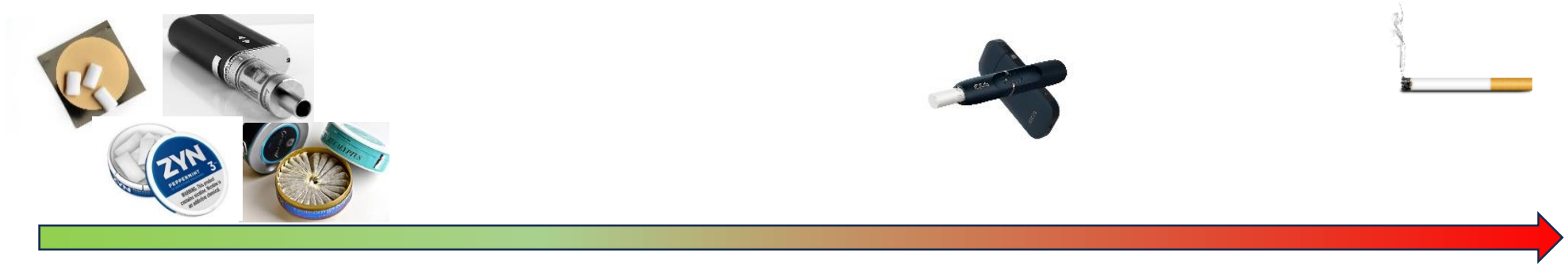
menti.com

2201 4139

0 of 1 responded

Gesundheitliche Risiken

100 Personen rauchen ihr ganzes Leben lang Zigaretten. Wir wissen, dass 50 von ihnen vorzeitig daran sterben werden. Wie viele mit weiteren Produkten?




40-60/100: Herkömmliche Zigaretten extrem toxisch. Enthalten Tabak, Tabakspezifische Nitrosamine, Teer, Kohlenstoffmonoxid und 600 weiter toxische Substanzen.


10-30/100: Tabakerhitzungsprodukte = ähnliche Substanzen, in geringerer Konzentration


1-10/100: E-Dampfer enthalten kein Tabak, also keine Tabakspezifische Nitrosamine. Enthalten aber weitere Krebserregende Stoffe.


1-10/100: Snus. Risiko Tabak an der Mundschleimhaut, nicht in der Lunge.

0-5/100: Pouches: Risiko Nikotin, möglicherweise minimales Risiko durch Additiva.


0-5/100: Nikotinersatztherapie: Risiko von Nikotin.

Courtesy Prof. R. Auer, BIHAM

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How effective are these products in helping smokers c

