

Supplemental Tables

Switching from usual brand cigarettes to a tobacco-heating cigarette or snus: Part 1.

Supplemental Table 1. Smoke chemistry data for study cigarettes^a				
CFM Method Measures^b	Eclipse	Eclipse Menthol	Camel Ultra Light	Salem Ultra Light
'Tar' (mg/cig)	4.8 (0.5)	4.5 (0.5)	4.7 (0.2)	5.3 (0.2)
Nicotine (mg/cig)	0.23 (0.02)	0.20 (0.02)	0.42 (0.01)	0.45 (0.03)
Carbon monoxide (mg/cig)	3.6 (0.2)	3.6 (0.2)	6.3 (0.3)	7.2 (0.4)
Acrolein (µg/cig)	26.4 (2.4)	27.3 (2.5)	29.5 (1.2)	30.6 (1.7)
Crotonaldehyde (µg/cig)	8.1 (0.5)	7.9 (0.8)	6.1 (0.5)	6.2 (0.4)
2-Aminonaphthalene (ng/cig)	0.67 (0.05)	0.58 (0.04)	4.9 (0.3)	4.7 (0.3)
4-Aminobiphenyl (ng/cig)	0.18 (0.01)	0.15 (0.01)	0.85 (0.03)	0.82 (0.03)
NNN (ng/cig)	9.2 (0.8)	9.3 (1.0)	45.2 (2.6)	38.8 (1.5)
NNK (ng/cig)	15.2 (0.8)	14.5 (1.4)	27.7 (2.0)	26.3 (2.0)
Benzo(a)pyrene (ng/cig)	2.4 (0.3)	2.4 (0.4)	3.6 (0.4)	4.0 (0.5)
Benzene (µg/cig)	11.5 (2.3)	11.8 (2.6)	24.7 (1.7)	26.6 (1.6)
1,3-Butadiene (µg/cig)	6.2 (0.3)	5.5 (0.5)	21.4 (0.7)	26.2 (1.1)
Acrylamide (µg/cig)	<0.12	<0.12	0.80 (0.08)	1.08 (0.09)

^aSmoke generated for analysis by the Cambridge Filter Method (CFM) (FTC, 1967; 1980)
^bAnalyte mean (standard deviation); n=8 for 'tar', nicotine, and carbon monoxide; n=6 otherwise

Supplemental Table 2. Quality assurance data for study snus			
Measures^a	Camel SNUS Frost	Camel SNUS Spice	Camel SNUS Original
pH	7.45 – 7.84 (7.55; 0.16)	7.33 – 7.85 (7.54; 0.23)	7.62 – 7.82 (7.73; 0.08)
Moisture (%)	32.2 – 34.4 (33.4; 0.9)	31.9 – 34.5 (33.3; 1.0)	32.7 – 33.1 (33.0; 0.2)
Nicotine (%) ^b	1.45 – 1.60 (1.52; 0.07)	1.29 – 1.76 (1.53; 0.20)	1.18 – 1.56 (1.35; 0.16)

^aAnalyte range (mean; standard deviation) across the 5 snus lots used in the study
^bAs-is (i.e. "wet") basis

Supplemental Table 3. Representative product chemistry data for study snus^a			
Measures^b	Camel SNUS Frost	Camel SNUS Spice	Camel SNUS Original
pH	7.72 (0.02)	7.81 (0.02)	7.95 (0.03)
Moisture (%)	32.2 (0.1)	32.2 (0.5)	31.9 (0.6)
Nicotine (mg/g) ^c	14.1 (0.11)	13.4 (0.62)	13.5 (0.29)
NNN (ng/g)	1009 (38)	984 (5)	1082 (24)
NAT (ng/g)	874 (13)	824 (19)	964 (50)
NAB (ng/g)	75 (32)	68 (31)	100 (22)
NNK (ng/g)	345 (52)	250 (19)	322 (22)
Benzo(a)pyrene (ng/g)	1.9 (0.2)	1.8 (0.1)	1.3 (0.1)

^aSelected market survey data adapted from Borgerding et al. (2012) for Camel SNUS purchased at retail, April-June 2007
^bAnalyte mean (standard deviation), n=3; all values expressed on a dry-weight basis unless otherwise noted
^cAs-is (i.e. "wet") basis