

Response to Health Canada's Consultation Document entitled "Reducing Youth Access and Appeal of Vaping Products"

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Canadian Adult Vaper's Flavour and Nicotine Preferences

About:

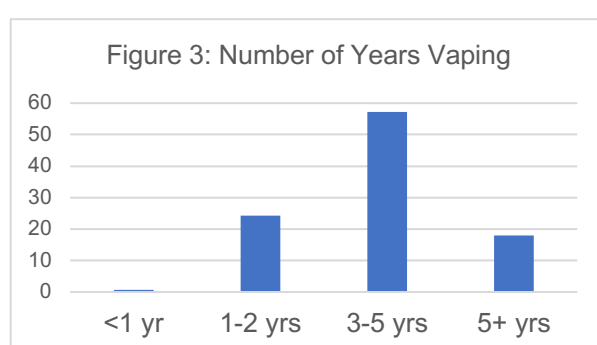
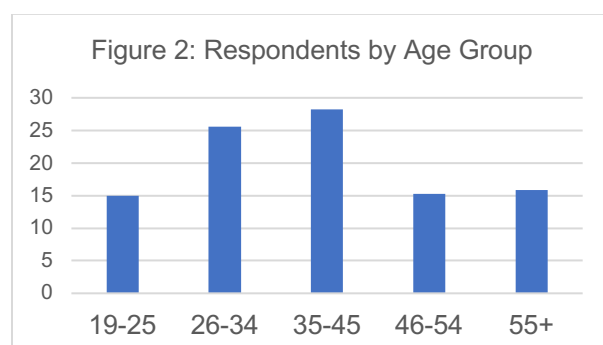
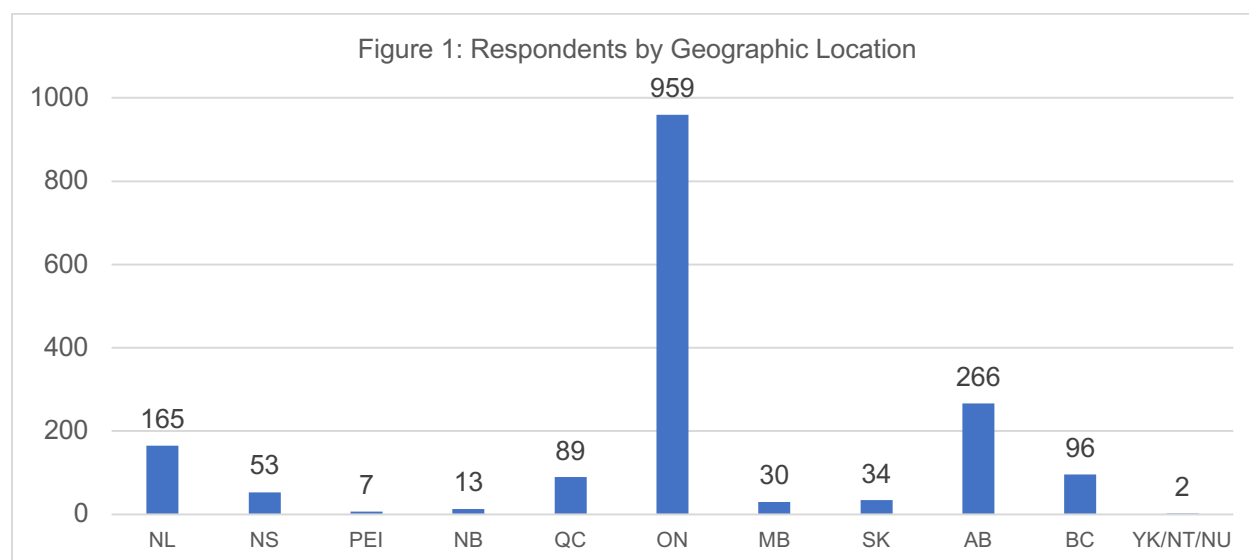
The data summary and conclusions provided within the following pages are in response to Health Canada's Consultation Document entitled "Reducing Youth Access and Appeal of Vaping Products."

Given time constraints, there is limited analytic commentary offered and the summary is not situated within a review of existing literature on vaping. Rather, the data summary represents the first stage in a research project that the author has been invited to join as an academic advisor. In the weeks following, data collection will continue, methodological adjustments will be made and the analysis will be deepened. The research team remains keen to explore the data in collaboration with Health Canada.

