## SNUS KOMMISSIONEN



# The Betrayal of Smokers

A Report on Sweden's Misinformation Campaign

### 1. Summary

This report reveals how Swedish government agencies and various publicly financed organisations continuously and repeatedly impede efforts to reduce smoking. By exaggerating health risks in information materials directed specifically towards smokers, these organisations manage to create an inaccurate picture of the harmful effects of snus, the effectiveness of snus for smoking cessation, and its potential public health benefits.

A study of dependence commissioned by the Snus Commission and conducted by Ipsos shows that many of the established perceptions of snus are incorrect. Snus is no more addictive than cigarettes. Snus is also the most effective cessation product for quitting smoking successfully.

The study also demonstrates that, to a great extent, smokers in Sweden have an excessively negative impression of the health effects of snus. Since the primary reason to quit smoking has been demonstrated to be the adverse effects on the

health of smokers, there is therefore also much less of an incentive to consider snus as a cessation product.

It its previously presented reports, the Snus Commission has pointed to the clear public health benefits inherent in switching from cigarette dependency to snus consumption. If today's smokers were to switch over to snus, tobacco use-related diseases and mortality rates would be reduced significantly to the point of being completely minimised.

In spite of this and in many instances, the information that government agencies and publicly financed organisations are directing at smokers who wish to quit cigarettes is erroneous.

Public funds are being spent in a way that risks keeping smokers dependent on cigarettes. The beneficiaries of such funds exhibit an unwillingness to inform about current tobacco research, and their failure to acknowledge and recognise snus as a life-saving product is difficult to comprehend.



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#### 2. Who are we?

he Snus Commission is an independent commission that produces reports on matters related to Swedish snus. The Commission is funded by the Swedish Association of Snus Manufacturers, a confederation of companies in Sweden that produce, market, and sell snus. The Commission's reports, studies, and conclusions are produced independently of its sponsors; the sponsors are neither given the opportunity to access, read, or comment on the substance of reports before publication.

The Snus Commission released its first report – 'The Health Effects of Snus' – in May 2016. That report surveyed the current research on the alleged health effects of snus and established that the use of snus did not increase the risk of cancer or cardiovascular diseases. Moreover, the Snus Commission produced a number of recommendations for politicians.

Our second report 'The Government's Problem with Snus – Linking Information and Health' was released in December 2016. That report outlined the regulatory proposals to restrict commercial freedom of expression, such as implementing exposure prohibitions and neutral tobacco packaging, and how these proposals would adversely affect snus and the consumer's ability to obtain accurate information.

The third report 'Snus Saves Lives' pointed to the difference between the current level of tobacco-related mortality rates in EU Member States and the levels that would have been attained if the rest of the EU had had the same tobacco consumption pattern as Sweden. In total, for men over 30 years, approx. 355,000 lives per year might have been saved if the other EU Member States' tobacco-related mortality rates had been at Sweden's levels.

The reports are available in their entirety at www.snuskommissionen.se.



#### 3. Snus Commission members



**Anders Milton,** Snus Commission Chairman. Milton is a physician whose former roles include president and chairman of the Swedish Medical Association, chairman of SACO 1993–2001, and chairman of the Swedish Red Cross 2002–2005. Milton has also served as the government's investigator in various health-related questions.

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**Karl Olov Fagerström,** Associate Professor, researcher on tobacco and nicotine. Fagerström was decorated by the WHO for his anti-tobacco efforts. He is also the founder of a company that sells smoking cessation products and has held various positions at Pharmacia.

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#### 4. Introduction:

## Snus is not the danger – misinformation is...

By population, Sweden's tobacco-related mortality rate is the lowest in Europe – and in spite of a domestic tobacco consumption that is commensurate with the rest of the EU, Sweden's disease rates are uniquely low. That this is because Swedes use more snus and smoke less is well-established.

Snus and cigarettes are two tobacco products that should not be lumped together in legislation, public health initiatives, or consumer information campaigns. Doing so is counter-productive as it reduces the incentive to lower cigarette consumption. Yet, this is the approach that has been adopted by most Swedish influential government and independent institutions. A part of the present report examines the harm-

fulness of the established anti-tobacco lobby's information strategy.

The current report is based on a study commissioned by the Snus Commission and produced by Ipsos – and it counters the myth that snus possesses particularly addictive properties. The study also shows that equating the

harmful effects of snus and cigarettes effectively lowers the incentive for reducing smoking in society. Daily smokers are four times more likely to use less harmful tobacco products for smoking cessation if their perception of health risks conforms to the research data instead of the received misinformation that is perpetuated by the Swedish authorities and organisations.