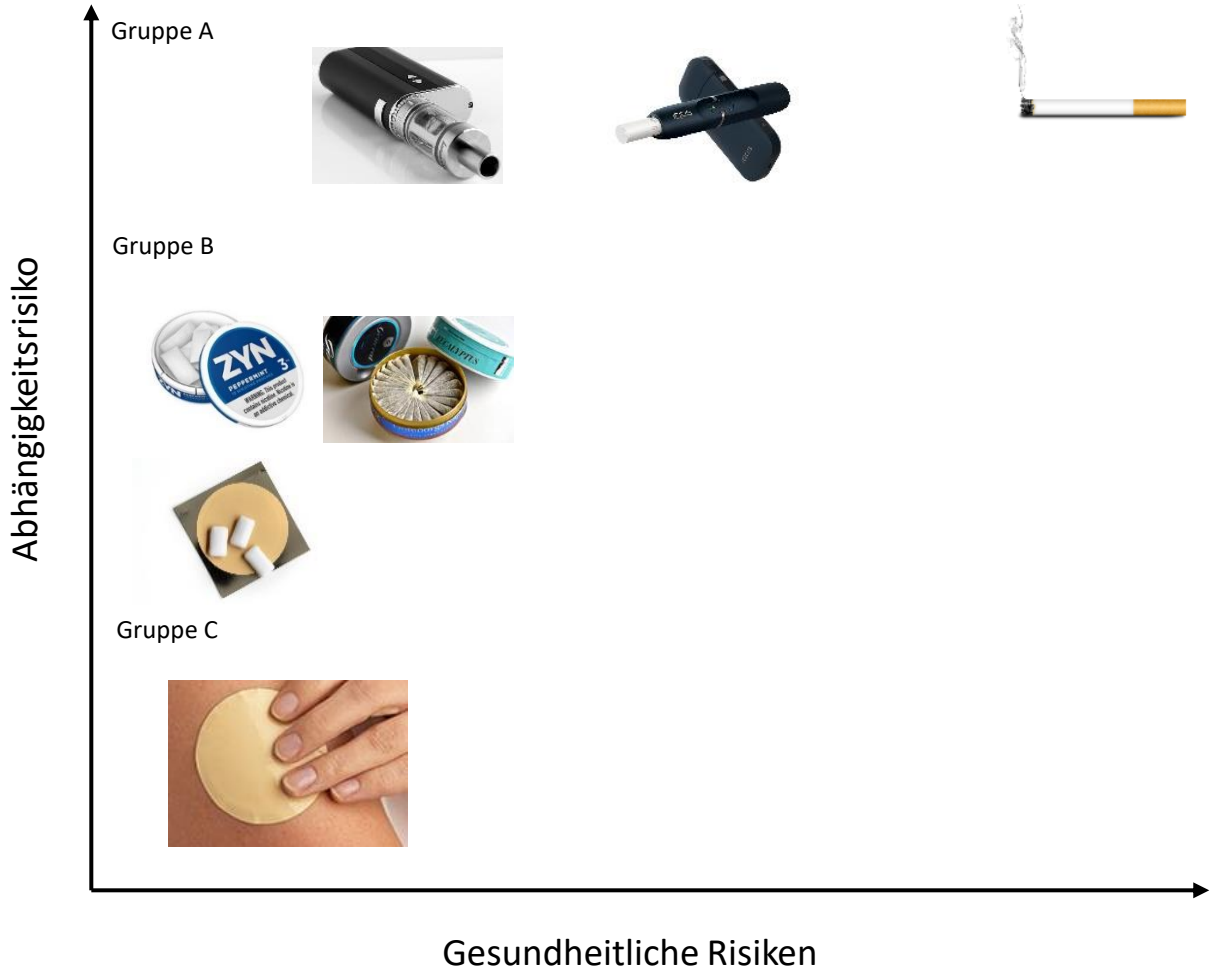
NRT chewing gum

Vapes / e-cigarettes

Snus / nicotine pouches

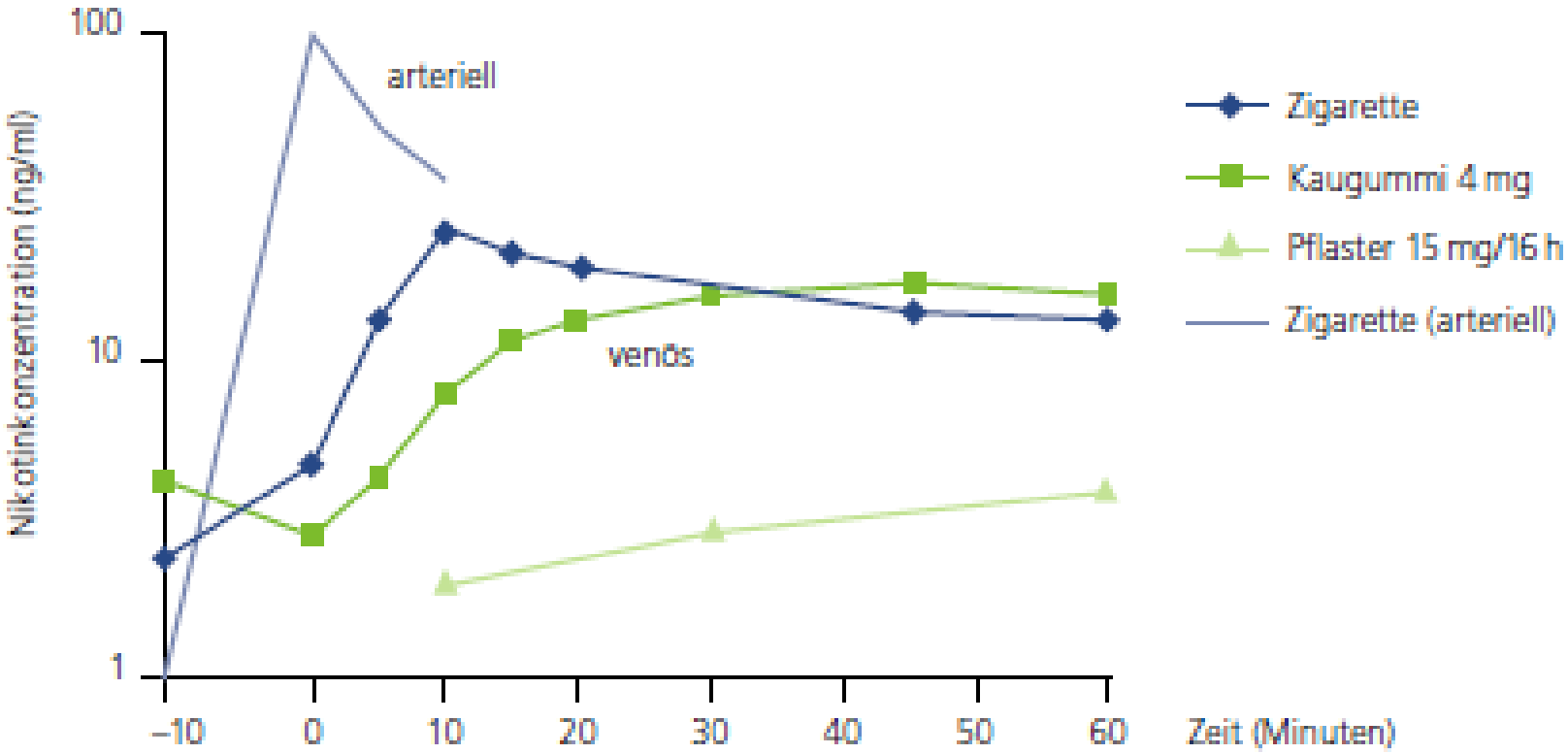
0 / 1

Gesundheitliche Risiken und Abhängigkeit



Courtesy Prof. R. Auer, BIHAM

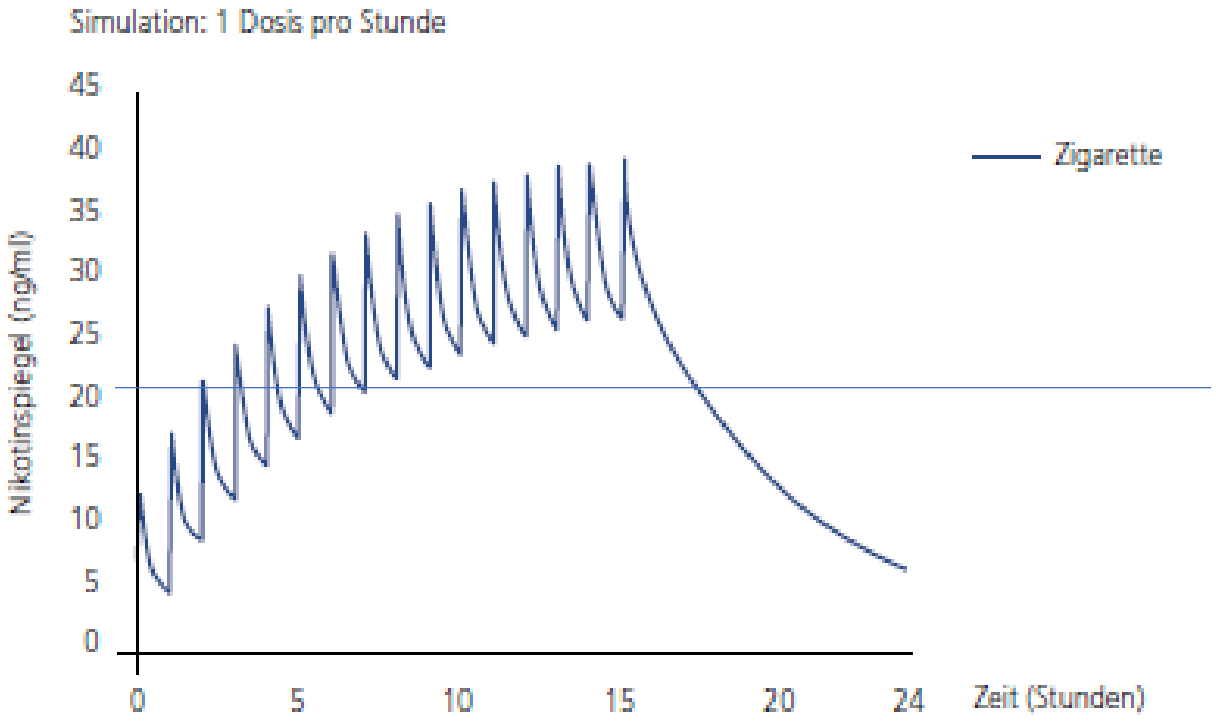
Entwicklung des Nikotinspiegels bei Rauchenden [88]



Tobacco and Nicotine

- 9’000 tobacco-associated deaths / year in Switzerland
- «People smoke for nicotine but they die from the tar“ - *M. Russell*

- Nicotine is an addictive stimulant
- Somatic health hazards:
  - Not listed as cancerogenous substance by the «International Agency for Research on Cancer» (IARC) - WHO
  - In study with Nicotine Replacement Therapy, no elevated risk of myocardial infarction
  - Acute effects on sympathetic nervous system: BP / HR. Atheroscleoris?



- Individueller Set-point für idealen Nikotinspiegel
  - Keine deutliche Tachyphylaxie
  - **Halbwertszeit im Blut: 1.6–2.8 Stunden**
  - Falls zu viel Nikotin - Pause in Einnahme
  - Falls zu wenig - Drang zu rauchen
  - Erste Zigarette meistens die beste (Nikotinspiegel am tiefsten)

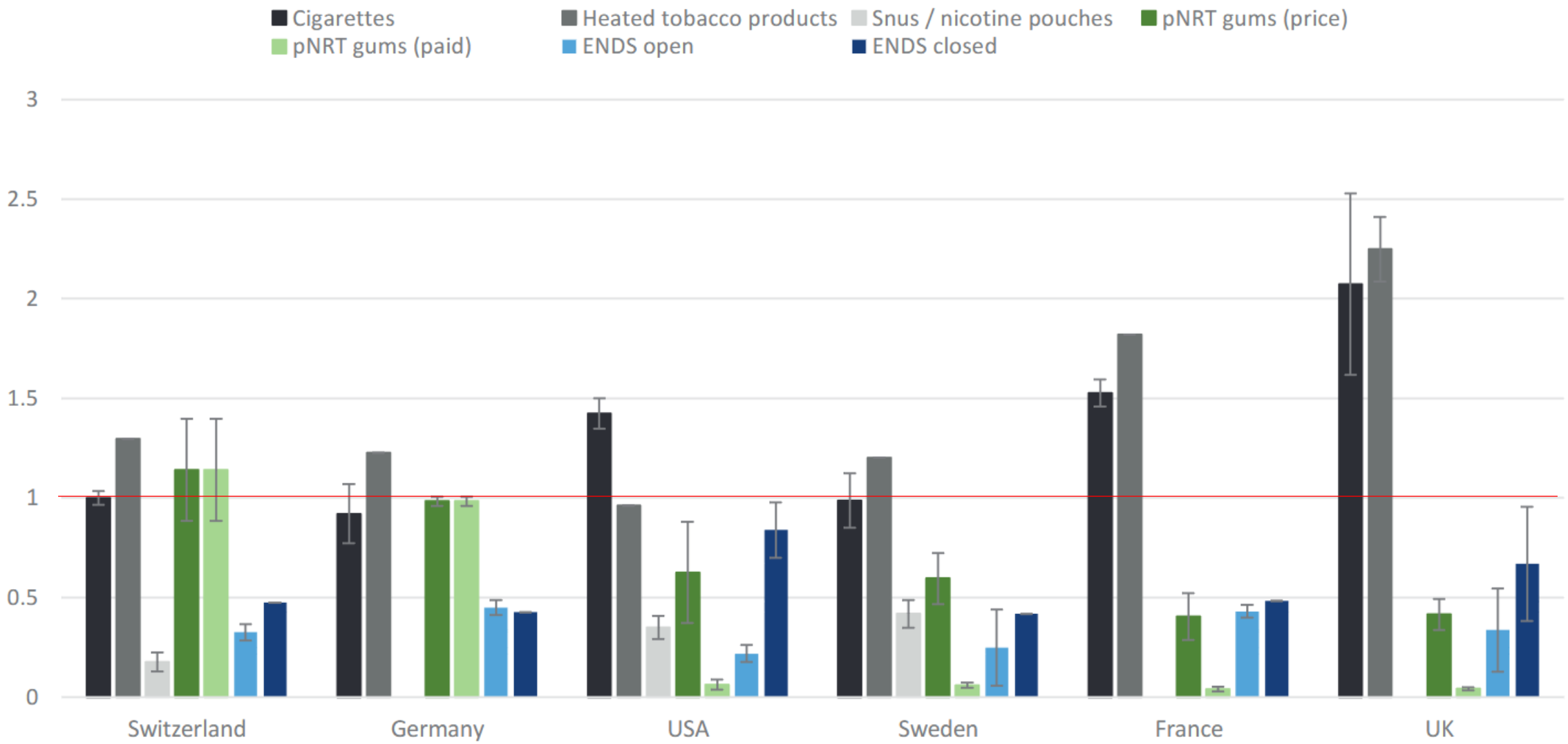
-> wenn mehr Nikotinersatztherapie benutzt wird, weniger Drang nach Zigaretten!

Smoking

- Nicotine
- Social habit and gesture
- Lifestyle
- Stress release?
- Price

Hate the smoke, love the smoker – Steve Schroeder

Relative price of tobacco-based and non-tobacco-based nicotine delivery systems in different countries in 2019 compared to a pack of tobacco cigarettes in Switzerland, adjusted for GDP per capita and bioavailability



Jakob et al. Tob Prev Cessat. 2022 Nov 25;8:42. doi: 10.18332/tpc/156052.

Case 1

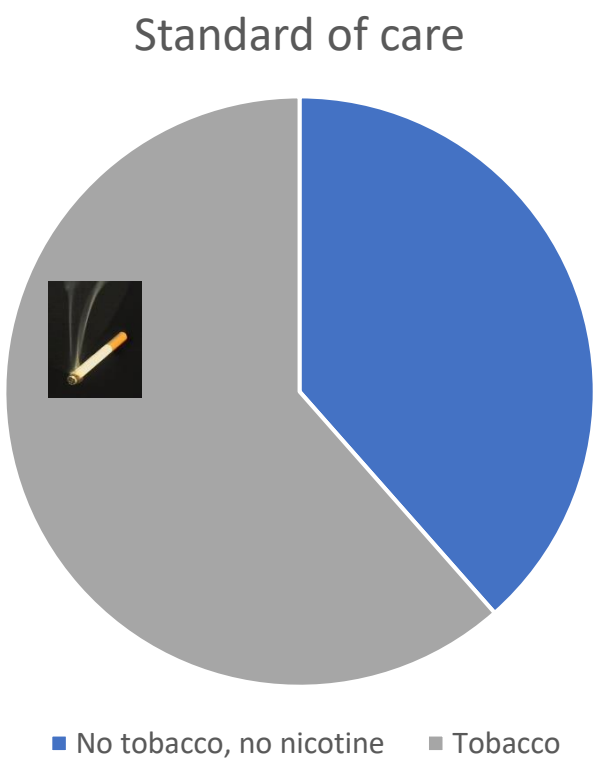
« Eine ältere Patientin raucht seit langem und **schafft es nicht**, **aufzuhören**. Sie möchte nun eine **Vape** / e-Zigarette ausprobieren. Ist das eine gute Idee? »

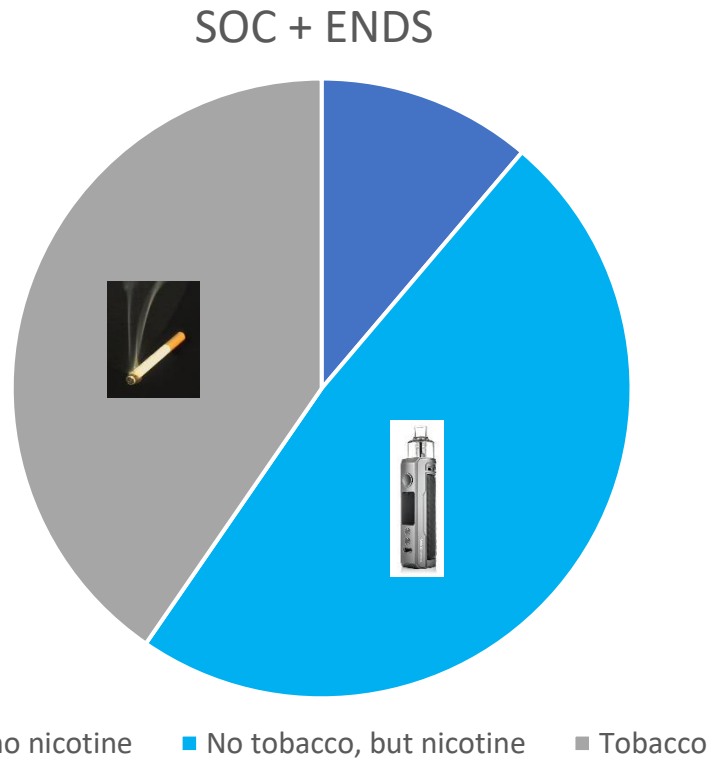
ESTxENDS: efficacy

Exposure at 6-months
(7-days PP)

