

Table S1. The energy and nutrient intake of Korean adults according to the level of energy intake from carbohydrate.

	<45% than 45% (n = 527)	45–50% 50% (n = 459)	50–55% 55% (n = 740)	55–60% 60% (n = 1037)	60–65% 65% (n = 1342)	65–70% 70% (n = 1281)	70–75% 75% (n = 1116)	≥75% (n = 1064)	p ¹
	Mean ± SE								
Energy (kcal)	2292 ± 45 ^{a,2}	2156 ± 42 ^b	2090 ± 34 ^b	2053 ± 28 ^b	1932 ± 22 ^c	1898 ± 23 ^c	1778 ± 25 ^d	1684 ± 26 ^e	<0.001
Protein (g)	117.6 ± 2.7 ^a	99.7 ± 2.2 ^b	91.4 ± 1.8 ^c	82.7 ± 1.2 ^d	73.9 ± 0.9 ^e	67.3 ± 0.9 ^f	57.6 ± 0.8 ^g	47.3 ± 0.8 ^h	<0.001
Fat (g)	105.9 ± 2.6 ^a	80.7 ± 1.8 ^b	69.6 ± 1.2 ^c	59.9 ± 0.9 ^d	47.4 ± 0.6 ^e	38.9 ± 0.5 ^f	29.0 ± 0.4 ^g	17.7 ± 0.3 ^h	<0.001
Vitamin A (µg RAE)	543 ± 44 ^a	452 ± 24 ^{ab}	449 ± 16 ^a	408 ± 12 ^{abc}	416 ± 24 ^{ab}	359 ± 11 ^{bc}	328 ± 10 ^c	267 ± 16 ^d	<0.001
Thiamin (mg)	2.38 ± 0.08 ^a	2.01 ± 0.05 ^b	1.95 ± 0.04 ^b	1.87 ± 0.03 ^b	1.66 ± 0.02 ^c	1.63 ± 0.03 ^c	1.52 ± 0.02 ^c	1.40 ± 0.02 ^d	<0.001
Riboflavin (mg)	2.09 ± 0.05 ^a	1.83 ± 0.05 ^b	1.78 ± 0.03 ^b	1.70 ± 0.02 ^b	1.55 ± 0.02 ^c	1.44 ± 0.02 ^d	1.23 ± 0.02 ^e	0.99 ± 0.02 ^f	<0.001
Niacin (mg)	23.3 ± 0.7 ^a	19.9 ± 0.5 ^b	19.3 ± 0.4 ^b	17.1 ± 0.3 ^c	15.0 ± 0.2 ^d	14.1 ± 0.2 ^e	12.5 ± 0.2 ^f	11.0 ± 0.2 ^g	<0.001
Vitamin C (mg)	66 ± 4 ^d	69 ± 3 ^d	82 ± 4 ^{bc}	80 ± 3 ^c	80 ± 3 ^{bc}	86 ± 4 ^{bc}	89 ± 4 ^{ab}	101 ± 4 ^a	<0.001
Calcium (mg)	529 ± 17 ^b	545 ± 17 ^{ab}	536 ± 11 ^{ab}	553 ± 11 ^a	532 ± 9 ^a	502 ± 8 ^b	463 ± 9 ^b	392 ± 7 ^c	<0.001
Iron (mg)	16.4 ± 0.5	16.7 ± 0.5	16.7 ± 0.5	15.7 ± 0.3	15.2 ± 0.3	14.8 ± 0.3	14.7 ± 0.4	13.5 ± 0.3	0.062

Note: The data were analyzed using the complex sample module. <45%: less than 45%, 45–50%: 45% to less than 50%, 50–55%: 50% to less than 55%, 55–60%: 55% to less than 60%, 60–65%: 60% to less than 65%, 65–70%: 65% to less than 70%, 70–75%: 70% to less than 75%, and ≥75%: 75% or more.¹ For energy by ANCOVA with sex and age as covariates. For the rest of nutrients by ANCOVA with total energy intake in addition to sex and age.² Post-hoc test: Holm–Bonferroni, a > b > c > d > e > f > g > h.

Table S2. The food group intake of Korean adults according to the level of energy intake from carbohydrate.