As a damage-minimising product, snus is clearly preferable to cigarettes. This well-established fact is opposed on fallacious grounds when the argument against "tobacco products" is being presented untruthfully, unnuanced, and under one label. When that counterproductive approach is carried over into legislation and information, Sweden's smokers become the first casualty.

## 5. Background:

## Snus health effects – what you've learned about snus is probably wrong

Snus is not – and should not be presented as – a health product. But snus might generate significant social benefits if cigarette smokers switch to snus. And the research is clear In its report 'Snus Health Effects' the Snus Commission mapped out the present state of the research on the health effects of snus consumption.<sup>1</sup>

That report established that there was no solid evidence for linking snus with cancer. Snus consumption also does not affect the risk of contracting cardiovascular diseases or, for that matter, periodontitis and other oral diseases.

The risk of opting out of smoking cessation products increases four times if the health risks are experienced to be as adverse as for cigarettes

**x4** 

<sup>&</sup>lt;sup>1</sup> Snus Commission (2016): 'Snus Health Effects.'

That there is a correlation between the number of smokers and the number of snus consumers in a given country is highly likely – Sweden has Europe's highest rate of snus consumers and also its lowest rate of smokers. In Sweden, one type of tobacco usage that kills has been substituted by another that does not.<sup>2</sup>

The share of Swedes who use both snus and cigarettes daily is very low – only about 1% of Sweden's population<sup>3</sup>. A researcher at the Center for Tobacco Products at the U.S. Food and Drug Administration (FDA) has also concluded that in "Sweden where the use of snus is more common, the rates of male smokers and tobacco-related diseases and mortality are lower than in other developed countries"<sup>4</sup>.

The Australian researchers Wayne Hall and Coral Gartner have studied snus-related health risks. Their research shows that there is a close correlation between the use of snus and a reduced use of cigarettes – and thereby a lower mortality rate caused by tobacco-related diseases<sup>5</sup>. Gartner and Hall also conclude that when cigarette smokers switch to smokeless tobacco with low levels of nitrosamines – as in Swedish snus – the health benefits are almost as great as if smokers abstain completely from tobacco use.<sup>6</sup> The U.S. Food and Drug Adminis-

tration has determined that Swedish snus, when used exclusively instead of cigarettes, entails a lower risk of developing COPD, emphysema, chronic bronchitis (inflammation of the airways), and certain types of cancer, e.g. pulmonary cancer.<sup>7</sup>

The conclusion is that the health benefits of switching from cigarette usage to snus consumption are almost the same as if to-bacco consumption had been discontinued completely:

"Increased snus consumption has been linked to decreased cigarette smoking and mortality rates caused by tobacco-related diseases [...] epidemiological models suggest that the health benefits of switching to smokeless tobacco products with low levels of nitrosamines are almost as great as when abstaining from tobacco usage altogether".

## 5.1 Research shows that no deaths can be attributed to Swedish snus

A report published in the medical journal The Lancet in 2017 investigated the risk attributes and health issues linked to 84 different risk factors globally.<sup>8</sup> The study was clear in its analysis of Swedish snus and unable to attribute any deaths to the consumption of snus. This should be seen in the context of the 7.1 million deaths that cigarette-smoking directly and indi-

<sup>&</sup>lt;sup>2</sup> Royal College of Physicians (2016): Nicotine without smoke: Tobacco harm reduction

<sup>3 &#</sup>x27;Tobaksvanor 2015 – regionala resultat' ['Tobacco Habits 2015 – Regional Results'], Public Health Agency of Sweden (January 2016).

<sup>&</sup>lt;sup>4</sup> Presentation by Conrad J. Choiniere, PhD at the Office of Science, Center for Tobacco Products at FDA (US Food and Drug Administration), march 2, 2016, Chicago, ILL. Society for research on nicotine and tobacco

<sup>&</sup>lt;sup>5</sup> Gartner C, Hall W (2009): Harm reduction policies for tobacco users. Int J Drug Policy. 2010 Mar;21(2):129-30

<sup>6</sup> Ibid.

<sup>&</sup>lt;sup>7</sup> Presentation by Li-Lun Chen, M.D. Director of Individual Health Science at FDA (US Food and Drug Administration), March 2, 2016

<sup>8 &#</sup>x27;Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016.' The Lancet, 2017 volume 390, p. 1345–1422

rectly caused globally in 2016. The report's authors conclude that the primary reason for deaths linked to smokeless tobacco is related to completely different products than Swedish snus:

"In estimating the burden attributable to smokeless tobacco, we found that the risk varies by the toxicity of the type used; there is sufficient evidence that chewing tobacco and other products of similar toxicity cause excess risk of oral and oesophageal cancer while, at this time, existing evidence does not support attributing burden to snus or similar smokeless tobacco products. Globally, smoking tobacco causes far more burden than smokeless tobacco; nonetheless, smokeless tobacco is an important risk factor for oral and oesophageal cancer in India, where more than half of the 32 141 (24 930-39 243) global deaths attributable to smokeless tobacco occur".9

## 6. Investigation:

## Inaccurate information leads to harmful habits

There are clear differences between how Swedes in general and how smoker risk groups in particular relate to the relative health risks of Swedish snus. This is influenced by the information that the population consume – information that, in large parts, creates an inaccurate picture of harm reduction and relative risks.

