

SmokeLess New Zealand

www.smokeless.org.nz info@smokeless.org.nz

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For printable version click on www.smokeless.org.nz/fastnic.pdf

Faster-acting smokeless nicotine products

Faster-acting nicotine products are those producing a rapid increase in blood nicotine – more closely mimicking the effect of smoking a cigarette. Several products are in development.

Safety. Nicotine-only products have virtually zero risk, while the tobacco snuffs have about 5 percent of the risk of smoking. Ideally nicotine-only products should make tobacco snuffs unnecessary.

Acceptability These fast-acting products could provide nicotine to suit the tastes and preferences of many smokers, if priced attractively.

Efficacy. We cannot say at this stage whether fast-acting nicotine products will be sufficient to speed up the decrease in the percentage of adults who smoke. If fast acting nicotine cannot do it, attention will turn to the tobacco snuffs, as used in Sweden.

Addiction maintenance. Whether fast acting nicotine will maintain addiction is not yet known. To seriously reduce smoking, nicotine products have to persuade the addicted smoker to switch from cigarettes to self-dose with smokeless nicotine.

Figure 1. Plasma nicotine levels – contrast between cigarettes and NRT.

Please click on www.smokeless.org.nz/BldnicNRTcigs12Mar.pdf
This graph shows the effect of a single cigarette versus a single dose of various types of NRT over one hour.

The cigarette raises serum nicotine levels faster than most current medicinal nicotine replacement products. In the gap between the cigarette and the nicotine nasal spray nicotine plot line there is room for faster-release nicotine products to more nearly mimic the action of a cigarette. Oral snuff can also fill this gap.

www.smokeless.org.nz/snus.htm Fig 2, as may nasal snuff. www.smokeless.org.nz/nasalsnuff.htm

Figure 2. Pure nicotine in pouch form, placed under the upper lip. (research samples only).



Fast acting nicotine-only products include

- **Fast release nicotine gum.*** Not yet marketed.
- **Nicotine nasal spray.**This has been sold in New Zealand but is no longer stocked.
- **NicoNovum products:** Nicotine mouth spray, Nicotine lozenge, Nicotine granules in pouch form. Under research, 2007. www.niconovum.com

*Niaura R, Sayette M, Shiffman S, Glover ED, Nides M, et al. Comparative efficacy of rapid-release nicotine gum versus nicotine polacrilex gum in relieving smoking cue-provoked craving. *Addiction*. 2005 Nov; 100(11):1720-30.

Tobacco snuffs are also fast-acting nicotine products:

- **Snus** (finely ground tobacco) raises serum nicotine levels rapidly. www.smokeless.org.nz/snus.htm at Fig. 2. With further hourly doses, snus increases nicotine blood levels above the level from nicotine gum. www.smokeless.org.nz/BldnicSnus.pdf

Nasal snuff. Finely ground tobacco snuff can produce a nicotine effect within two minutes. No trials of the effects of this traditional form of tobacco have been conducted in New Zealand. Swedish Match will test market nasal snuff in 2007. www.smokeless.org.nz/nasalsnuff.htm