Follow-up rates:

- 91% (1130/1243) based on self-report
- 62% (767/1243) for validated outcome





	Control N=504	Intervention N=552	Difference
	%	%	%
No tobacco cigarettes	**38.5**	**59.6**	**+21.1**
No ENDS and no tobacco cigarettes (quitters)	35.5	11.2	-24.3

Results: safety

- **Validated serious adverse events (SAE)**
  - 26 SAE in 25 (4.0 %) participants in the intervention group
  - 34 SAE in 31 (5.0%) participants in the control group

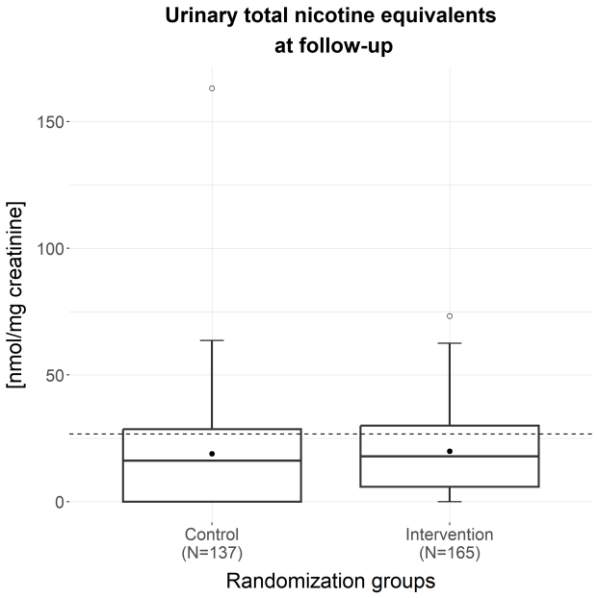
    → **RR 0.81; 95%CI: 0.48 to 1.36**
- **Validated adverse events (AE)**
  - 272 (43.9%) participants reported 425 AE in the intervention group
  - 229 (36.7%) participants reported 366 AE in the control group

    → **RR: 1.19; 95%CI: 1.04 to 1.37**

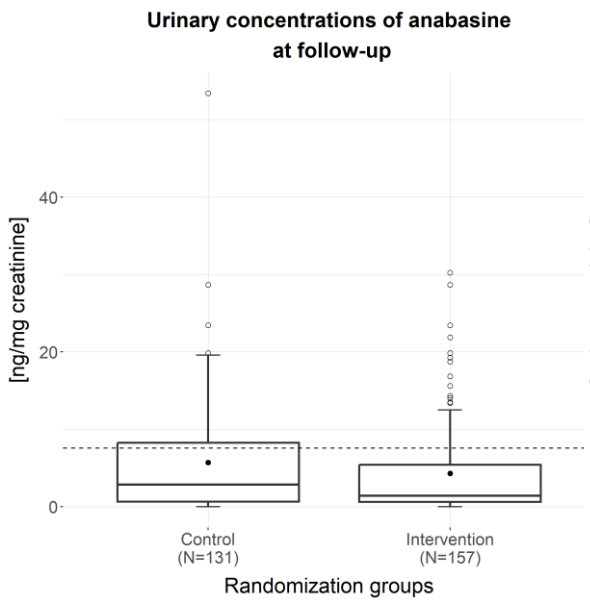
Results: toxicology

Toxicological analyses of urinary biomarkers in 306 participants at baseline and 6-month follow-up visit.

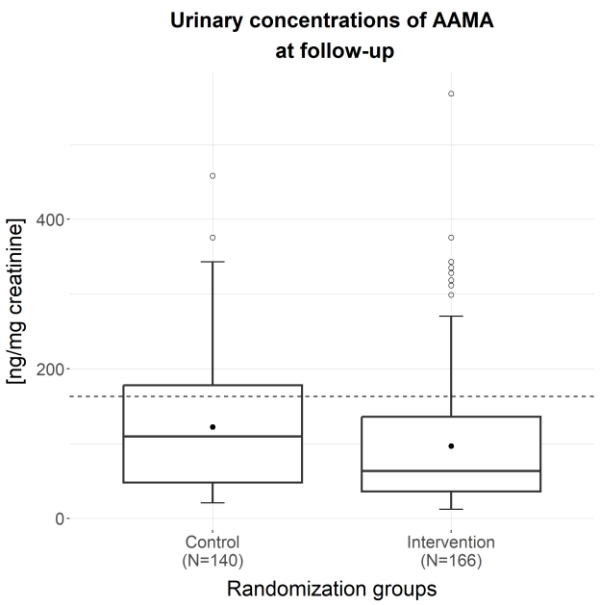
Nicotine metabolites



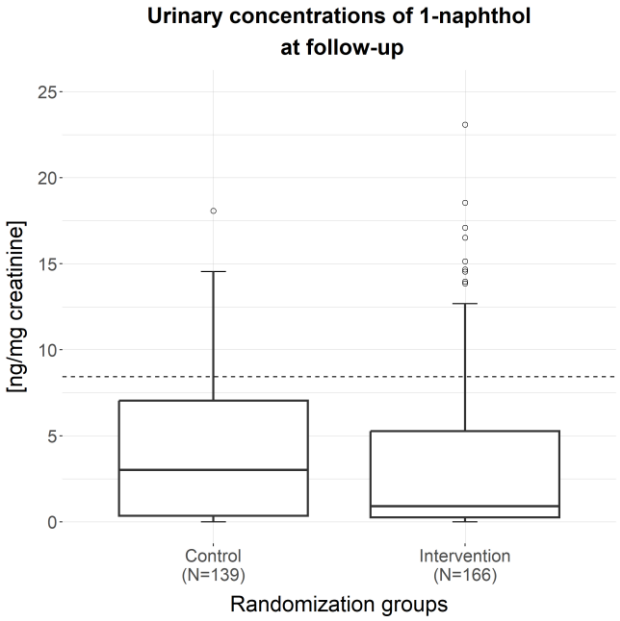
Anabasine



Volatile organic compound (VOC) metabolites



Polycyclic aromatic hydrocarbon (PAH) metabolites



Berthet et al. Manuscript in preparation.

Conclusion

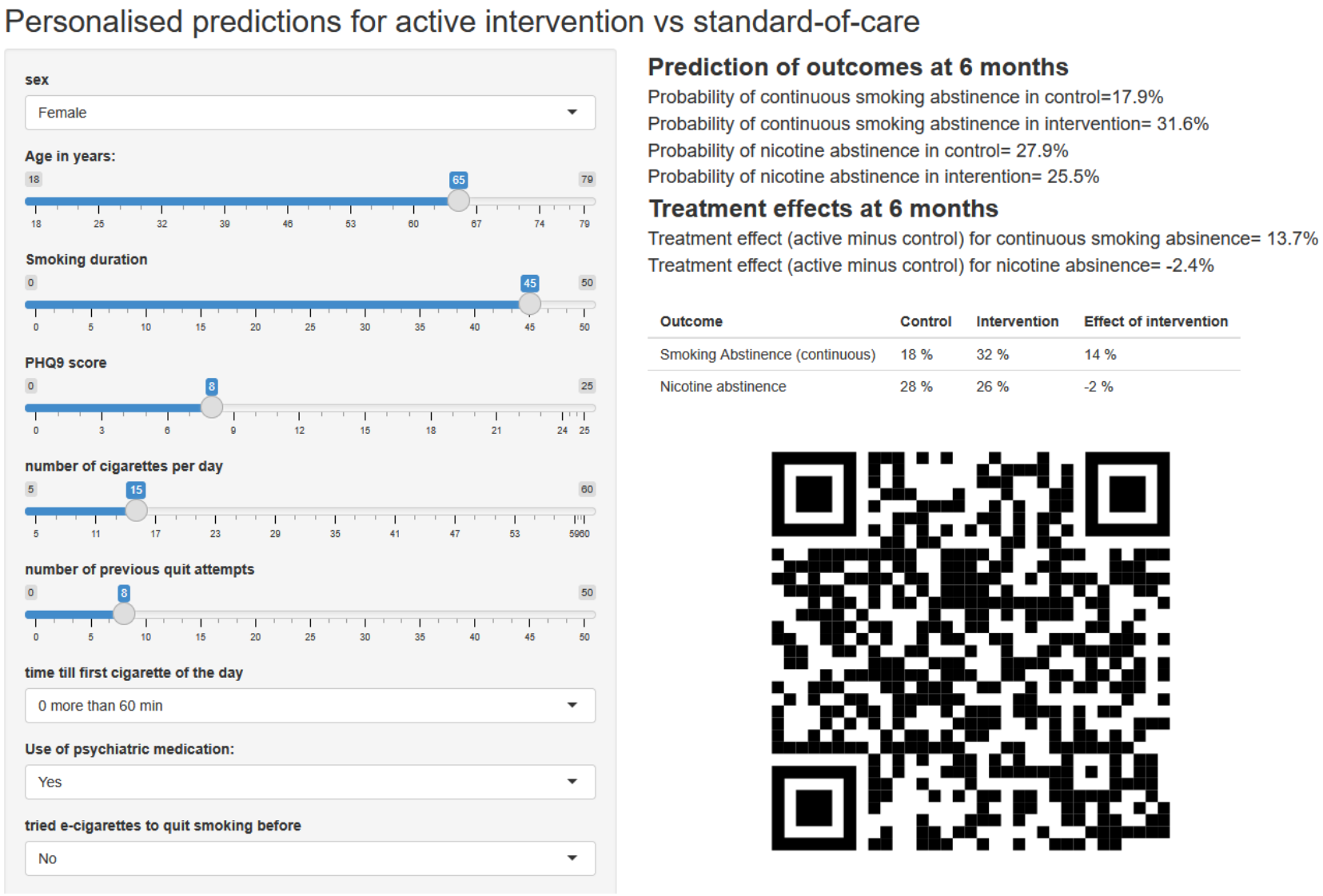
The addition of free ENDS to standard counselling resulted in **greater abstinence from tobacco** among smokers than standard counselling, but many of those who abstained from smoking tobacco **continued using ENDS**.

The intervention resulted in more adverse events but not more serious adverse events, higher exposure to nicotine, and lower exposure to anabasine, VOCs and PAHs.

Significance

ENDS plus standard counselling may be a viable option for tobacco smokers who want to **abstain from smoking without necessarily abstaining from nicotine** but may be less appropriate for those who want to abstain from both tobacco and nicotine.