The fundamental issues are easily identified and they can be explained in six items. These items are examined in this report:

- 1. Public health benefits from having as many as possible quit smoking.
- 2. Health is the principal reason for quitting smoking.
- 3. In context, the health impact of snus is a vastly less harmful alternative than cigarettes.
- Snus is the most used smoking cessation product among former smokers who have experienced long-term success in quitting.
- 5. In spite of the factors above, inaccuracies and direct falsehoods are disseminated about the health risks of snus by the Swedish public authorities, anti-tobacco campaigns, and publicly financed enterprises (see Chapter 7).
- Consumers' incentives and opportunities for quitting smoking are greatly diminished by misinformation – especially for groups that are already in the risk zone.

The public health benefits for a small percentage of smokers in a population have been mapped out, and the adverse health effects of snus are marginal in comparison. This chapter clarifies – by means of the report produced by Ipsos that major social groups in Sweden (1) do not have a perception of snus that corresponds to the scientific data, and (2) that this perception failure influences the incentives and options for smokers for quitting cigarettes.

#### 6.1 The tobacco habits of the Swedes

According to a study performed by Ipsos in October–November 2017, 16.7% of all Swedes are daily consumers of snus or

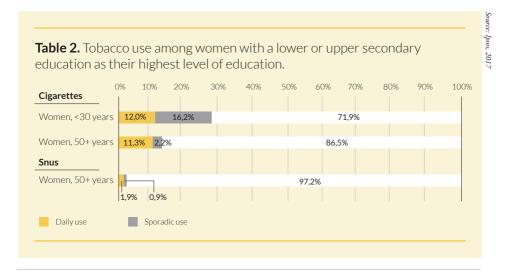
<sup>&</sup>lt;sup>9</sup> Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016.' The Lancet, 2017 volume 390, p. 1345–1422.

<b>Table 1.</b> S	wedes' daily tobacco เ	ısage.	
	Cigarettes	Snus (not nicotine-free)	
Men	5,5%	15,1%	
Women	8,1%	4,7%	
Total	6,8%	9,9%	

cigarettes.<sup>10</sup> Just under 10% of the population consumes snus daily. Significantly more men than women are part of that group. The reverse ratios apply to the group of cigarette smokers, which totals 6.8% of the population. The study presents a prevalence snapshot of current tobacco use by Sweden's population.

The levels are lower across all tobacco varieties compared with the numbers that have been presented in the most recent public health survey issued by the Public Health Agency of Sweden.<sup>11</sup>

Among women, 8.1% identify as daily cigarette users. A detailed study of the research data shows that, in certain subgroups, the rate of cigarette smokers is significantly higher than the national average. Almost 30% of women under 30 years without a high school education are either occasional smokers or daily smokers. Every tenth woman over 50 years with the same level of education is a daily smoker. In this group, snus usage is markedly lower than for the rest of the population – only 2% are using snus. These groups – which are clearly



<sup>10</sup> Ipsos 2017, for the Snus Commission

<sup>&</sup>lt;sup>11</sup> Public Health Agency of Sweden: 'Hälsa på Lika Villkor' ['Health on Equal Terms'] (2016).

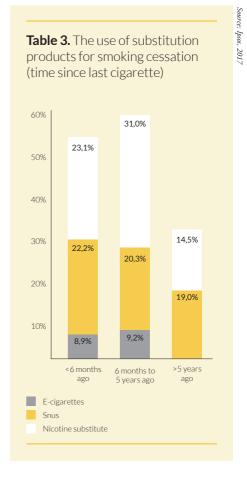
Please refer to Appendix 1 for a more detailed description of the methodologies used in the Ipsos report.

#### 6.2 Snus as a cessation product

The study shows that snus is the most effective cessation product over time for smoking. About one-fifth of former daily smokers specify snus as their primary smoking cessation product.<sup>12</sup>

The trend shows that snus is a more effective cigarette cessation product than nicotine substitution. No other smoking cessation product shows better result for long-term success for quitting smoking (quit for longer than 5 years). This is also substantiated by earlier scientific studies by Lars Ramström, which show that former smokers who switch to snus have greater success quitting smoking than smokers who use other products.<sup>13</sup>

The Swedish widespread resistance to snus as a cigarette cessation product has been cemented, something that is discussed in greater detail in the next chapter. Both legislative directives and the relevant government agencies are clear in their approach: less harmful tobacco products should in no way be presented as promoting public health.