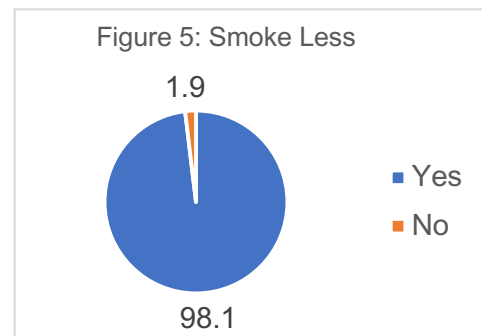
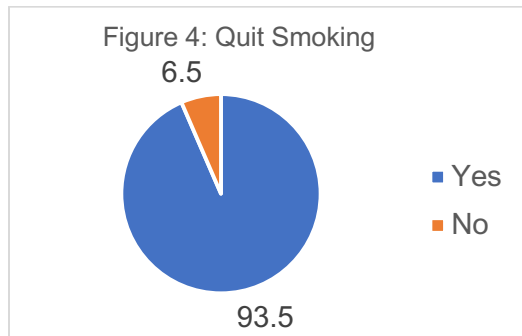
Please note that the research is not sanctioned by the author's place of employment and the involvement is independent, autonomous and without financial incentive.

Sample:

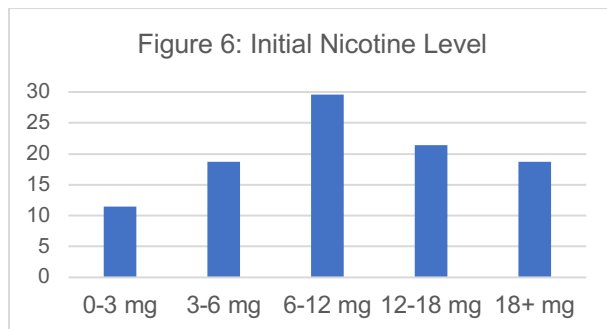
This submission is based on the results of an on-line survey conducted between 26 April and 20 May 2019. Responses were provided by a convenience sample of 1,714 Canadian adult vapers. Links to the survey were shared in online vaping forums and email list serves dedicated to the subject of vaping. Data collection is on going and the current growth rate suggests that the sample will double in size in a month's time. Responses were received from all provinces and territories (see Figure 1). Respondents ranged in age from 19-77 years (see Figure 2).



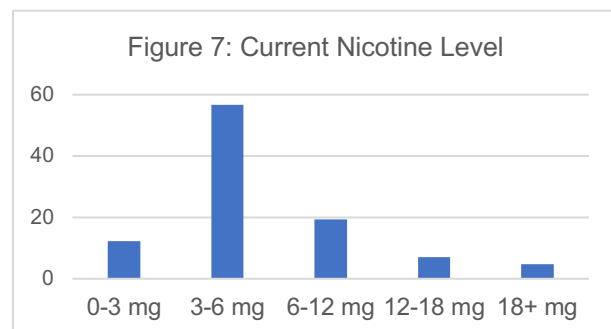
Respondents provided information on the number of years they have been vaping (see Figure 3), whether or not they had quit smoking because of vaping (see Figure 4) and whether they smoke less because of vaping (see Figure 5).



The survey also contained items regarding e-liquid flavours and nicotine levels. Figure 6 displays the nicotine strength that respondents initially used when they began vaping. Figure 7 shows current nicotine strength. Average nicotine strength was 13.4mg when vaping began and 5.1mg for current levels—a 62% decrease in strength.