Tabakabstinenz vs Nikotinabstinenz



Draft personalized prediction score on Tobacco and Nicotine abstinence with and without intervention

Nicotine EC compared to NRT for smoking cessation

Patient or population: people who smoke cigarettes, aged 18 or older
Setting: various settings in New Zealand, UK, USA
Intervention: nicotine EC
Comparison: NRT

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	№ of participants (studies)	Certainty of the evidence (GRADE)	Comments
	Events with NRT	Events with Nicotine EC				
Smoking cessation at 6 months to 1 year Assessed with biochemical validation	Study population 6 per 100	10 per 100 (8 to 12)	RR 1.59 (1.30 to 1.93)	2544 (7 RCTs)	⊕⊕⊕⊕ HIGH	-
Adverse events at 4 weeks to 6 to 9 months Assessed by self-report	Study population 23 per 100	24 per 100 (21 to 27)	RR 1.03 (0.91 to 1.17)	2052 (5 RCTs)	⊕⊕⊕⊖ MODERATE[a]	-
Serious adverse events at 4 weeks to 1 year Assessed via self-report and medical records	Study population 4 per 100	5 per 100 (4 to 6)	RR 1.20 (0.90 to 1.60)	2761 (6 RCTs)	⊕⊕⊖⊖ LOW[b]	2 studies reported no events; effect estimate based on the 4 studies in which events were reported

Rauchstopp / Arrêt du tabac

Choix d'une méthode d'aide à l'arrêt du tabac

	SANS MÉDICAMENTS			THÉRAPIE MÉDICAMENTEUSE			NOUVEAUX PRODUITS À BASE DE NICOTINE	
Produit	Thérapie cognitivo-comportemcentale	Entretien motivationnel	Arrêter de fumer sans aide Réduction des cigarettes	Varénicline Champix®	Bupropion® Zyban® *uniquement sur ordonnance médicale*	Cytisin® Tabex®, Desmoxan® *Uniquement sur ordonnance médicale*	Vaporisateurs avec nicotine / Vaporette Plusieurs marques	Nicotine Pouches Plusieurs marques
								
				Liste B+	Liste A	Pas disponible en CH	Magasins spécialisés	Magasins spécialisés
Utilisation/ Administration	Consultation	Consultation	Initiative individuelle	Comprimés	Comprimés	Capsules / Comprimés	Vaporisateur	Nicotine Pouches
Concentrations disponibles	-	-	-	0.5 mg / 1 mg	150 mg	1.5 mg	Différentes concentrations	Différentes concentrations
Posologie	-	-	-	2x / jour	2x / jour	6x / jour, puis 2x / jour	Selon besoin	Selon besoin
Avantage pour les utilisateur.rice.s	• Pas de traitement médicamenteux • Apprendre des stratégies pour faire face à l'envie de fumer • Renforcer la confiance en sa propre capacité d'abstinence	• Pas de traitement médicamenteux • Changement de comportement grâce à ses propres arguments/ motivations	• Pas de traitement médicamenteux • Pas de consultation • Différentes méthodes : arrêter de fumer d'un seul coup ou méthode progressive	• Arrêter de fumer en toute discrétion • Prise en charge par l'assurance de base sous certaines conditions	• Arrêter de fumer en toute discrétion • Prise en charge par l'assurance de base sous certaines conditions	• Arrêter de fumer en toute discrétion • Peut être utilisé lorsque d'autres méthodes n'ont pas été efficaces	• Simulation du rituel «Main-bouche» • Peut être utilisé lorsque d'autres méthodes n'ont pas été efficaces	• Produit sans tabac • Disponible en différents goûts
Effets indésirables / Inconvénients	• Temps consacré à la consultation	• Temps consacré à la consultation	• Irritabilité, colère, nervosité • Fatigue • Anxiété • Mauvaise humeur • «Craving» (Forte envie de tabac)	• Nausées • Troubles du sommeil • Changements d'humeur • Cauchemars	• Troubles du sommeil • Bouche sèche • Maux de tête • Troubles de l'humeur • Troubles digestifs	• Maux de tête • Nausées • Troubles du sommeil • Troubles gastro-intestinaux	• Irritation de la bouche et de la gorge • Exposition à des substances nocives • Toux	• Hoquet • Nausées • Risque de dépendance
Efficacité	++	(+)	(+)	+++	++	++	+++(+)	++
Dépendance	-	-	-	-	-	-	+++	++
Prix par emballage	individuel selon tarif / nombre de consultations	individuel selon tarif / nombre de consultations	Gratuit	~ 100.– CHF 56 comprimés de 1 mg	~ 55.– CHF 30 comprimés de 150 mg	~ 90.– CHF 100 comprimés de 1.5 mg	~ 20 / 70.– CHF Kit de démarrage	~ 7.– CHF 1 boîte à 21 sachets
Prix par jour (par rapport à un paquet de cigarettes*)	individuel selon tarif / nombre de consultations	individuel selon taruf / nombre de consultations	Gratuit	~ 4.– CHF par jour	~ 4.–CHF par jour	~ 4.– CHF par jour	~ 2-3.– CHF par jour	~ 2-3.– CHF par jour

Version 3.2_F / Septembre 2023

* Prix de référence d'un paquet de cigarettes 8.80 CHF

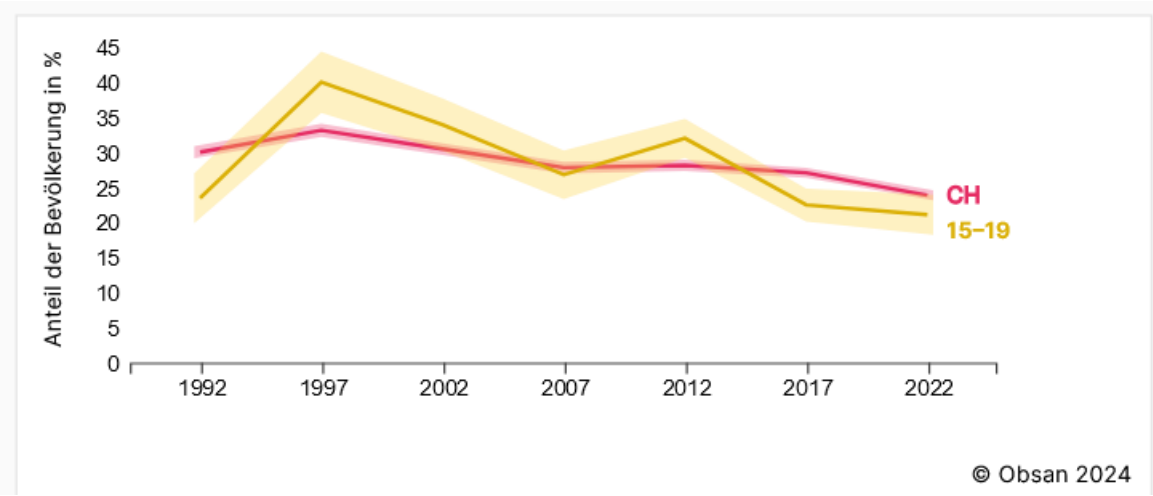
2

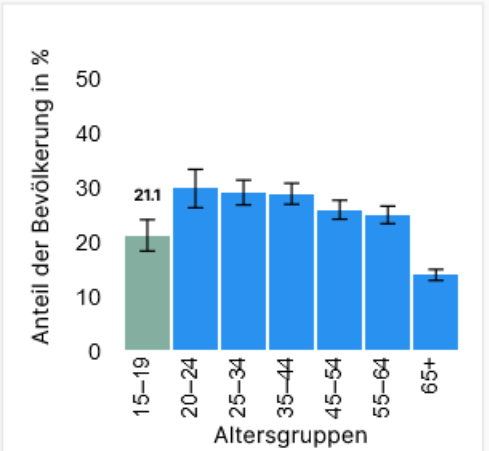
Masterarbeit «*Participatory development of smoking cessation counselling tools for pharmacists in primary care*» von A. Quach, Universität Bern, CH

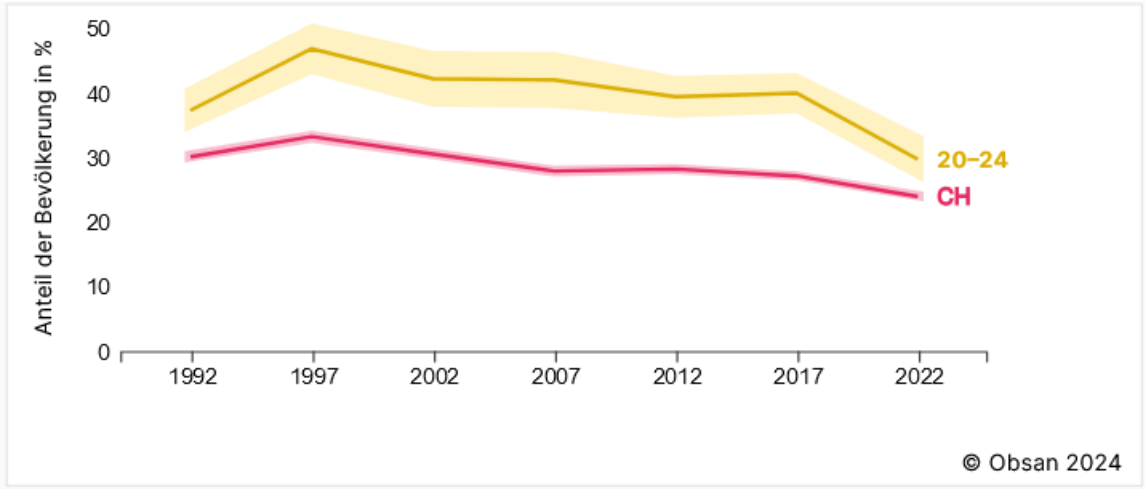
Case 2

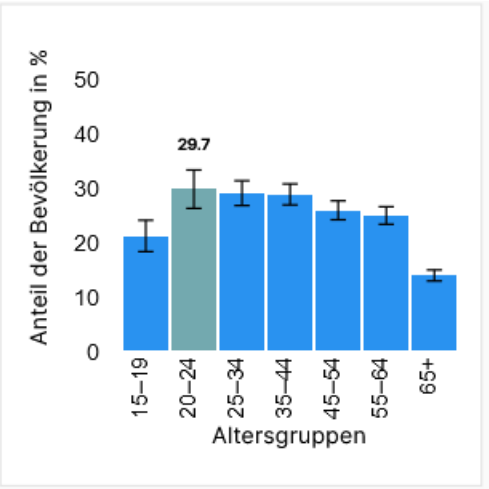
« Ein **Jugendlicher**, der nie geraucht hat, findet **Snus** cool. Er meint, das sei nicht so schädlich, und wir seien ja alle nach etwas süchtig. Stimmt das? »

Zigarettenrauchen (täglich + gelegentlich)