## 6.3. Health the most important factor in smoking cessation

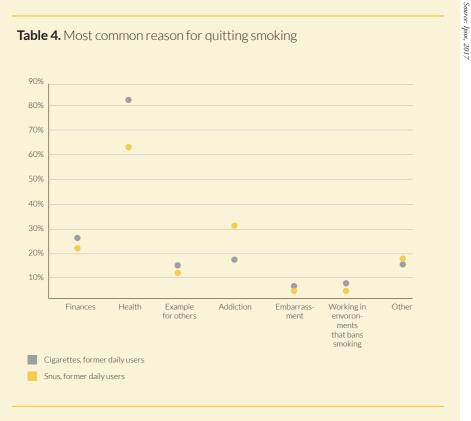
The effectiveness of snus as a long-term cessation product and snus's public health benefits as an alternative to cigarettes both hinge on one factor: The incentive for smokers to quit cigarettes.

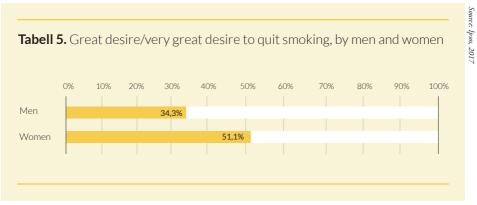
Nearly one-third of male smokers and half of all female smokers have a great or very

<sup>12</sup> Ipsos 2017, for the Snus Commission

<sup>&</sup>lt;sup>13</sup> Ramström, LM: Role of snus in initiation and cessation of tobacco smoking in Sweden. (2006)







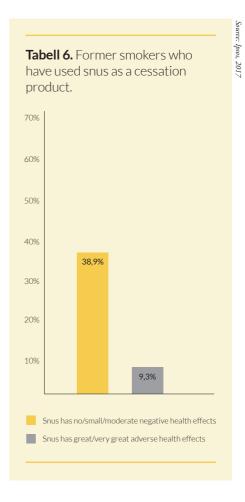
This means that the perception of a substitution product's negative health effects is a highly determining factor for whether a product will be used as a smoking cessation product. Those who perceive snus as having a detrimental health effect equal to cigarettes have no incentive to choose snus as a smoke cessation product.

## 6.4. Smokers lack knowledge about the health effects of snus

It would appear that the perceived health effects of snus are more important as a smoke cessation product than the scientific empirical data. This is a decisive factor, which is being influenced by the Swedish public health policy initiatives. The study suggests that because snus is presented as a harmful product at par with cigarettes, smokers remain attached to harmful cigarette use.

The study points to the clear difference that exists between groups that perceive snus to have very adverse health effects and the group that does not. The share, 38.9%, of smokers who perceived snus to have mild or moderate adverse health effects chose snus as a cessation product in deciding to quit smoking. According to 9%, the same choice was made by those who viewed the adverse health effects of using snus to be great or very great.

It is four times more likely that a smoker in his or her cessation efforts uses snus as



an alternative to cigarettes if the person's perception is that the adverse health effects of snus are small compared to whether the person views them as being great.

A relatively large group of smokers who wish to quit does not use snus as a substitute product, presumably because of the erroneous perceptions of snus's health risks. This creates an issue at the individual

**Table 7.** How would you evaluate the health effects of daily use of snus?

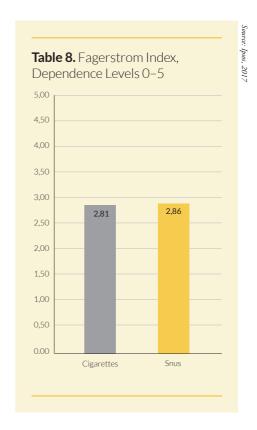
	Smokers			Users	Users of snus	
	Men	Women		Men	Women	
None/Mild	17,1%	10,2%	38,1%		22,1%	
	Men	Women		Men	Women	
Great/Very great	25,6%		38,3%	13,1%	22,7%	

level, which - taken together - constitutes a public health problem.

In addition to the aggregate figures, which clearly indicate that an erroneous perception exists about the health effects of snus, the report shows that the negative view of snus is more common among female smokers. In excess of 12% of all female smokers see snus as causing very great adverse health effects. Only 1% of women who use snus share this view. The same trend is evident among men, but at lower rates in both categories.

