

Supplementary Table 2. General characteristics of study participants according to tertiles of energy intake (%) from ultra-processed foods based on 24-hour dietary recall data among adults aged 19–40 years in the Korea National Health and Nutrition Examination Survey (2021–2023) (n = 3,859)

Variables	Total	Tertile of energy intake (%) from UPF (full 24 hr recall)			P-value
		T1 (lowest)	T2 (middle)	T3 (highest)	
Total	3,859 (100)	1,279 (34.0)	1,278 (33.3)	1,278 (32.8)	
Gender					0.074
Men	1,714 (44.7)	596 (35.8)	572 (32.9)	546 (31.3)	
Women	2,121 (55.3)	683 (32.0)	706 (33.6)	732 (34.4)	
Education level					0.041
Elementary school graduate or less	11 (0.3)	4 (36.8)	2 (22.2)	5 (41.1)	
Middle school graduate	53 (1.4)	29 (51.5)	11 (19.6)	13 (28.9)	
High school graduate	1,310 (35.4)	408 (31.3)	435 (33.6)	467 (35.1)	
College graduate or more	2,327 (62.9)	790 (34.9)	795 (33.9)	742 (31.2)	
Household type					< 0.001
Single	533 (13.9)	135 (25.0)	180 (34.4)	218 (40.7)	
Living together	3,302 (86.1)	1,144 (35.3)	1,098 (33.1)	1,060 (31.6)	
Household income					0.350
Q1 (lowest)	216 (5.6)	67 (29.5)	171 (30.7)	86 (39.8)	
Q2	482 (12.6)	154 (32.8)	171 (36.0)	157 (31.2)	
Q3	895 (23.4)	326 (36.8)	288 (30.7)	281 (32.5)	
Q4	1,156 (30.2)	377 (33.1)	396 (34.6)	383 (32.3)	
Q5 (highest)	1,080 (28.2)	352 (33.8)	358 (33.4)	370 (32.9)	
Alcohol					0.839
No	409 (11.3)	143 (34.8)	137 (33.0)	129 (32.2)	
Yes	3,216 (88.7)	1,046 (33.3)	1,091 (34.0)	1,079 (32.8)	
Smoking					0.295
No	699 (50.58)	244 (35.7)	241 (34.2)	214 (30.0)	
Yes	683 (49.42)	225 (33.9)	222 (32.4)	236 (33.7)	
Physical activity					0.597
No	1476 (41.3)	499 (34.6)	488 (32.6)	489 (32.9)	
Yes	2094 (58.7)	690 (33.3)	708 (34.3)	696 (32.4)	

The frequency (n) is unweighted, and the percentage (%) is weighted.

The *P*-values were calculated using the Rao–Scott χ^2 test, accounting for the complex survey design (stratification, clustering, and weighting).

UPF, ultra-processed food