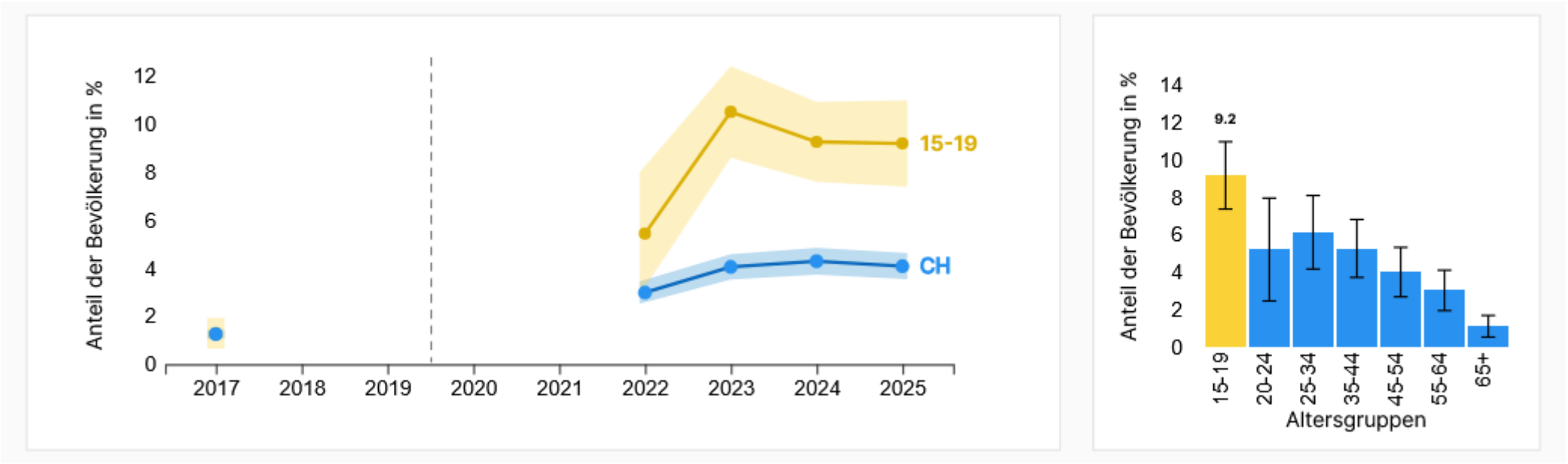






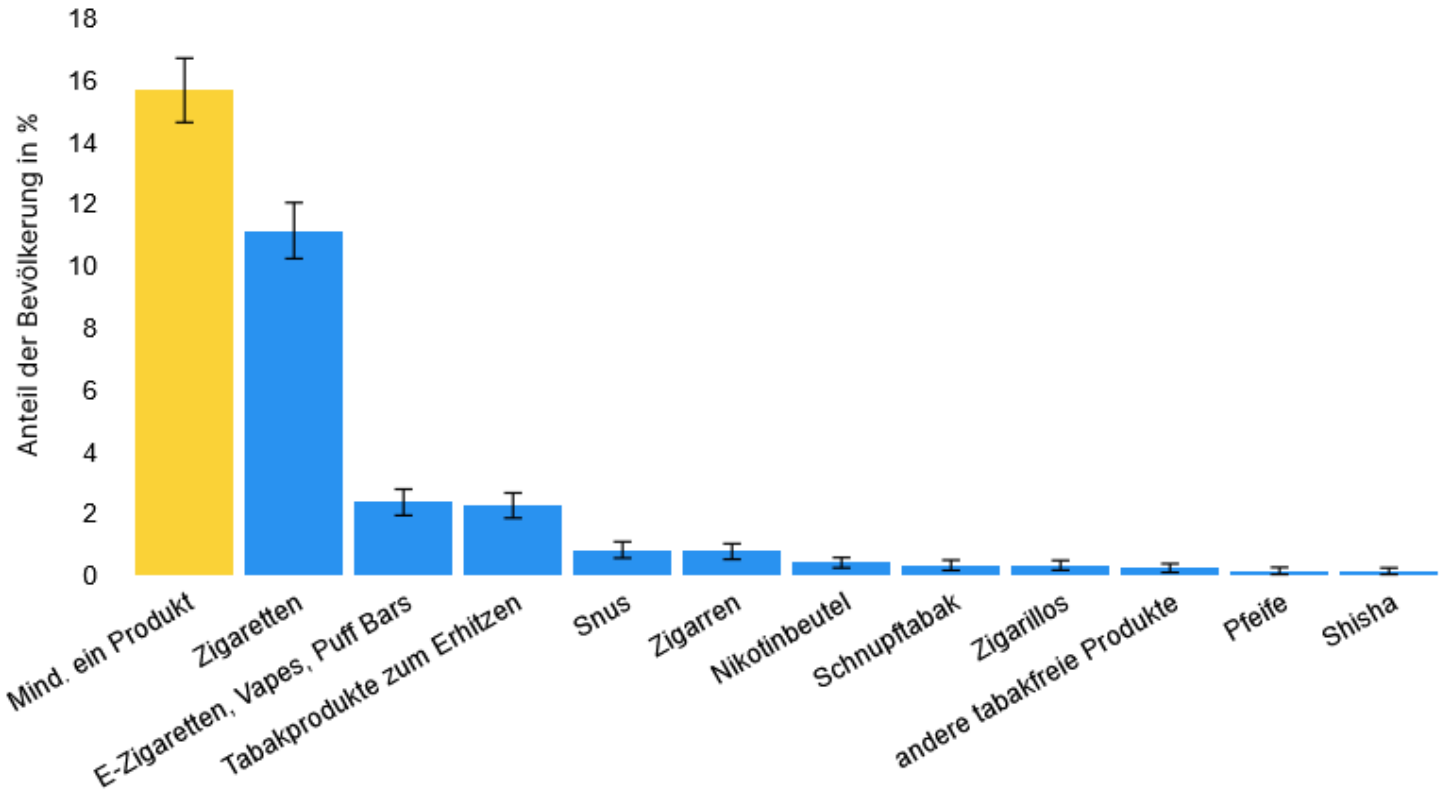


Vaping (monatlich)



MONAM 2024:
Schweizerische Gesundheitsbefragung 2017
Gesundheit und Lifestyle ab 2022

MonAM 2025

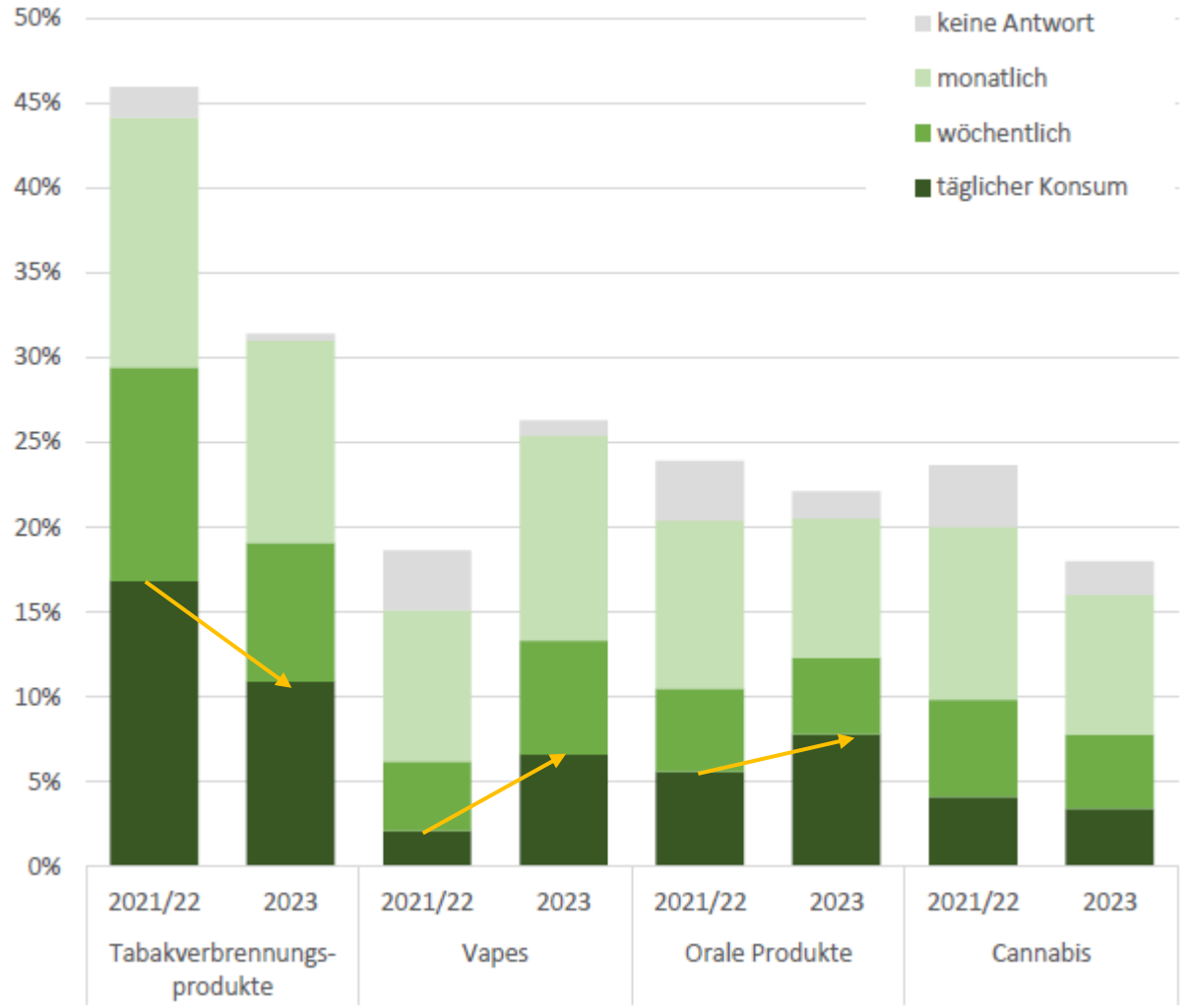

Anteil der Bevölkerung in %
18
16
14
12
10
8
6
4
2
0
Mind. ein Produkt
Zigaretten
E-Zigaretten, Vapes, Puff Bars
Tabakprodukte zum Erhitzen
Snus
Zigarren
Nikotinbeutel
Schnupftabak
Zigarillos
andere tabakfreie Produkte
Pfeife
Shisha

Oral tobacco: Gesundheit & Lifestyle (BAG) 2023

Sexe	Consommation totale			Consommation mensuelle			Chaque jour		
	N	% Pop.	[95% CI]	N	% Pop.	[95% CI]	N	% Pop.	[95% CI]
Total	384	**5.4**	[4.8,6.0]	224	**3.1**	[2.6,3.5]	107	1.6	[1.2,1.9]
Hommes	271	**8.3**	[7.2,9.3]	174	**4.9**	[4.1,5.7]	88	2.6	[2.0,3.3]
Femmes	113	**2.6**	[2.0,3.2]	50	**1.3**	[0.9,1.7]	19	(0.6)	[0.3,0.9]

Âge	Consommation totale			Consommation mensuelle			Oui, chaque jour		
	N	% Pop.	[95% CI]	N	% Pop.	[95% CI]	N	% Pop.	[95% CI]
Total	384	**5.4**	[4.8,6.0]	224	**3.1**	[2.6,3.5]	107	1.6	[1.2,1.9]
15-17	*80*	***10.7***	*[8.4,13.0]*	*45*	***5.8***	*[4.1,7.5]*	*17*	*(2.0)*	*[1.0,3.0]*
18-24	*138*	***17.7***	*[14.4,21.1]*	*92*	***11.7***	*[8.9,14.4]*	*46*	*6.2*	*[4.1,8.4]*
15-24	218	**15.7**	[13.2,18.2]	137	**10**	[7.9,12.0]	63	5	[3.5,6.6]
25-34	71	**10.5**	[8.1,12.8]	41	**6.1**	[4.2,7.9]	24	(3.6)	[2.2,5.0]
35-44	35	**4.5**	[3.0,6.0]	16	**(2.0)**	[1.0,3.0]	8	.	
45-54	36	**4**	[2.7,5.3]	19	**(2.2)**	[1.2,3.2]	10	(1.3)	[0.5,2.1]
55-64	15	**(1.8)**	[0.9,2.7]	7	.		1	.	
65-74	9	.		4	.		1	.	
75+	.	.		.	.		.	.	