## 6.5. Dependency issue related to cigarettes and snus

A common argument for not using snus as a cessation product for cigarettes is that this is merely changing one unhealthy product with what is admittedly a less unhealthy product but with greater addictive properties. This is contradicted by the dependence study produced by Ipsos. In that study, researchers examined perceived



dependence among users of snus and smokers by means of the Fagerström Index. The analytical model is described in greater detail in Appendix 2.

The research indicates that snus and cigarettes are perceived to be almost equally addictive by users (snus = 2.86 and cigarettes = 2.81 on a five-point scale).

These numbers indicate that the dependence issue that is often described as particularly problematic with snus, also in relation to cigarettes, is inaccurate. There is a clear dependence factor linked to the consumption of snus. However, based on this study, we can assume that it is lower than what is most often claimed in the debate on tobacco use prevention.

Clearly, to be dependent on a product that is not carcinogenic is preferable to be dependent on one that is. For the individual as well as for public health.

#### 7. Swedish misinformation

## From government agencies to mass information campaigns

Historically, the notion of harm reduction is controversial from a Swedish public health perspective. That a harmful product is exchanged for a less harmful product goes against the long-established approach applied by Swedish government agencies and various anti-tobacco organisations.

The results from this study clearly show that the approach that has dominated

Swedish tobacco information for a long time has influenced cigarette smokers to continue their hazardous tobacco use. These arguments and resistance to harm-reduction are recurring messages from the authorities, publicly financed institutions, and private interest organisations – we provide some examples below.

This approach becomes particularly problematic when it involves one of the most harmful products available in the Swedish consumer market. Smoking is estimated to cause more than 5,000 deaths annually in Sweden – and that is for cigarette-related cancer cases only. <sup>14</sup> That is more lives than traffic accidents, narcotics, and suicides – in total.

## 7 100 000

annual deaths globally, caused by cigarettes

The indisputable correlation between cigarette smoking and the increased risk of a number of directly fatal diseases has been well-established for many decades. Contemporary research simultaneously shows that there is no evidence in the research for connecting consumption of snus with mortality. According to the report 'Snus Saves Lives' produced by the Snus Commission in 2017, tobacco consumption like the Swedish could save 355,000 lives a year if applied to the rest of the EU. <sup>15</sup>

<sup>&</sup>lt;sup>14</sup> https://www.cancerfonden.se/livsstil/rokning, retrieved on 5 December 2017.

<sup>15</sup> Snus Commission (2017): 'Snus Saves Lives.'

In spite of such clear indications that a switch from smoking to snus consumption would provide benefits to the Swedish public health and save both money for society and the lives of suffering individuals, the Swedish official position on tobacco-related matters is clear. Cigarettes and snus are categorised as equal in terms of health risks, and sanctions are not rarely implemented equally harshly for snus consumers and cigarette smokers.

355 000

lives a year could be saved in the EU by Swedish snus

Swedish legislation in the tobacco area follows the same pattern. In the final report on the Tobacco Directive Enquiry, entitled 'An Overview of the Tobacco Act – New Steps Towards Reducing Tobacco Use', its authors stated that:

"Irrespective of how it relates to assessments of snus in terms of smoking cessation or the reduced danger of snus compared to cigarettes, we conclude that the tobacco policy principle is that no difference should be made between the various forms of tobacco. This has also been the point of departure for our considerations and proposal." 16

This perspective is a recurring theme and symptomatic for the public health initiatives that are implemented across the tobacco area. It is more important for snus not to be used for cessation purposes than to quit smoking.

This is clarified in the communication on "snus as smoking cessation" in the Tobacco Directive Enquiry:

"A reduction of tobacco use is therefore not just predicated on a reduction in the number of smokers but also a reduction in the number of snus consumers. In various contexts, it has been claimed that the harmful effects of snus are smaller than those of cigarettes, in part that snus is a smoking cessation agent that, for this reason, should be treated differently than other tobacco. Even if the harmful effects of snus might be smaller than those of smoking – which e.g. the Public Health Agency of Sweden has concluded in its report 'Tobacco and Cessation' (2009) - this type of comparison is irrelevant from a public health perspective, since there are few activities as hazardous to one's health as smoking. Instead, the comparison should be made with individuals who are not tobacco users."17

## 7.1. Public Health Agency of Sweden and snus

The Public Health Agency of Sweden is the supervisory authority for Swedish snus. The established view of snus consumption is clearly stated in the information material presented by that agency.

On the agency's website, under the header 'Snus use and health risks,' the agency confuses snus produced according to Scandinavian product principles and that, according to the report published in The Lancet, cannot be attributed to fatalities, with the Indian tobacco product that can, in fact, be linked to cancer diseases:

<sup>16</sup> Swedish Government Official Report [SOU]: 2016:14, 'En översyn av tobakslagen - Nya steg mot ett minskat tobaksbruk' ('An Overview of the Tobacco Act – New Steps Towards Reducing Tobacco Use'), p. 123.

