

SmokeLess New Zealand

www.smokeless.org.nz info@smokeless.org.nz ph 0274 884 375

[nasalsnuff.htm](#)

Printable version www.smokeless.org.nz/nasalsnuffMay06.pdf

Nasal snuff – providing a legal, recreational, satisfying, smokeless nicotine hit



Nasal snuff is tobacco, very finely ground to the dark brown powder seen here.

The 5 cm diameter tin is 1 cm in depth, and contains in the lid an oval dispensing slot on the side, for tapping out the snuff into the anatomical snuff box (between the tendons when the thumb is raised vertically) prior to sniffing it into the nose.

This brand of nasal snuff (Singletons) was imported by Swedish Match, Auckland and was manufactured in Sweden. It is approximately 63% tobacco, 19% moisture, 11% paraffin as moisturiser, 4% potassium carbonate to regulate its acidity, and 3% flavour.

Acute effects of use A pinch of nasal snuff is inhaled into each nostril instead of inhaling cigarette smoke into the lungs. For maximum effect, it is sniffed up into the top of the nose, rather than merely sniffing it into the nostrils. For an addicted smoker, nasal snuff produces tingling, eye watering, a pleasant stinging sensation, a light headedness and some increase in pulse rate, as with smoking a cigarette, in other words, a recognizable nicotine hit, within as little as 2 minutes. A two-finger pinch in each nostril should suffice. High levels of blood nicotine are achievable, but requires practice.

Sneezing is a frequent side-effect.

Historical status. Nasal snuffing was the most popular method of tobacco use in the 1700s in England and France, especially among upper

Long term risks of use. Quitting smoking is the safest course. For smokers unwilling to give up nicotine or tobacco, nasal snuff is the only legal way to sell and supply to New Zealand smokers within New Zealand, a satisfying smokeless nicotine hit. Nasal snuff is the only way nicotine addicts can reduce risk and still use tobacco.

In the absence of wide use in western countries in the 1900s, there is little evidence for or against nasal snuff.

Nasal snuff, having the same chemical content as oral snuff, is likely to have much the same effects as oral snuff: both are absorbed through mucosa with a rich blood supply. For oral snuff, extensive evidence of its risk is available.

<http://www.smokeless.org.nz/oralsnuff.htm> at Figure 1. See also www.smokeless.org.nz/tobaccocancers.htm

class men and women. Captain James Cook, however, was a pipe smoker, and thus New Zealand Maori people's first contact with tobacco in 1769 was with smoking, not snuffing.

Legal status. There is no ban on the import or sale of snuff for nasal use in New Zealand (NZ Customs letter to SmokeLess NZ, 2 June 06) or in certain parts of Australia (South Australia, Western Australia, Tasmania, and Northern Territory). It cannot be advertised in New Zealand. Currently nasal snuff is only available by internet mail order.

Ban on sale to under 18s Section 30 of the Act bars sale of tobacco products to under 18s. Nasal snuff is a tobacco product and so it cannot be sold or supplied to under-18s.

Prevalence of use. The only Western European country where nasal snuff is common is Iceland. Nasal snuff is the predominant form of snuff use in Iceland, where 3.7% of men use snuff, according to www.statveca.com. Cigarette companies have not promoted it, as it can be as satisfying as smoking a cigarette. The Icelandic mandatory warning states "Snuff and chewing tobacco may damage the mucous membranes." <http://www.cdc.gov/tobacco/who/iceland.htm>

Harmful constituents. Tobacco specific nitrosamine (TSNA) content in nasal snuff can vary from 1 to 1000 ppm of TSNA in samples from different parts of the world. TSNAs in Swedish Match products are under 5 ppm. (personal communication, I. Wahlberg, Senior Scientific Officer, Swedish Match, June 2006).

Price

Nasal snuff sold in New Zealand is likely to be less expensive -than cigarettes or oral snuff. See www.smokeless.org.nz/snus.htm at Table 1

Duration of use A year after stopping smoking, when the danger of relapse to smoking has greatly decreased, nasal snuff takers may wish to switch to nicotine gum or quit nicotine altogether, as nasal snuff has not had a long history of documented relatively-safe and widespread use, as is the case for snus.