Daten Lungenliga: 10’000 SuS

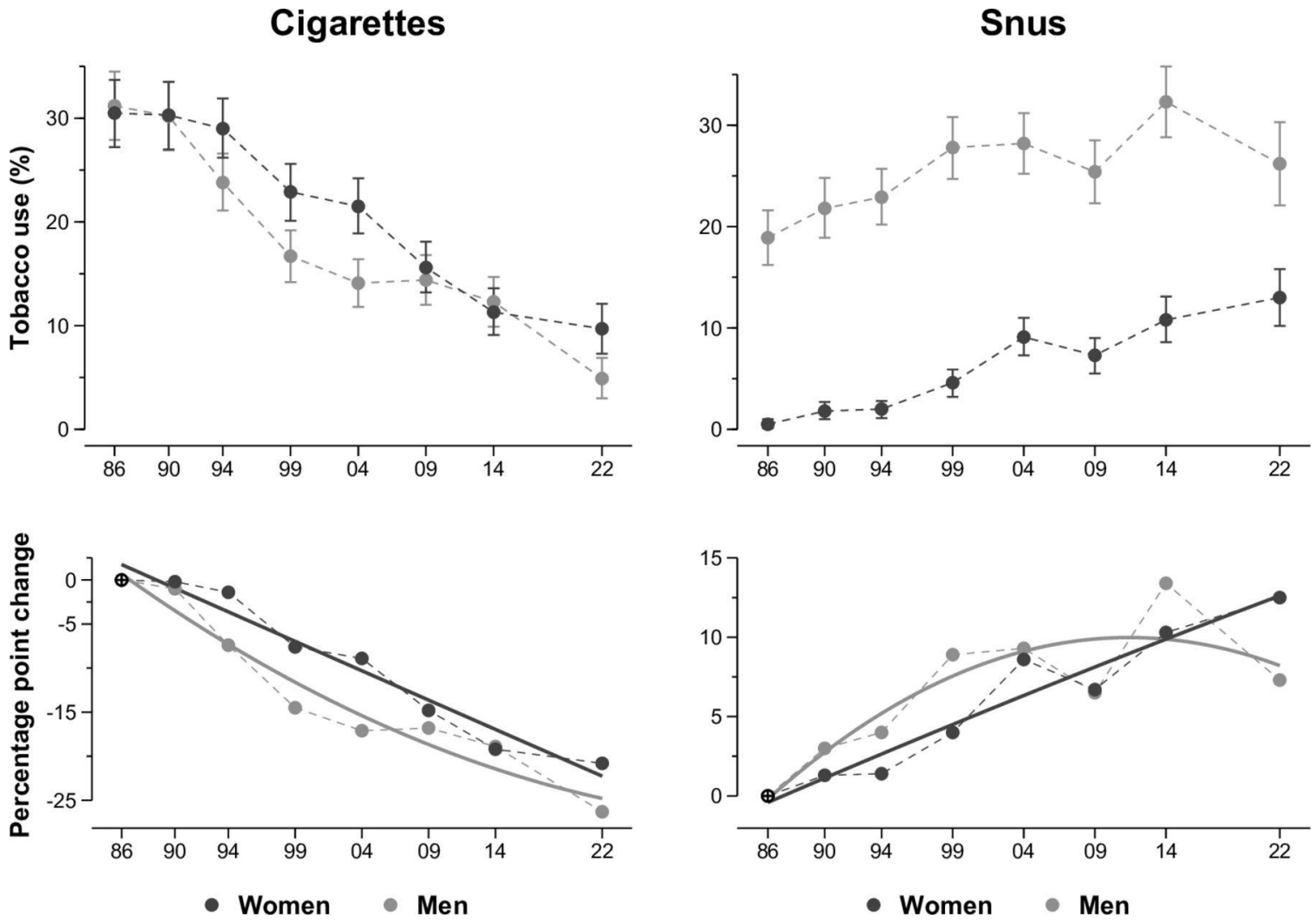


Lungenliga Aargau, 2024

Inhalt

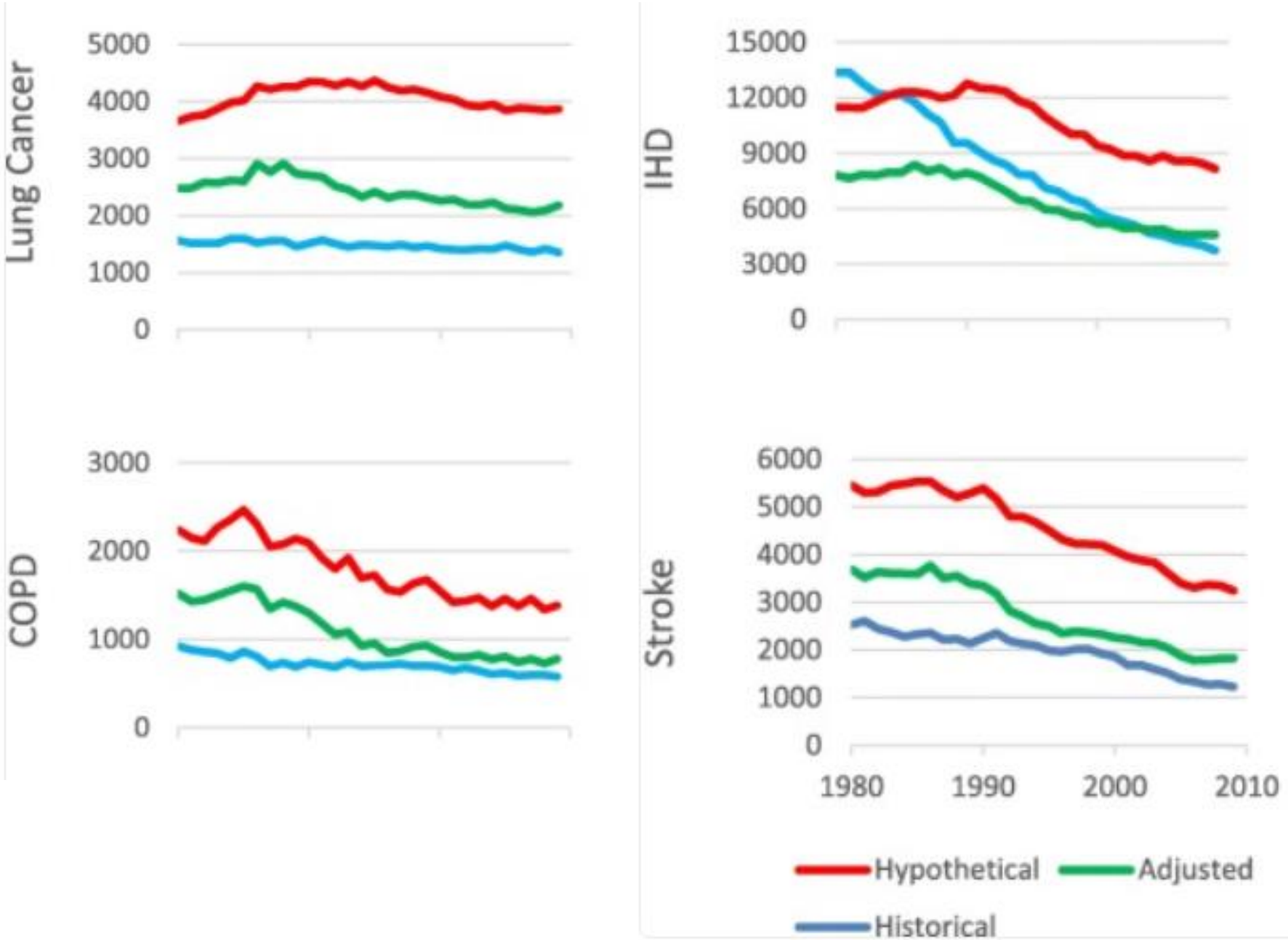
- Pasteurisierter Tabak (fein gemahlen)
- Wasser und Salz (Geschmack, Konservierung)
- Alkalisator (Nikotinaufnahme – “punch”)
- Aromen
- Glycerin (Feuchthaltemittel)

Snus in Schweden



Sjödin et al 2024, BMJ Open, PMID: 39806602

Snus



Djurdjevic et al 2019, PMID: [31664971]

Snus – Modified Risk Tobacco Product

Applicant	Swedish Match U.S.A. Inc.
Product manufacturer	Swedish Match U.S.A. Inc.
Application type	Renewal
Order Under 911(g)	☒ Risk Modification 911(g)(1) order ☐ Exposure Modification 911(g)(2) order
Product category	Smokeless Tobacco Products
Product subcategory	Loose Snus (MR0000256.PD1), Portioned Snus (MR0000256.PD2-MR0000256.PD5, MR0000256.PD7-MR0000256.PD9)
Modified Risk Claims	Using General Snus instead of cigarettes puts you at a lower risk of mouth cancer, heart disease, lung cancer, stroke, emphysema, and chronic bronchitis.

FDA U.S. FOOD & DRUG ADMINISTRATION

Rauchstopp? Metaanalyse!

- RCTs (N=5) und Kohorten (N=7) : RR=1.33, 95% CI 0.71 to 2.47
- Kohorten RR=1.38, 95% CI 1.05 to 1.82, p=0.022
- «There is weak evidence for the use of snus for smoking cessation.»