<sup>17</sup> Ibid.

"In 2014, the Norwegian Institute of Public Health published a systematic literature survey of the health effects of the use of snus (3). In addition to Swedish snus, the survey also included other types of smokeless tobacco. The conclusion was that there was:

Scientific support for establishing a link between the use of snus and Type 2 diabetes (for high consumption, ≥ 5 doses a week), cancer in the pancreas, oesophagus and the oral cavity, as well as an increased risk of dying from a myocardial infarction or a stroke.

There is some scientific support for establishing a link between the use of snus and cancer in the stomach, lungs, colon, and rectum, weight gain, being overweight and obese, as well as unfavourable cholesterol levels." 18

These health warnings, directed at a Swedish target group who are most likely not major consumers of e.g. Indian smokeless tobacco products, must be viewed to be intended to have a deterrent effect on snus consumers. The sentence is followed up by admitting that:

"the size of the increases in risk cannot be estimated based on the documentation available. For Swedish snus, there are only a few good-quality studies for us to be able to draw any solid conclusions" 19

This is an assertion that is not repeated in any of the other Public Health Agency information efforts. This caveat by with the agency acknowledges that science does not actually support any links between the health risks raised and Swedish snus is not found anywhere else in the other infor-

mation efforts that the agency conducts related to tobacco use.

Another example of this is the Public Health Agency's consultation option for the report 'An Overview of the Tobacco Act – New Steps Towards Reducing Tobacco Use.' Instead of pointing out the scientific and empirical evidence that exists for snus as a significantly less harmful alternative to cigarettes, they end up supporting the investigator's counterproductive point of departure. According to this person, no difference should be made the various forms of tobacco in Swedish legislation.

# 7.2. Publicly financed public health organisations and snus – the examples of the Quit-Smoking-Hotline and Tobaksfakta initiatives

Many organisations involved in public health and publicly funded enterprises have profiled themselves as active parties in tobacco-preventive work. Among these, we find 'Sluta-Röka-Linjen' ('Quit-Smoking-Hotline'), whose activities were started with support from the Public Health Institute (the current Public Health Agency of Sweden). The hotline describes its offering as follows: "The Quit-Smoking-Hotline is a free support hotline that is open for anyone who has questions about quitting smoking or snus." It is currently operated by Stockholm County Council's Centre for Epidemiology and Community Medicine with primary funding from the Ministry for Social Affairs. The hotline receives five million kronor a year in state funding.<sup>20</sup>

<sup>18</sup> https://www.folkhalsomyndigheten.se/livsvillkor-levnadsvanor/alkohol-narkotika-dopning-tobak-och-spel-andts/tobak/snusbruk-och-halsorisker/ (retrieved on 5 December 2017).

<sup>19</sup> Ibid

<sup>&</sup>lt;sup>20</sup> E-mail correspondence, Stockholm City Council, 5 December 2017.

The information material that has been produced by the "Quit-Smoking-Hotline" contain some of the common warnings against snus consumption:

"The risk of contracting cancer from Swedish snus has long been a topic of discussion. Swedish snus is produced in a different manner than international snus, which makes it less harmful — but not harmless. Swedish snus contains carcinogenic substances, such as heavy metals, nitrosamines, and residues of pesticides. The tobacco-specific nitrosamines are generated in connection with smoke or air drying of the tobacco. Currently, it is believed that snus users may be at a higher risk of developing cancer in the pancreas, the mouth, and the oesophagus. New studies suggest that snus might also increase the risk of other cancer forms"<sup>21</sup>

5

#### MILLION

in state funding for the Quit-Smoking-Hotline each year

The non-sourced assertions that snus consumption might be linked to cancer are repeated in the general information material from the Quit Smoking-Hotline. In the brochure 'Sluta snusa – En handbok för dig som funderar på att kasta snusdo' san' ['Quit Snus – A Handbook for People Considering Chucking the Snus Tin'], [reducing] "the risk of cancer in the pancreas"

is listed as one of the primary reasons to quit using snus<sup>22</sup>. Also here, it is reasonable to assume that the group that would turn to the Quit-Smoking-Hotline and who happen to be consumers of Indian chewing tobacco is extremely small - even as this type, according to the established scientific data, is what causes most cancer cases caused by oral tobacco use.

The Quit-Smoking-Hotline is one of the most frequently cited organisations for tobacco cessation initiatives by government agencies. The hotline's number is displayed, by law, on all cigarette packages sold in Sweden and its remit is to offer help to anyone who wish to quit tobacco use – snus as well as cigarettes.

The category 'anti-tobacco organisations' also features Tobaksfakta (Tobacco Facts), which is a think tank with the objective of achieving a tobacco-free Sweden.