	<45% (n=527)	45–50% (n=459)	50–55% (n=740)	55–60% (n=1037)	60–65% (n=1342)	65–70% (n=1281)	70–75% (n=1116)	≥75% (n=1064)	<i>p</i> ¹
	Mean ± SE								
Grains	205 ± 6 ^{h2}	275 ± 9 ^g	301 ± 7 ^f	329 ± 6 ^e	325 ± 4 ^d	348 ± 5 ^c	361 ± 7 ^b	372 ± 8 ^a	<0.001
Meat·fish·eggs·legumes	511 ± 13 ^a	422 ± 15 ^b	377 ± 10 ^c	325 ± 7 ^d	290 ± 6 ^e	265 ± 7 ^f	217 ± 7 ^g	151 ± 6 ^h	<0.001
Vegetables	321 ± 10 ^c	337 ± 14 ^{ab}	344 ± 10 ^{ab}	335 ± 9 ^{ab}	329 ± 6 ^b	364 ± 8 ^a	354 ± 8 ^{ab}	345 ± 10 ^{ab}	<0.001
Fruits	101 ± 8 ^g	109 ± 9 ^{fg}	129 ± 8 ^{ef}	161 ± 9 ^{de}	172 ± 8 ^{cd}	191 ± 9 ^{bc}	207 ± 10 ^b	295 ± 13 ^a	<0.001
Dairy products	90 ± 9 ^{bcde}	114 ± 9 ^{abc}	102 ± 6 ^{bcd}	111 ± 6 ^{ab}	104 ± 5 ^{abc}	83 ± 4 ^{cd}	66 ± 4 ^d	43 ± 3 ^e	<0.001

Note: The data were analyzed using the complex sample module. <45%: less than 45%, 45–50%: 45% to less than 50%, 50–55%: 50% to less than 55%, 55–60%: 55% to less than 60%, 60–65%: 60% to less than 65%, 65–70%: 65% to less than 70%, 70–75%: 70% to less than 75%, and ≥75%: 75% or more.¹ By ANCOVA with sex, age and the total energy intake as covariates. ² Post-hoc test: Holm–Bonferroni, a > b > c > d > e > f > g > h.

Table S3. The biochemical indices of Korean adults according to the level of energy intake from carbohydrate.

	<45% (n=527)	45–50% (n=459)	50–55% (n=740)	55–60% (n=1037)	60–65% (n=1342)	65–70% (n=1281)	70–75% (n=1116)	≥75% (n=1064)	p ¹
	Mean ± SE								
Systolic blood pressure (mmHg)	114.3±0.6	114.4±0.7	113.9±0.4	113.7±0.5	115.1±0.4	116.0±0.4	116.6±0.5	117.8±0.6	0.454
Diastolic blood pressure (mmHg)	76.3±0.5	76.4±0.5	76.2±0.4	76.0±0.3	76.3±0.3	76.8±0.3	77.2±0.3	76.4±0.3	0.094
BMI (kg/m ²)	24.3±0.1	23.7±0.2	23.9±0.1	23.8±0.1	23.7±0.1	23.9±0.1	23.7±0.1	23.9±0.1	0.166
Waist circumference (cm)	82.2±0.5	81.2±0.5	81.7±0.4	81.4±0.3	81.1±0.3	81.9±0.3	81.2±0.3	81.9±0.4	0.273
Triglyceride (mg/100mL)	139±7	141±8	137±6	136±4	135±3	145±4	135±4	143±3	0.897
Total cholesterol (mg/100mL)	191±1 ^{a2}	193±1 ^a	191±1 ^{ab}	194±1 ^a	194±1 ^a	196±1 ^a	194±1 ^{ab}	193±1 ^b	0.005
HDL-cholesterol (mg/100mL)	53.0±0.5 ^a	52.9±0.6 ^{ab}	52.0±0.5 ^{abc}	52.2±0.4 ^{ab}	52.4±0.4 ^{ab}	51.1±0.3 ^{bc}	51.3±0.4 ^{bc}	50.3±0.4 ^c	<0.001
LDL-cholesterol (mg/100mL)	117±4	121±4	119±3	115±2	123±2	120±2	122±3	115±2	0.403
Fasting glucose (mg/100mL)	95.5±0.9	96.4±0.8	95.8±0.6	96.2±0.6	98.8±0.8	98.0±0.6	98.1±0.6	102.6±1.0	0.222

Note: The data was analyzed using the complex sample module. <45%: less than 45%, 45–50%: 45% to less than 50%, 50–55%: 50% to less than 55%, 55–60%: 55% to less than 60%, 60–65%: 60% to less than 65%, 65–70%: 65% to less than 70%, 70–75%: 70% to less than 75%, and ≥75%: 75% or more.¹

By ANCOVA with sex and age as covariates. ² Post-hoc test: Holm–Bonferroni, a> b > c.