Stjepanovic et al 2023, Tob Control, PMID: 35197366

Rauchstart?
Gesundheit & Lifestyle (BAG) 2023

Statut cigarettes	Consommation totale			Consommation mensuelle			Oui, chaque jour		
	N	% Pop.	[95% CI]	N	% Pop.	[95% CI]	N	% Pop.	[95% CI]
Total	384	**5.4**	[4.8,6.0]	224	**3.1**	[2.6,3.5]	107	1.6	[1.2,1.9]
Fumeurs (cig.)	133	**9.1**	[7.3,10.9]	77	**5.1**	[3.8,6.5]	36	2.4	[1.5,3.4]
Ex-fumeurs (cig.)	39	**4.2**	[2.8,5.6]	26	**(2.9)**	[1.7,4.1]	17	(2.0)	[1.0,3.1]
Jamais fumé	212	**4.7**	[4.0,5.4]	121	**2.6**	[2.0,3.1]	54	1.2	[0.8,1.6]

Nicotine pouches

- Kein Tabak
- Wasser, Zellulose, Salz, Guarkenmehl, Xylitol, Geliermittel, Nikotin, Säureregulator, Aroma, Acesulfam K→ Weniger Toxine

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	№ of participants (studies)	Certainty of the evidence (GRADE)	Comments
	Risk with minimal control (advice to continue smoking as usual)	Risk with oral nicotine pouches				
Smoking abstinence assessed with: Biochemical validation follow-up: mean 8 weeks	11 per 1000	**18 per 1000** (1 to 392)	**RR 1.58** (0.07 to 35.32)	27 (1 RCT)	⊕⊖⊖⊖ Very low[a,b]	
Serious adverse events (SAEs) assessed with: Self-report follow-up: range 1 weeks to 8 weeks	Not pooled	Not pooled	Not pooled	124 (2 RCTs)	⊕⊖⊖⊖ Very low[c,d]	0 participants across the 2 studies contributing data (total n = 124) reported any SAEs
NNAL follow-up: mean 1 weeks	The mean NNAL was **330** ng/g creatinine	MD **265.3 ng/g creatinine lower** (350.64 lower to 179.95 lower)	-	53 (1 RCT)	⊕⊖⊖⊖ Very low[a,e]	RR for 1 study: −265.30 ng/g creatinine, 95% CI −350.64 to −179.96
Carboxyhaemoglobin (COHb) assessed with: % saturation (blood) follow-up: mean 1 weeks	The mean Carboxyhaemoglobin was **11.3** %	MD **6.7 % lower** (8.33 lower to 5.07 lower)	-	53 (1 RCT)	⊕⊖⊖⊖ Very low[a,e]	RR for 1 study −6.70%, MD −8.33 to −5.07

Hartmann-Boyce et al 2025, Cochrane

Nicotine pouches

- = NRT? Grössere RCTs benötigt!
- Tabakindustrie statt Pharmaindustrie
- Rauchstopp vs Nikotinstart → Regulation

FDA Authorizes Marketing of 20 ZYN Nicotine Pouch Products after Extensive Scientific Review

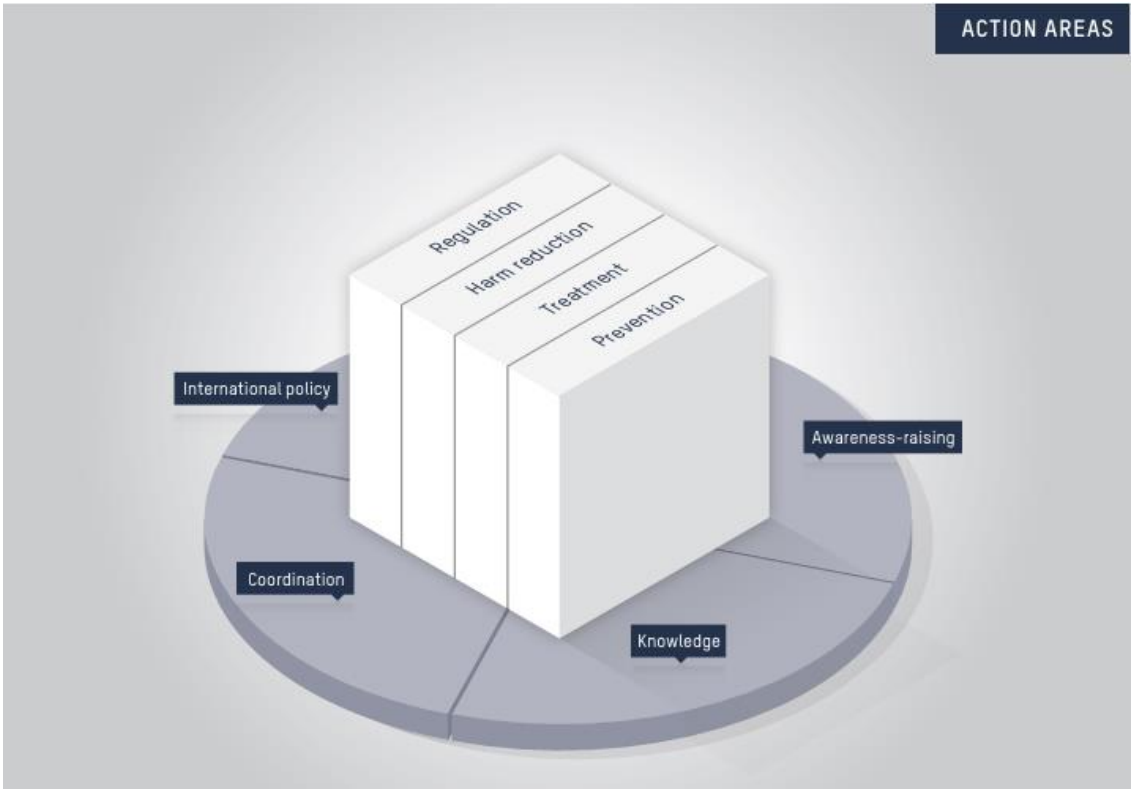
Agency Will Closely Monitor Youth Use and Company's Compliance with Marketing Restrictions

America's No. 1 Now Extra Strong", (Zyn Ad. 2023)

Harm reduction & regulation

- WHO Framework Convention on Tobacco Control (FCTC):

  Article 1, d: “tobacco control” means a range of **supply**, **demand** and **harm reduction strategies** that aim to improve the health of a population by **eliminating or reducing** their consumption of tobacco products and exposure to tobacco smoke.