"Tobaksfakta – An Independent Think Tank" consists of 16 member organisations and they present themselves with the words: "Everyone has the right to information about tobacco and the tobacco industry's work methods. That's why Tobaksfakta - Independent Think Tank exists".

Through its member organisations, the think tank represents numerous knowledge-intensive professions, among others, physicians, nurses, educators, and psychologists. In 2016, Tobaksfakta was awarded two million kronor in organisation contributions from the Public Health Agency.

<sup>&</sup>lt;sup>21</sup> Quit-Smoking-Hotline: 'Truth About Snus,' retrieved 5 December 2017.

<sup>&</sup>lt;sup>22</sup> Quit-Smoking-Hotline: 'Sluta snusa – En handbok för dig som funderar på att kasta snusdosan' ['Quit Snus – A Handbook for People Considering Chucking the Snus Tin'].

Most of its member organisations, such as Psychologists Against Tobacco have been provided with individual contributions from the same agency in the order of half a million kronor.<sup>23</sup>

Tobaksfakta's view of what constitutes accurate information about tobacco is sufficiently flexible to fit its own movement's absolutist vision of a tobacco-free Sweden.

In Tobaksfakta's publication 'Snuset är inte något harmlöst alternativ' ('Snus Is Not a Harmless Alternative') the health effects of snus are problematised with dubious scientific evidence. Tobaksfakta also advocates for having Sweden as a state refrain from "seeking to influence countries that have banned snus to lift such bans." According to the Snus Commission's most recent report 'Snus Saves Lives,' the lifting of such bans has the potential to save hundreds of thousands of lives within the EU alone.

It is also alleged in Tobaksfakta's publication that snus consumption can be linked to most deadly diseases. The current research presented in this report contradicts this.

In its publication, Tobaksfakta stresses five so-called myths about snus as a cigarette alternative. Under these headers, they wrestle with arguments that snus might be a healthier product than cigarettes but eventually dismiss them as "irrelevant." Snus's effectiveness as a cessation product to replace cigarettes – an effective alternative as evidenced in the present report – is rejected as "pure guesswork". Throughout,

Tobaksfakta's information materials about snus as an alternative product ignore a very substantial portion of established research.

The two organisations mentioned above — the Quit-Smoking-Hotline and Tobaks-fakta — are two out of many that are involved in the tobacco debate in Sweden. Both organisations have produced a great deal of material about snus and cigarette consumption, some of high quality. It is therefore remarkable that those two movements — both publicly funded and oft-cited sources of expertise for government initiatives — furnish the general public with materials that are clearly erroneous on their face or counterproductive to public health.

As shown in this report, this type of information is misleading. It also results in reducing the incentive for quitting smoking at the expense of public health and human lives.

#### 8. Conclusion

New tobacco legislation, long sought after by the active parties in the tobacco debate, has the opportunities to redress many of the problems of the current Swedish laws. Regrettably, the investigator – through directive and procedures – has chosen to ignore the potential solutions that are currently available.

By phrasing it "irrespective of how it relates to assessments of snus in terms of smoking cessation or the reduced danger of snus compared to cigarettes, we conclude that the

<sup>&</sup>lt;sup>23</sup> Public Health Agency of Sweden: Organisation Contributions to Organisations That Conduct Tobacco Preventive Activities 2017 (SFS 2015:456)

<sup>&</sup>lt;sup>24</sup> Tobaksfakta: 'Snuset är inte något harmlöst alternativ' (2011)

tobacco policy principle is that no difference should be made between the various forms of tobacco. This has also been the point of departure for our considerations and proposal" the investigator ignores established science and empirical data on smoke cessation. It is a position that is notably out of touch with reality.



The dependency study that has been conducted as part of this report shows that the official position and misinformation have affected the perceptions of Swedish smokers. As a result of this, their incentive to quit their very unhealthy cigarette use is reduced.

From a public health perspective, to equate the product that has resulted in Sweden's having the lowest tobacco-related mortality rates in the EU with cigarettes, whose harmfulness it is difficult to overestimate, is quite counterproductive. The then-Minister for Public Health Gabriel Wikström wrote in Aftonbladet Debatt in 2016:

"For me, as Public Health Minister, it is self-evident that measures that reduce smoking should be given the highest priority. Smoking is the single largest preventable risk factor for diseases and premature death. By reducing smoking, we provide the conditions for better public health and lower social costs". 25

This is contradicted not only by the enquiry's proposal, it is counteracted directly by the organisations that advocate with public funds for equating all tobacco varieties. In the present report, which is based on the study Ipsos conducted, it also turns out that the information that is disseminated by these organisations actively contribute to providing smokers with a reduced incentive to break their harmful habit. The Swedish approach to tobacco issues from ministries to consulting engagements at the individual level has and will result in the deaths of more Swedes from cigarette-related diseases.

