

## Snus facts

### What is snus?

Snus is a moist, smokeless powdered tobacco. It is sold as a loose powder or pre-packaged in a small sachet (a bit like a mini tea bag). It contains ground tobacco, salt and may contain food-grade smoke aroma flavourings, such as citrus, bergamot, juniper, herb or floral flavours. Most Scandinavian snus is produced in Sweden where it is regulated as a food under the Swedish Food Act. The nicotine content varies among brands.

### Is snus an appropriate and acceptable harm reduction product?

Snus fulfils the criteria for a tobacco harm reduction product. It is a low risk nicotine product and delivers acceptable doses to those who use it. In countries in which it is allowed it is popular and has contributed to declines in smoking and smoking related diseases.

### How does snus differ from other oral tobaccos?

Snus is a smokeless tobacco. Unlike some other smokeless tobacco types, Swedish snus is not fermented and is pasteurised, which inhibits the growth of bacteria that help the formation of tobacco-specific nitrosamines (an important group of carcinogens in tobacco products). Snus is refrigerated in order to inhibit the growth of toxins.

### How is snus used?

Snus is placed between the upper lip and gum. The nicotine is released into the saliva, with the rate of release affected by the amount of saliva. New users experiment (titrate) to find the best rate of nicotine release.

<http://www.wikihow.com/Use-Snus>

### Is there a quality standard for snus?

The Gothiatek standard, a voluntary quality standard for snus products, has maximum levels for constituents, including nitrosamines, metals, nitrite, agrochemicals, mycotoxins and aldehydes.

<https://www.swedishmatch.com/Snus-and-health/GOTHIATEK/GOTHIATEK-standard/>

### Is snus safe and are there any long-term health effects?

Snus is considered by scientists to be 95%, and possibly closer to 99%, less risky than smoking. Snus poses no respiratory risk. Respiratory diseases, predominantly lung cancer, chronic obstructive pulmonary disease (COPD) and pneumonia account for 46% of deaths due to smoking, according to the Scientific Committee on Emerging and Newly Identified Health Risks, 2008.

[http://ec.europa.eu/health/ph\\_risk/committees/04\\_scenihr/docs/scenihr\\_o\\_013.pdf](http://ec.europa.eu/health/ph_risk/committees/04_scenihr/docs/scenihr_o_013.pdf)

Individual studies can produce contradictory findings so evidence must be sought from overviews of key studies and pooled results. A systematic review and meta-analysis examined the evidence relating to snus and health across six major Swedish, Norwegian, Danish and Finnish studies, up to 2010. This concludes that the evidence provides scant support for any major adverse health effects of snus: snus is not associated with cancers of the oropharynx, oesophagus, pancreas, or heart disease or strokes. Compared with smoking snus poses about 1% of the risk of cancer or cardiovascular disease.

<http://onlinelibrary.wiley.com/doi/10.1002/ijc.30773/full>

A recent definitive study from the Swedish Karolinska Institutet confirms that snus is not associated with an elevated risk of pancreatic cancer. Because snus has been used in Sweden for a long time it is possible to study samples of the population over time (so-called cohort studies) and to link survey data with registers of disease and mortality. A total of 424,152 men from nine cohort studies was followed up for risk of pancreatic cancer through links to health registers. The nine prospective cohort studies included participants of varying ages, who were recruited at different time periods from diverse geographic regions across Sweden. During a cumulative 9,276,054 person-years of observation, compared to never users of snus, current snus use was not associated with risk of pancreatic cancer.

<https://www.ncbi.nlm.nih.gov/pubmed/21163315>

## **Snus and lung cancer and tobacco-related mortality in Sweden**

The rise in the use of snus has resulted in Sweden having the lowest lung cancer mortality and tobacco-related mortality in Europe. The 'natural experiment' between Sweden and the rest of the EU provides evidence not only on the impact of the availability of snus on smoking rates, but also the impact of smoking rates on tobacco related disease. Sweden has the lowest rate of tobacco related disease for the EU 28 for males aged 30 and older, at 152/100, 000, compared to the EU28 average of 373/100, 000. Hungary has the highest at 699/100, 000.

It is estimated that if the Swedish smoking prevalence was extrapolated to the rest of the EU, there would be a 54% reduction of male mortality from lung cancer.

<http://journals.sagepub.com/doi/abs/10.1177/1403494809105797>

## **The human cost of the ban on snus**

Using data on tobacco-related mortality across the EU, and applying the Swedish mortality data to other EU countries, it has been calculated that among men over the age of 30, 355,000 lives per year could have been saved if the other EU countries had matched Sweden's tobacco-related mortality rate.

[http://snuskommissionen.se/wp-content/uploads/2016/05/Snusets\\_halsoeffekter\\_A5\\_eng.pdf](http://snuskommissionen.se/wp-content/uploads/2016/05/Snusets_halsoeffekter_A5_eng.pdf)

## **Health effects of switching to snus**

Given the lower risk profile for snus it has been calculated that the life expectancy of smokers who switch from smoking to snus is little different to the life expectancy of those who stop smoking altogether. The authors of this study conclude that: 'Individual smokers who switched to snus instead of continuing to smoke and new tobacco users who only used snus rather than smoking would achieve large health gains compared with smokers'.