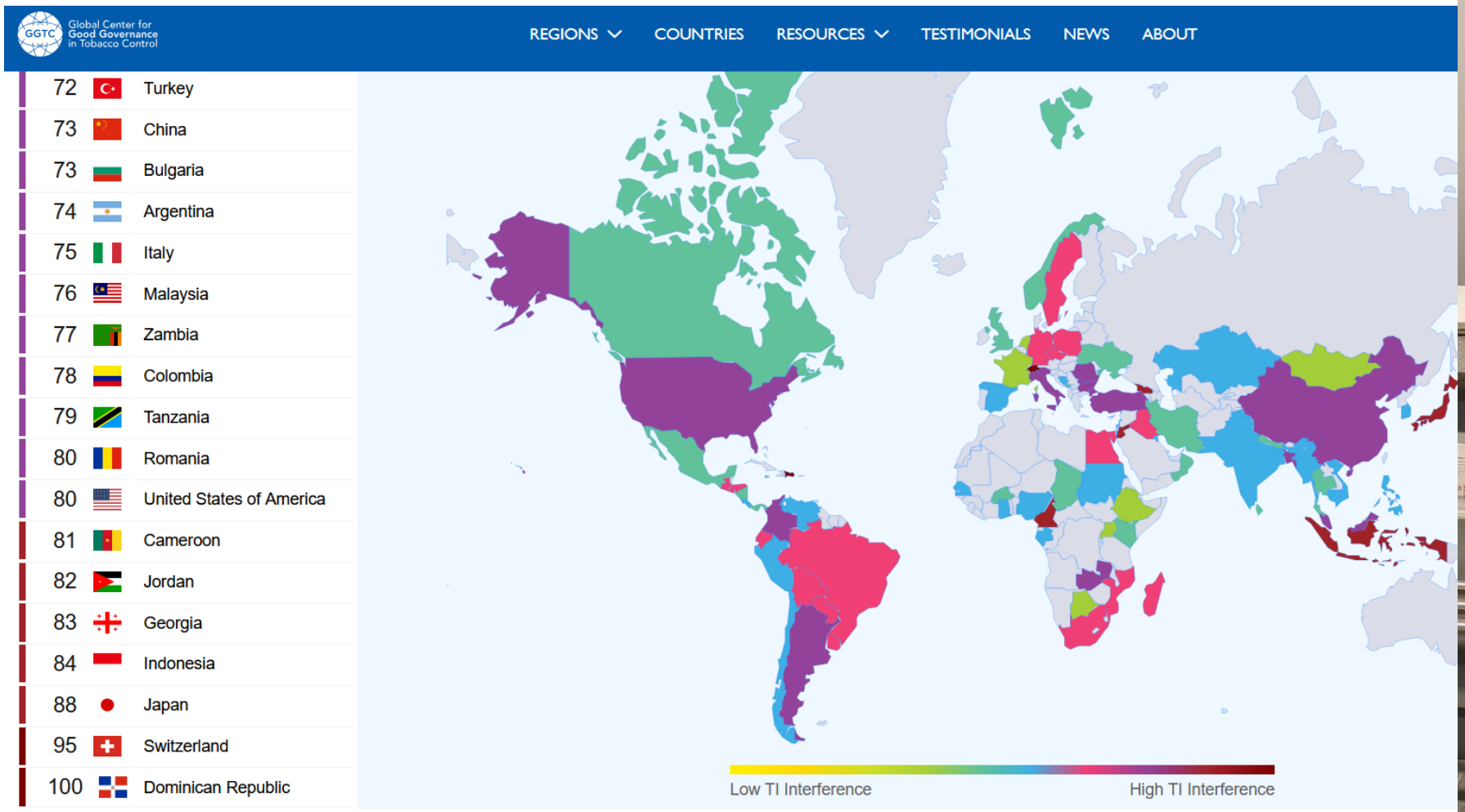
National Strategy on Addiction, CH

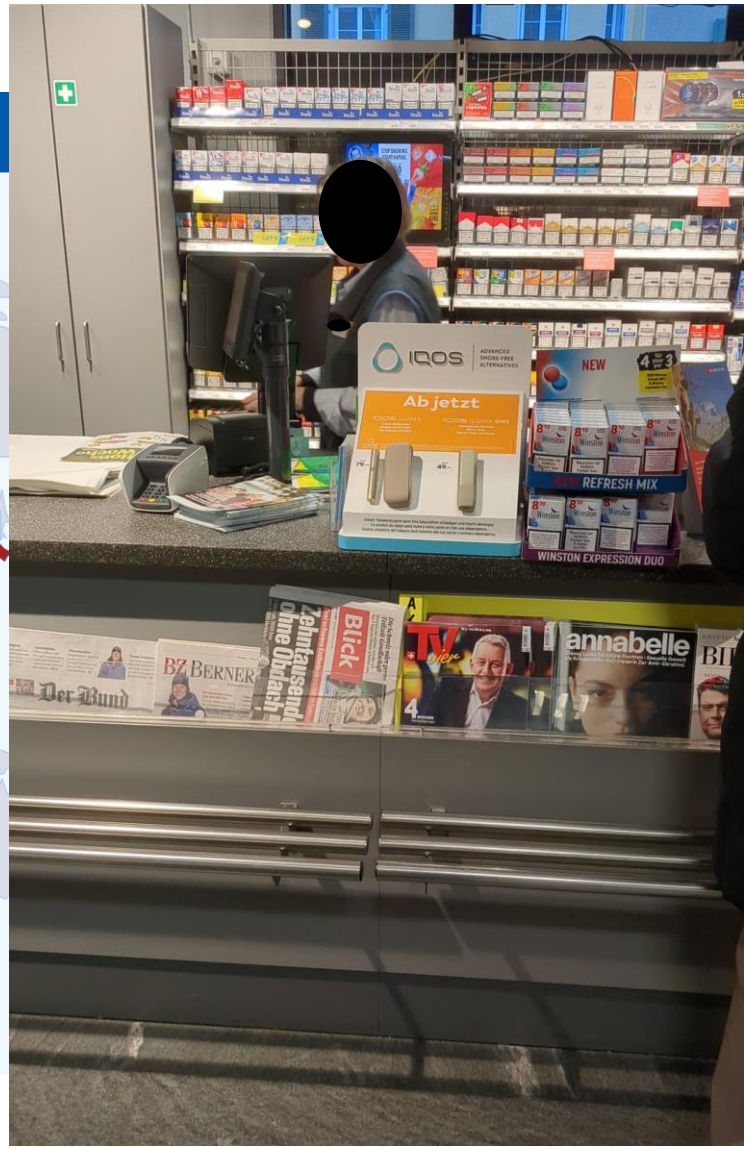
https://www.bag.admin.ch/bag/en/home/strategie-und-politik/nationale-gesundheitsstrategien/strategie-sucht.html

Case 3

« Jemand behauptet, er sehe immer mehr Jugendliche, die vapen. Früher hätte man wenigstens noch richtigen, natürlichen Tabak geraucht. Das sei sicher wegen der aggressiven **Werbung** auf Instagram! »

Kontext Schweiz





FCTC 2004 – Kinder ohne Tabak 2022

Switzerland is not a Party to the WHO Framework Convention on Tobacco Control. Switzerland signed the FCTC on June 25, 2004, but has not ratified the treaty. Switzerland has no formal rules against the participation of the tobacco industry in public health policy, allowing key government officials to represent tobacco industry interests in policy discussions. Moreover, the Swiss government's open support for input from the tobacco industry on drafted policies and legislation, allows the industry to be well-represented in the policy

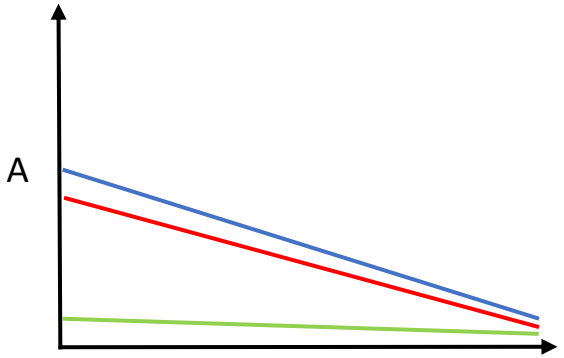
- 2022 angenommen, Blockierung durch Ständerat
- Werbeverbot vs Wirtschaftsfreiheit (Festivals, mobiles Verkaufspersonal)?
- Kollektive vs persönliche Verantwortung?
- Neues Tabakproduktegesetz seit 01.10.2024
  - Zuvor zB nicht in jedem Kanton ein Mindestalter

What can we do to prevent disease and addiction?

- Angebot
  - Einschränkungen Verkaufsstellen
  - Produktverbote (z.B. Einweg-Vapes)
  - Altersbeschränkungen
- Nachfrage
  - Werbeverbot
  - "Plain Packaging" (neutrale Verpackung)
  - Steuern
  - Einschränkungen: Aromen, Nikotinsalze
- Schadensminderung
  - Zugang zu risikoärmeren Produkten

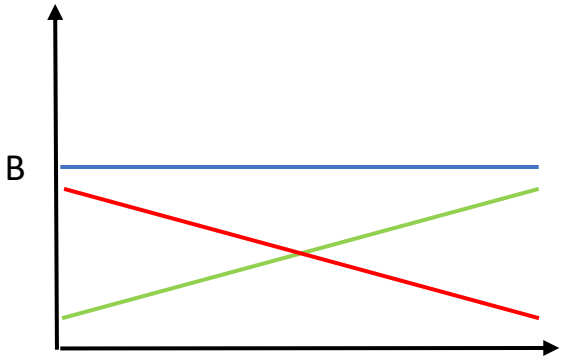
Szenarien für die Zukunft

A



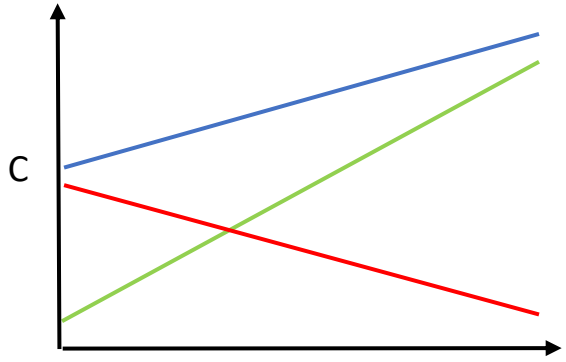
Insgesamt <5%
Tabakzigaretten Konsum <5%
Alternative Nikotinprodukte <5%

B



Insgesamt 20%
Tabakzigaretten Konsum <5%
Alternative Nikotinprodukte 15-20%

C

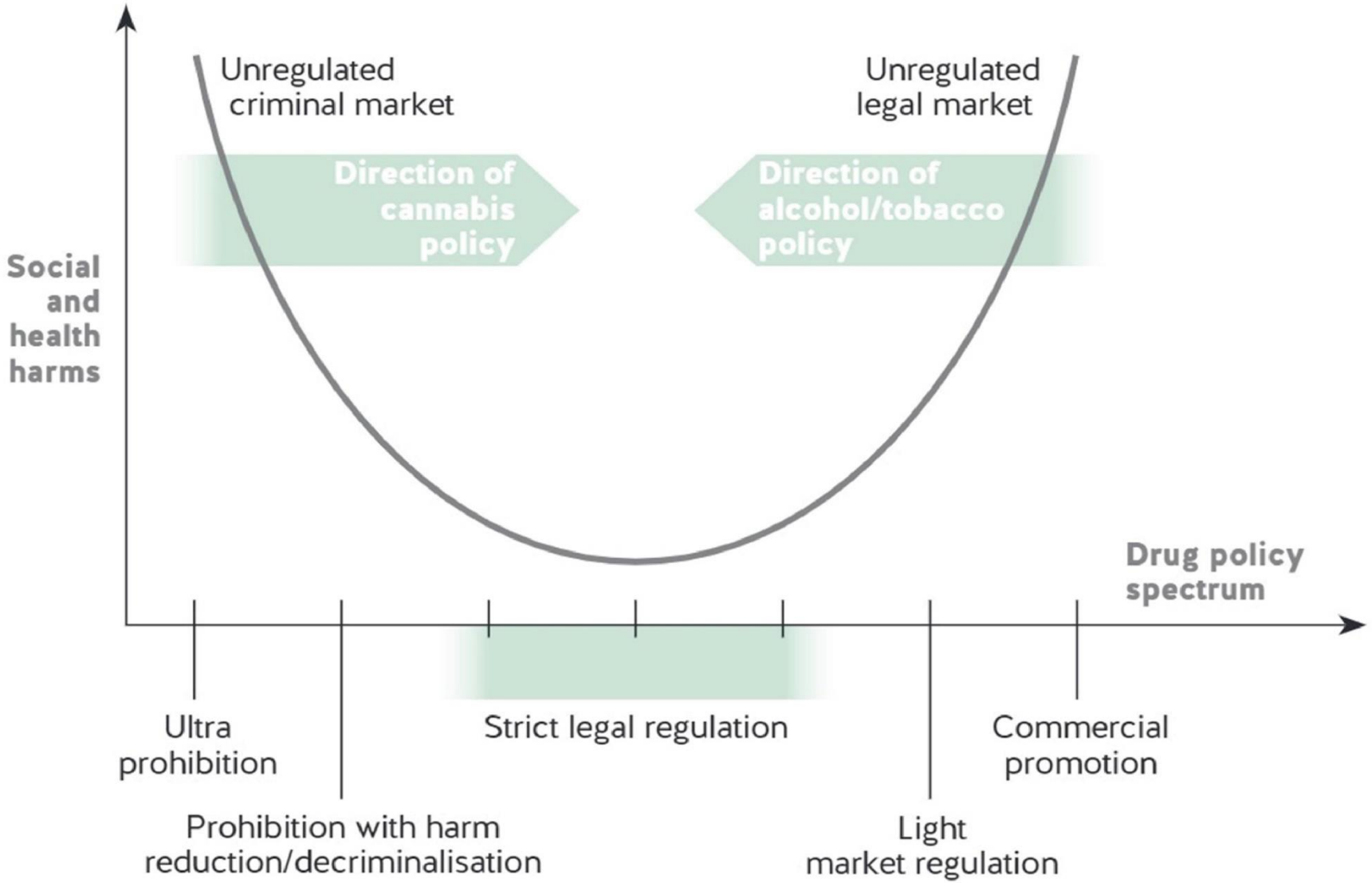


Insgesamt 35%
Tabakzigaretten Konsum <5%
Alternative Nikotinprodukte 30%

Mechanismen

- **Besteuerung** Tabakzigaretten : alternative Nikotinprodukte (ratio)
- **Allgemeine** Massnahmen: plain packaging, Werbeverbot?
- Einschränkung **Verkauf**sstellen / -zeiten?
- Unterstützung beim **Rauchstopp**? NRT Preise?
- **Verbote**?
  - Busse für Verkäufer:innen?
  - Busse für Käufer:innen?
  - Gefängnis für Verkäufer:innen?
  - Gefängnis für Käufer:innen?

A spectrum of policy options available



Take home messages

- Central dissonance points:

Reduction in tobacco-related death **vs.** number of nicotine dependents

Facilitate access to lower-risk products **vs.** avoid initiation with non-smokers

Treat a chronic condition **vs.** "just say no", "just stop"

“The test of a first-rate intelligence is the ability to hold two opposing ideas in mind at the same time and still retain the ability to function.” Scott Fitzgerald

Danke!

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