We should expect legislators, government agencies, and publicly financed organisations to remain neutral and open to research findings that elucidate the role of snus as a public health benefit and as a substitute to cigarettes. We should also expected legislators to pursue an approach for the tobacco question that contributes to the declared goal – that the measures that reduce smoking will be given the highest priority. To save lives, we need sober and robust knowledge about snus, not misinformation.

<sup>&</sup>lt;sup>25</sup> Aftonbladet debatt: 'Reducing Smoking Is Our Highest Priority' (23 May 2016).

## Appendix 1: Dependence Report

#### Methodology and Implementation

The quantitative data collection for the Ipsos report was carried out from 18 September to 27 September 2017 in the form of an online survey. The survey was distributed without a sender, which meant that the respondents were unaware that the Snus Commission had commissioned the survey.

In order to ensure that the survey was interpreted as desired, a cognitive test was initially performed for the questionnaire.

For data collection, Ipsos relied on Norstat's Gold Panel solution, a randomly recruited panel with a risk representative selection of respondents. For more information related to panel sizes, quality processes, and recruitment procedures, etc., please visit https://norstatgroup.com/ methods/online-data-collection/

The questions in the questionnaire followed this general structure:

- Introduction to survey
- Screening
- Demographics
- Use
- Dependency
- Quitting
- Experienced health effects and concerns

#### **Target Group**

The survey featured 3,000 respondents, risk representative across age, gender, and region.

- Men, women nationally representative distribution
- 18–75 years (nationally representative distribution based on age intervals: 18–30; 31–40; 41–50; 51–60; 61–75)
- Resident in Sweden (nationally representative distribution based on NUTS 2:
   Stockholm; East Middle Sweden; Småland and the Islands; South Sweden;
   West Sweden; North Middle Sweden;
   Middle Norrland; Upper Norrland)

#### Weighting

Collected data were weighted against a nationally representative distribution (model obtained from SCB's population database 2017), in order to fully match reality.

#### Extra Data Collection

In order to improve on the number of interviews in relevant target groups with low prevalence, extra data collection was performed that focused on three specific target groups:

- Daily nicotine drug users
  - 34 extra interviews
- Stopped using both cigarettes and snus, and quit snus first
  - 49 extra interviews
- Daily e-cigarette users
  - 46 extra interviews

The objective was to secure 80 interviews for each specific target group, for increased statistical robustness. Extra collected data was combined with original data during the analysis phase.

# Appendix 2: Fagerstrom Index

Nicotine products' experienced dependence effects were measured by means of the Fagerström Index (FTCD). The Index was created by analysing how soon after getting out of bed a product was consumed and which cigarette/snus had been most difficult to refrain from smoking/taking during the day. This was linked with the actual consumption to create an indexation between 0–5, which showed dependence. The number "0" is the lowest dependence level and "5" is the highest.

The Fagerström Index is an established model for analysing tobacco dependence and has been used by e.g. Society for Research on Nicotine and Tobacco at Oxford University and Sweden's county councils.

# Appendix 3: Margin of Error

Statistical margin of error for data materials in the size of > 3,000:

0-5 %: 0,6 %

6-9 %: 0,9 %

10-19 %: 1,3 %

20-29 %: 1,5 %

30-39: 1,7 %

40-59 %: 1,8 %

60-69: 1,7 %

70-79: 1,6 %

80-89 %: 1,3 %

90-94 %: 0,9 %

95-100 %: 0,6 %

#### Report Summary:

This is the fourth report produced by the Snus Commission. Other reports:



#### Snus Health Effects. May 2016

This report reviewed current research on the alleged health effects of snus and established that the use of snus did not increase the risk of cancer or cardiovascular diseases. Moreover, the Snus Commission presented a number of policy recommendations.



## The Government's Problem with Snus December 2016

In this report, the political proposals to restrict the commercial freedom of expression were described, such as exposure prohibitions and neutral tobacco packaging, and how these proposals would adversely affect snus and the consumer's ability to obtain accurate information.



## Snus Saves Lives June 2017

This report analysed the existing level of tobacco-related mortality rates in EU Member States and the level that would have been attained if the rest of the EU had had the same consumption pattern for tobacco as Sweden. In total, for men over 30 years, approx. 355,000 lives per year could have been saved if the other EU Member States had been at the same level as Sweden in tobacco-related mortality.

The reports are available in their entirety at www.snuskommissionen.se





The Snus Commission's Fourth Report, December 2017 Read more at snuskommissionen.se info@snuskommissionen.se

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