Regulation of purity In Africa, snuff containing high levels of chromium (24 - 97 ppm) and other metals was suspected to be the cause of high rates of nasal cancer in African people in past years.¹

Nasal snuff in New Zealand is currently not subject to any regulation for purity. Regulations are needed to bar all snuffs unless low in nitrosamine and heavy metal levels, as are products sourced from Swedish Tobacco or if manufactured from the same tobaccos used in the manufacture of popular New Zealand cigarettes. See Table 2 at www.smokeless.org/snuffregulations.doc)

Addiction status. Nicotine addiction is common. Smokers take a fairly constant amount of nicotine each day, so smokers who take snuff instead, will smoke fewer cigarettes, and if concerned about their health, may decide to switch off cigarettes entirely. Snuff needs to be addictive or satisfying for the smoker to want to use it instead of a cigarette.

Pharmacology. A single pinch of snuff can raise nicotine plasma level from 20 ng/mL (due to previous snuffing) to 41ng/mL, an increase of 21 ng/mL within 5 minutes. This is similar to the levels found in heavy cigarette smokers, but the peak is quicker in snuff users. Nicotine absorption from snuff was faster than by oral absorption from non-inhaled cigar smoke.² After a single pinch of snuff, *occasional* snuff users obtain a small (2ng/mL) increase within 8-17 minutes, whereas *daily* snuff users raised their

Tax status In New Zealand, nasal snuff is taxed at the loose tobacco excise rate of 35 cents a gram. [On the basis of low risk and more moisture, SmokeLess New Zealand argues that the tax rate should be 3% of the 35 cents per gram loose tobacco rate, that is, 1 cent per gram. (see www.smokeless.org.nz/taxandrisk.htm) Nasal snuff is not taxed in the UK.

Price, consumption, use and nicotine intake

. In South Africa where snuff was 25% of the price of cigarettes, 13% of black women used snuff, while 5% smoked. Women using nasal snuff sniffed it four times a day, using 50-130 mg of nicotine per day, equal to the nicotine in 20 cigarettes.

nicotine level by 12.6 ng/mL, similar to the increase in nicotine obtained by a heavy cigarette smoker smoking a single cigarette.

Singleton Menthol (Swedish Match), one of the few brands for which we found independent data, sold in cans of 6 g tobacco, contained 1.8% of moisture, 0.6% nicotine by wet weight, 99% of which was in free base form, at a measured pH of 10.1.³ Nicotine delivery is likely to be very high, but plasma nicotine was not measured for this brand. One can lasts a regular user about 3 days.

Nasal snuff rivals cigarette smoking in nicotine blood levels attained

Table 1. Plasma nicotine levels attained by nasal snuffers and cigarette smokers

	Number of subjects	Single pinch of snuff or single cigarette, blood taken after 8-17 minutes		Multiple dosing	
		Average increase ng/mL	Peak value ng/mL	Average increase	Peak values ng/mL
Occasional snuff users	10	2			
Daily snuff users	8	12.6	36.1	54	75.4*
Heavy cigarette smokers	136	10.1	36.7		48.1**

*129.3 ng/mL was recorded in one user within 15 minutes

**obtained by rapid smoking for aversion treatment.

Russell MA. et al. 1981.⁴

Proposed Health warning for nasal snuff

This product is addictive, may cause disease, but is much less harmful than cigarettes.

Or (less informative)

This product may be harmful to your health

Conclusion

For stopping smoking, nasal snuff taking is a useful option for addicted cigarette smokers who have tried and failed with nicotine patches or gum.

The more effective choices smokers have, the more they are likely to succeed at quitting smoking.

Future in New Zealand

It remains unclear how popular nasal snuff will become. As continued smoking is some 20 times more likely to cause early death than snuffing, and nasal snuff is legal to sell in New Zealand, SmokeLess New Zealand believes smokers should be informed about snuff and decide for themselves.

1 Shapiro MP, Keen P, Cohen L, De Moor NG Malignant disease in the Transvaal. III Cancer of the respiratory tract. South African Med J 1955; 29: 96-101.

2 Russell MA, Jarvis MJ, Feyerabend C. A new age for snuff? Lancet 1980; 1: 474-5.

3. Ayo-Yusuf OA, Swart TJP, Pickworth WB. Nicotine delivery capabilities of smokeless tobacco products and implications for control of tobacco dependence in South Africa. Tob Control 2004; 13: 186-9.

4 Russell MAH, Jarvis MJ, Devitt G, Feyerabend C. Nicotine intake by snuff users. Br Med J 1981; 283: 814-7.

Dr Murray Laugesen QSO chair; Prof Ross McCormick, Sir John Scott KBE, Dr Tom Marshall OBE, Trish Fraser MPH, Trustees.

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