[http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(07\)60677-1/abstract](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(07)60677-1/abstract)

This finding is confirmed by a recent analysis of six major studies which found that switching from smoking to snus is associated with major reductions in morbidity and that switching to snus appears to have much the same reduced health risk as quitting smoking.

<http://europepmc.org/abstract/MED/23454227>

## Does snus pose a risk to others?

**Snus poses no risk to others**, such as work colleagues and family members as there is no combustion and consequently no 'second hand' smoke and no risk of fire.

## Snus and stopping smoking

Snus is now the most popular product for smokers in Sweden and Norway when they wish to stop smoking and the success rate is higher when using snus than when using pharmaceutical Nicotine Replacement Therapy products.

<https://academic.oup.com/ntr/article/14/10/1221/1749452/Association-Between-Willingness-to-Use-Snus-to>

## Has snus replaced smoking in Sweden and Norway?

Consumers in both Sweden and Norway are choosing to use snus rather than to smoke. There has been a major increase in the use of snus and a concomitant decline in the smoking of tobacco. In Sweden, snus overtook cigarettes in 1996. In Norway the rise of snus and the decline in smoking resulted in male use of snus overtaking cigarettes by 2006. This happened despite snus use in Sweden and Norway occurring in a context where active promotion of the product was banned and health authorities warned smokers against snus use.

## Sweden has the lowest levels of smoking in the EU

Smoking is fast disappearing in Sweden, with the latest EC EuroBarometer survey showing that for 2017 only 5% of adult Swedes are daily smokers, compared with an EU28 average of 24%. Such an exceptionally low prevalence of smoking has not been achieved in any other higher income country.

<http://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/ResultDoc/download/DocumentKy/79003>

## How does the use of snus reduce smoking?

Snus is used to avoid the uptake of smoking, to stop smoking, and to reduce smoking.

The decline in Sweden and Norway has come about by smokers using snus to avoid smoking, and by the fact that younger nicotine users are choosing to use snus rather than to smoke, and that the uptake of snus does not lead to tobacco smoking.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4245639/>

<https://www.ncbi.nlm.nih.gov/pubmed/27834883>

Overall in Sweden and Norway the total level of tobacco use has remained stable or slightly declined – what is important is that there has been a major shift away from smoking.

Snus can therefore be considered protective against smoking.

## **Might other factors in Sweden account for the switch to snus?**

No. Sweden has implemented fewer tobacco control measures than the UK. Laws on tobacco use and promotion are less strict than in the UK. They don't have a fully 'comprehensive' smoking ban. Smoking is allowed in designated purpose built smoking rooms in some workplaces and some public places like airport terminals. Smoking is also permitted in designated smoking areas outside in train stations and bus terminals. They don't have especially high tobacco taxes. There is a ban on tobacco advertising and promotion, but advertising and promotion is allowed at points of sale, as are tobacco product displays. There are total restrictions on tobacco sponsorships.

The clear difference between Sweden and the UK is due to snus. Overall the UK ranks number 1 in implementing tobacco control measures, whilst Sweden ranks joint 9th in 2016. Sweden gets better results with fewer controls on smoking.

<http://www.tobaccocontrolaws.org/legislation/country/sweden/summary>

## **What does the Royal College of Physicians, Tobacco Advisory Group say about snus?**

*'The availability and use of an oral tobacco product known as snus in Sweden, documented in more detail in our 2007 report...demonstrates proof of the concept that a substantial proportion of smokers will, given the availability of a socially acceptable and affordable consumer alternative offering a lower hazard to health, switch from smoked tobacco to the alternative product. Particularly among men, the availability of snus as a substitute for smoking has helped to reduce the prevalence of smoking in Sweden, which is now by far the lowest in Europe...Trends in snus use in Norway are similar to, and perhaps stronger than, those in Sweden, and there the use of snus is strongly associated with quitting smoking.'*

Royal College of Physicians, Tobacco Advisory Group (2016). Nicotine without smoke: Tobacco harm reduction

## **Legal status of snus**

Snus is banned from sale in the EU (except in Sweden). The UK Tobacco and Related Products Regulations 2016 and EU Tobacco Products Directive 2014 on which it is based states that 'no person may produce or supply tobacco for oral use'. Tobacco for oral use is defined as:

*A tobacco product which is – (a) intended for oral use, unless it is intended to be inhaled or chewed; and (b) in powder or particulate form or any combination of these forms, whether presented in a sachet portion or a porous sachet, or in any other way'.*

## **How did snus come to be banned?**

In 1989 the UK Oral Snuff (Safety) Regulations were passed in response to the introduction of the moist snuff marketed as 'Skoal Bandits'. This ban was quashed on appeal by the manufacturer.

In the EU, Directive 92/41 banned sales of snus, to harmonise rules in that three member states had already banned tobacco for oral use.



## **New Nicotine Alliance**

**Registered charity in England and Wales – number 1160481**

In 1995, on accession to the EU, Sweden obtained an exemption from the ban.

In 2001 the Tobacco Products Directive continued the ban.

The ban was also continued in the 2014 Tobacco Products Directive.