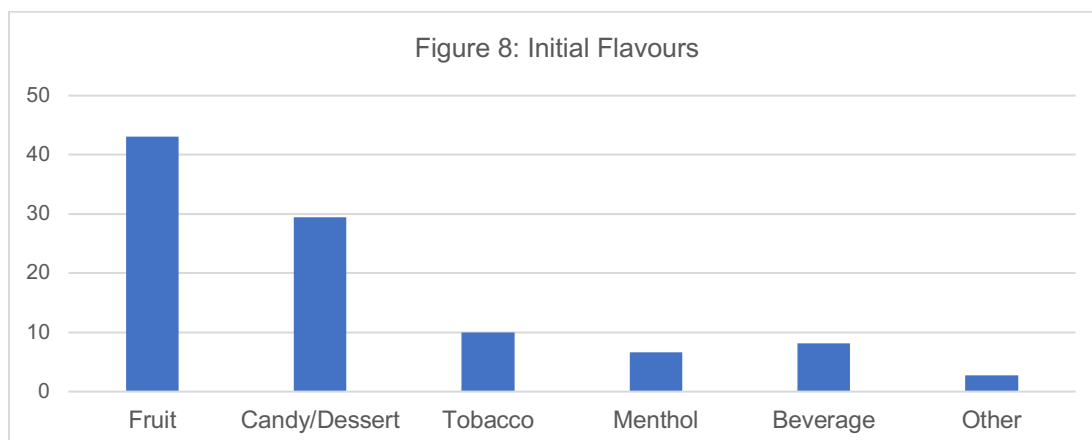


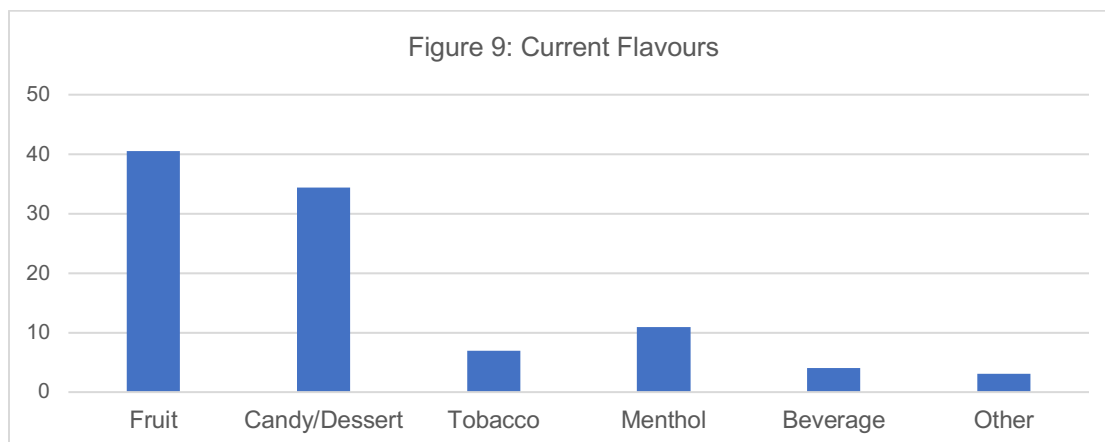
Note: 1.3% began vaping using 0 mg



Note: 5.5% currently use 0 mg

Respondents were also asked about the flavours they used when they began vaping (see Figure 8), as well as the flavours they currently use (see Figure 9). It should be noted that 96.8% reported using only one flavour when they began vaping, while 33.7% currently use a single flavour.





In terms of initial flavour choice, just 8.9% of respondents who had quit smoking because of vaping used tobacco flavour when they started vaping, and just 6.3% reported using menthol. These percentages rise among current vapers to 10.2% for tobacco and 15.5% for menthol.

Though based on a sample of just over 1,700 adults, these data support three strong conclusions:

1. Adult use vaping to quit smoking.

The vast majority (93.5%) of respondents reported quitting smoking because of vaping. Among the few respondents (112) who did not fully quit, 33 or 29.5% reported they were smoking less because of vaping.

2. Adult vapers need flavours.

Vapers begin using a single flavour that is almost never tobacco or menthol. As time passes, they increase the number and variety of flavours they use to remain smoke-free.

3. Adult smokers need higher nicotine levels to switch.

Smokers choose high nicotine levels to begin vaping, but then dramatically decrease their nicotine strength over time.

With respect to the Health Canada consultation, it seems clear that proposals to selectively promote vaping as an alternative to smoking for adults, while using education on the risks of vaping to prevent youth access are bound to lead to unintended consequences. Adult smokers will be confused and potentially discouraged from switching, and youth may be more attracted to a forbidden fruit (pun intended).

Based on the data in hand, and a considered examination of the existing literature, restricting flavours, nicotine strength, and online access will reduce the likelihood that adult smokers will successfully switch to vaping. That would be an enormous mistake for public health.

Data Tables:

Table 1: Respondents by Location

Province/Territory	Count	Percent
NL	165	9.6
NS	53	3.1
PEI	7	0.4
NB	13	0.8
QC	89	5.2
ON	959	56.0
MB	30	1.8
SK	34	2.0
AB	266	15.5
BC	96	5.6
YK/NT/NU	2	0.1

Table 2: Respondents by Age Group

Age Group	Count	Percent
19-25	257	15.0
26-34	438	25.6
35-45	484	28.2
46-54	262	15.3
55+	273	15.9

Table 3: Number of years vaping

Years Vaping	Count	Percent
<1 yr	11	0.6
1-2 yrs	416	24.3
3-5 yrs	980	57.2
5+ yrs	307	17.9

Table 4: Quit smoking because of vaping

Quit Smoking	Count	Percent
Yes	1602	93.5
No	112	6.5

Table 5: Smoke less because of vaping

Smoke Less	Count	Percent
Yes	1681	98.1
No	33	1.9

Table 6: What nicotine level did you start with?

Initial Nicotine Level	Count	Percent
0-3 mg	197	11.5
3-6 mg	319	18.7
6-12 mg	505	29.6
12-18 mg	366	21.4
18+ mg	320	18.7

Note: 1.3% began vaping using 0 mg nicotine

Table 7: What nicotine level do you vape?

Current Nicotine Level	Count	Percent
0-3 mg	206	12.3
3-6 mg	950	56.7
6-12 mg	323	19.3
12-18 mg	118	7.0
18+ mg	78	4.7

Note: 5.5% currently use 0 mg nicotine

Table 8: Initial Flavours

Initial Flavours	Count	Percent
Fruit	692	43.1
Candy/Dessert	474	29.5
Tobacco	160	10.0
Menthol	106	6.6
Beverage	131	8.2
Other	43	2.7

Table 9: Current Flavours

Current Flavours	Count	Percent
Fruit	1006	40.5
Candy/Dessert	854	34.4
Tobacco	175	7.0
Menthol	271	10.9
Beverage	101	4.1
Other	76	3.1