A comparison of consumption behaviour in Swedish users of loose and portion snus

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Introduction
Snus is an oral moist snuff with a long history of use in Sweden. It is principally available in two forms: a loose form of compacted tobacco and a form with portions of the tobacco sealed in small sachets termed ‘pouches’. While the prevalence of snus use in Sweden is well documented (currently 24% in males and 3% in females) (1) there is very little published information on levels of consumption and usage behaviours either in Sweden or for smokeless tobacco products in other countries. To address the lack of detailed knowledge on current snus consumption patterns, we commissioned the Market Research Agency (MRA) GfK to conduct a telephone survey in 2007 & 2008 of adult snus users in Sweden, to obtain data on the frequency and duration of loose and pouched snus consumption, and to investigate behaviours associated with use. The data presented in this poster covers snus usage type, daily consumption (g/day) of male loose and pouched snus and duration of use.

Methods
The MRA telephoned people selected at random from Swedish telephone directories covering all regions of the country, the numbers in each region being broadly representative of the population distribution across Sweden. In total 63,707 people were contacted; 12,162 declined to participate 124 failed to complete the survey and 48,398 were rejected on the basis of the inclusion/exclusion criteria, leaving 3,003 participants. The pre-selection criteria for the interview were:
- Tobacco users who are daily snus users of at least one portion a day, aged between 18 and 72
- Not employed in particular industries such as marketing, tobacco or journalism

The survey lasted approximately 10 minutes and no incentive was given for taking part. Standard call-back procedures were used to verify the data for a sample of participants as a quality measure. The data was collated and analysed statistically using Minitab Software, Version 15.1. Data were sense-checked, and participants with missing key data or conflicting responses for the checking questions were eliminated from the survey, leaving a data-set comprising of 2,914 participants; 2,555 males and 359 females.

Results
Use of Loose and Pouched Snus
As shown in Fig. 1, female snus users showed a clear preference for use of pouched snus. By comparison, male respondents, were more evenly distributed between pouched and loose, with a small majority using pouched snus. The data also show significant polarization in type of snus use, with few respondents regularly using both loose and pouched, with a small majority using pouched snus.

Dual snus use respondents were questioned as to the frequency of use of each product type. A majority (96.8%) of dual snus users described using loose snus on a daily basis, whereas 63.5% described using pouched snus daily. These data, and subsequent questioning, suggest that dual snus users may be predominately loose snus users. A majority (96.8%) of dual snus users described using loose snus on a daily basis, whereas 63.5% described using pouched snus daily. These data, and subsequent questioning, suggest that dual snus users may be predominately loose snus users. A majority (96.8%) of dual snus users described using loose snus on a daily basis, whereas 63.5% described using pouched snus daily. These data, and subsequent questioning, suggest that dual snus users may be predominately loose snus users. A majority (96.8%) of dual snus users described using loose snus on a daily basis, whereas 63.5% described using pouched snus daily. These data, and subsequent questioning, suggest that dual snus users may be predominately loose snus users. A majority (96.8%) of dual snus users described using loose snus on a daily basis, whereas 63.5% described using pouched snus daily. These data, and subsequent questioning, suggest that dual snus users may be predominately loose snus users.

Snus Consumption in Males
Daily consumption (g/day) was calculated in two ways as follows:
1) Daily consumption = reported number of tins per day x snus weight in tin
2) Daily consumption = reported number of portions per day x portion weight

For loose snus, portion weight was calculated from the total weight of tobacco in a tin divided by the number of reported portions the snus users take per tin. For pouched snus, portion weight is that printed on the package of respondents main brand.

The average daily consumption estimates obtained for pouched and loose snus by the two different calculations were very similar, as shown in Table 1.

TABLE 1. Daily consumption of male snus users (g/day)

<table>
<thead>
<tr>
<th>Type</th>
<th>Calculated from tins</th>
<th>Calculated from portions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pouched snus</td>
<td>12.4</td>
<td>11.8</td>
</tr>
<tr>
<td>Loose snus</td>
<td>29.3</td>
<td>32.1</td>
</tr>
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The higher daily consumption of loose snus was primarily due to the larger portion size, as the numbers of packages or portions per day were very similar for loose and pouched snus (Fig. 2).

Conclusions
Frequency and duration of snus use was similar for both loose and pouched snus in males. The loose snus users had a higher daily consumption than pouched snus users. The key factor governing the increased amount of tobacco use seemed to be the much larger amount of tobacco that loose snus users take for each portion compared to the set portion weight for pouched snus. This survey has provided new insights into consumer behaviour and usage patterns for loose and pouched snus in Sweden.


Consumption Statistics
There were very few loose snus users taking less than 10 g/day, and a significant proportion using 50 g/day. By comparison, 50% of pouched snus users were consuming less than 10 g/day and very few respondents consumed over 25 g/day, as shown in Table 2.

TABLE 2. Daily consumption of male snus users (g/day)

<table>
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<tr>
<td>Calc. from tins</td>
<td>12.4 ± 7.20</td>
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<tr>
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<td>29.3 ± 16.50</td>
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Duration of Use
The survey examined usage time by querying the shortest, average and longest times portions and pouches were normally kept in the mouth during use. On average, the normal time that respondents kept either a loose portion or pouch in their mouths was slightly in excess of one hour (Fig. 3).

FIGURE 3. Duration of use

FIGURE 2A
Male Consumers of Pouched Snus
Traditionally, there are 24 portions/pouches in a tin. 0.5 tin = 12 portions/pouches

FIGURE 2B
Male Consumers of Loose Snus

FIGURE 2C
Daily usage

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Mean ± SD

Minimum

Maximum

1st Quartile

Median

75th Percentile

90th Percentile

95th Percentile

N

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