Supplemental Tables:

Table S1: Number of questions asked in each survey

Survey	Number of top- level questions	Total number of possible questions	Median Number of Questions Answered	Median Time to Complete Survey (seconds)
SES	11	11	11	137
Caffeine Intake	6	36	10	82
Allergies	11	263	73	426
Tobacco	3	15	7	13

Table S2a: Breakdown of survey response platforms for each analyzed survey

Survey	Responding on Web	Responding on Mobile App
(n overall)	n (%)	n (%)

SES (417,927)	375,425 (89.8%)	42,502 (10.2%)
Caffeine Intake (118,480)	92,989 (78.5%)	25,491 (21.5%)
Allergies (146,502)	124,230 (84.8%)	22,272 (15.2%)
Tobacco (273,257)	244,852 (89.6%)	28,405 (10.4%)

Table S2b: Breakdown of mobile responses between app type

Survey	Responding on Android	Responding on iOS
(n on mobile)	n (%)	n (%)
SES (42,502)	5,005 (11.8%)	37,497 (88.2%)
Caffeine Intake (25,491)	3,593 (14.1%)	21,898 (85.9%)
Allergies (22,272)	2,726 (12.2%)	19,546 (87.8%)
Tobacco (28,405)	3,602 (12.7%)	24,803 (87.3%)

Table S3: Comparison of age between mobile app users and web users for each survey

Survey	Platform	Younger Group	Older Group	Chi-square p- value
SES	Mobile App	30,672 (81.3%)	7,065 (18.7%)	<2.2e-16
	Web	196,501 (54.3%)	165,205 (45.7%)	
Caffeine Intake	Mobile App	19,802 (81.2%)	4,597 (18.8%)	<2.2e-16

	Web	40,179 (43.5%)	52,171 (56.5%)	
Allergies	Mobile App	16,374 (83.4%)	3,260 (16.6%)	<2.2e-16
	Web	61,809 (51.9%)	57,379 (48.1%)	
Tobacco	Mobile App	23,432 (83.1%)	4,779 (16.9%)	<2.2e-16
	Web	116,353 (47.5%)	128,368 (52.5%)	

Table S4: Comparison of race between mobile app users and web users in each survey

Survey	Platform	European n (%)	Non-European n (%)	Chi-square p- value
SES	Mobile App	29,486 (69.4%)	13,016 (30.6%)	<2.2e-16
	Web	296,171 (78.9%)	79,254 (21.1%)	
Caffeine Intake	Mobile App	18,398 (72.2%)	7,093 (27.8%)	<2.2e-16
	Web	77,224 (83.0%)	15,765 (17.0%)	
Allergies	Mobile App	15,415 (69.2%)	6,857 (30.8%)	<2.2e-16
3 7	Web	99,172 (79.8%)	25,058 (20.2%)	
Tobacco	Mobile App	19,749 (69.5%)	8,656 (30.5%)	<2.2e-16
	Web	200,029 (81.7%)	44,823 (18.3%)	

Table S5: Comparison of sex between mobile app users and web users in each survey

Survoy	Platform	Male	Female	Chi-square p-
Survey	Piationiii	n (%)	n (%)	value
SES	Mobile App	21,281 (50.1%)	21,221 (49.9%)	<2.2e-16
	Web	140,423 (37.4%)	235,002 (62.6%)	
Caffeine Intake	Mobile App	11,131 (43.7%)	14,360 (56.3%)	<2.2e-16
	Web	32,597 (35.1%)	60,392 (64.9%)	
Allergies	Mobile App	11,116 (49.9%)	11,156 (50.1%)	<2.2e-16
C	Web	47,890 (38.5%)	76,340 (61.5%)	
Tobacco	Mobile App	13,445 (47.3%)	14,960 (52.7%)	<2.2e-16
	Web	94,184 (38.5%)	150,668 (61.5%)	

Table S6: Proportion of customers completing the survey for each survey platform

Survey	Platform	Completed survey	Did not complete survey	Chi-square p- value
SES	Mobile App	37,737 (88.8%)	4,765 (11.2%)	<2.2e-16
	Web	361,710 (96.4%)	13,715 (3.6%)	
Caffeine Intake	Mobile App	24,400 (95.7%)	1,091 (4.3%)	<2.2e-16
	Web	92,251 (99.3%)	638 (0.7%)	2.20 10

Allergies	Mobile App	19,634 (88.2%)	2,638 (11.8%)	<2.2e-16
	Web	119,188 (95.9%)	5,042 (4.1%)	12.20
Tobacco	Mobile App	28,213 (99.3%)	192 (0.7%)	<2.2e-16
	Web	244,727 (99.9%)	125 (0.1%)	

Table S7: Proportion of customers skipping free text question in each survey

Survey	Platform	Skipped	Did not skip	Chi-square p- value
SES	Mobile App	4,906 (11.7%)	36,097 (88.3%)	0.0063
	Web	45,651 (12.2%)	328,701 (87.8%)	
Allergies	Mobile App	316 (10.5%)	2,681 (89.5%)	<2.2e-16
	Web	1,064 (5.9%)	16,859 (94.1%)	
Tobacco	Mobile App	681 (7.8%)	8,045 (92.2%)	<2.2e-16
	Web	5,811 (4.3%)	129,114 (95.7%)	

Table S8: Proportion of customers skipping checkbox question in each survey

Survey	Platform	Skipped	Did not skip	Chi-square p- value
SES	Mobile App	2,911 (7.3%)	36,891 (92.7%)	0.0049

	Web	25,081 (6.9%)	336,630 (93.1%)	
Allergies	Mobile App	8 (1.8%)	446 (98.2%)	0.5924
J	Web	49 (1.3%)	3,640 (98.7%)	

Table S9: Proportion of customers skipping radio button question in each survey

Survey	Platform	Skipped	Not skipped	Chi-square p- value
SES	Mobile App	1,042 (2.6%)	39,359 (97.4%)	0.0016
	Web	8,438 (2.3%)	354,118 (97.7%)	
Caffeine Intake	Mobile App	21 (0.1%)	25,468 (99.9%)	0.04914
	Web	44 (<0.1%)	92,945 (>99.9%)	
Allergies	Mobile App	26 (0.1%)	22,242 (99.9%)	0.901
	Web	138 (0.1%)	124,091 (99.9%)	
Tobacco	Mobile App	33 (0.4%)	8,677 (99.6%)	0.001118
	Web	962 (0.7%)	141,345 (99.3%)	