

Supplementary Table S1. Baseline characteristics of the study population by included or not

Characteristics	Included in the analysis	Unincluded in the analysis
Participants	6,628	121,212
Age (year)	54.11 ± 9.89	52.78 ± 12.70
Female, <i>N</i> (%)	4,093 (61.75)	58,964 (60.11)
High school or above, <i>N</i> (%)	819 (12.38)	13,725 (14.01)
Southern, <i>N</i> (%)	5,193 (78.35)	49,406 (50.37)
Urban residents, <i>N</i> (%)	531 (8.01)	7,354 (7.50)
Per-capita household income ≥1,000 CNY/month, <i>N</i> (%)	1,057 (15.98)	15,199 (15.56)
Current smoker, <i>N</i> (%)	1,593 (24.19)	24,035 (24.59)
Alcohol drinker <i>N</i> (%)	1,620 (24.48)	20,110 (20.53)
Ideal physical activity, <i>N</i> (%)	4,737 (71.47)	64,382 (65.64)
Ideal diet score, <i>N</i> (%)	3,806 (57.42)	48,923 (49.88)
Family history of CVD, <i>N</i> (%)	2,023 (30.52)	25,276 (25.77)
Obesity, <i>N</i> (%)	835 (12.60)	12,267 (12.51)
Hypertension, <i>N</i> (%)	2,723 (41.10)	35,826 (36.60)
Diabetes mellitus, <i>N</i> (%)	351 (5.62)	6,444 (6.97)
Dyslipidemia, <i>N</i> (%)	1,830 (29.21)	28,382 (30.67)
Fruit and vegetable, g/d	400 (250, 536)	408 (254, 550)

Note. Continuous variables are presented as mean ± standard deviation or median (interquartile range) and categorical variables are presented as number (percentages). AVI, arterial velocity–pulse index; API, arterial pressure–volume index; CVD, cardiovascular disease.

Supplementary Table S2. The upper reference range of AVI in different age

Age (years)	18–23	24–26	27–28	29–35	36–37	38–40	41–43	44–46	47–49	50–52	53–54	55–57	58–59	60–61	62–63	64–65	66–67	68–69	70–72	73–75	76–77	78–79	≥ 80		
Upper AVI	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39

Note. AVI, arterial velocity–pulse index.

Supplementary Table S3. The upper reference range of API in different age

Age (years)	18–26	27–32	33–37	38–43	44–47	48–54	55–58	59–62	63–66	67–71	72–77	78–79	≥ 80
Upper API	22	23	24	25	26	27	28	29	30	31	32	33	33

Note. API, arterial pressure–volume index.

Supplementary Table S4. Sensitivity analyses for associations of per 100 g/d increment in fruit and vegetable intake with AVI and API

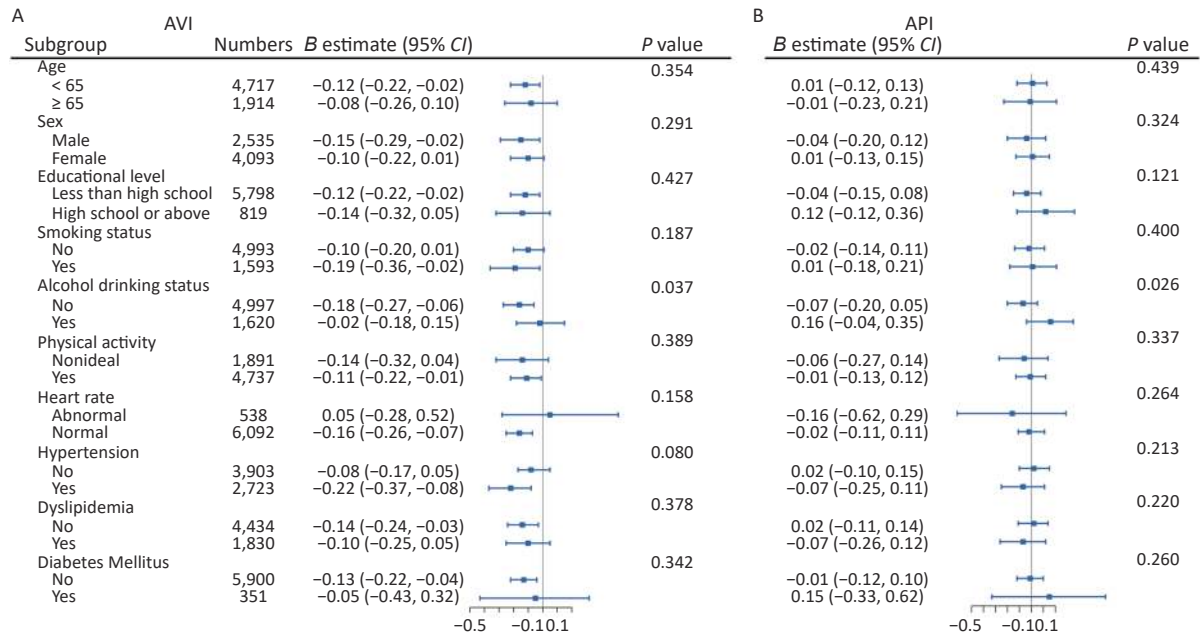
Variables	B estimate	95% CI	P value
Exclusion of CVD events			
AVI			
Model 1	-0.17	-0.27, -0.07	< 0.001
Model 2	-0.12	-0.21, -0.04	0.006
Model 3	-0.12	-0.22, -0.03	0.010
API			
Model 1	0.03	-0.09, 0.15	0.591
Model 2	-0.01	-0.12, 0.10	0.870
Model 3	0.03	-0.09, 0.14	0.645
Adjusted obesity, hypertension, diabetes, and dyslipidemia replace BMI, SBP, HDL-C, LDL-C, fasting glucose level and drug use for hypertension, diabetes, and dyslipidemia			
AVI			
Model 1	-0.16	-0.26, -0.06	< 0.001
Model 2	-0.11	-0.19, -0.02	0.014
Model 3	-0.13	-0.21, -0.04	0.005
API			
Model 1	0.03	-0.07, 0.13	0.597
Model 2	-0.01	-0.11, 0.09	0.832
Model 3	-0.02	-0.13, 0.08	0.681

Note. Model 1 adjusted for age, sex, region, urbanization, cohorts, and educational level. Model 2 adjusted for age, sex, region, urbanization, cohorts, educational level, smoking, drinking, ideal physical activity, ideal diet score, heart rate, family history of CVD, and body mass index. Model 3 adjusted for age, sex, region, urbanization, educational level, ideal physical activity, ideal diet score, family history of CVD, body mass index, systolic blood pressure, fasting glucose level, high-density lipoprotein cholesterol and low-density lipoprotein cholesterol. AVI, arterial velocity–pulse index; API, arterial pressure–volume index; CI, confidence interval; CVD, cardiovascular disease; BMI, body mass index; SBP, systolic blood pressure; HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol.

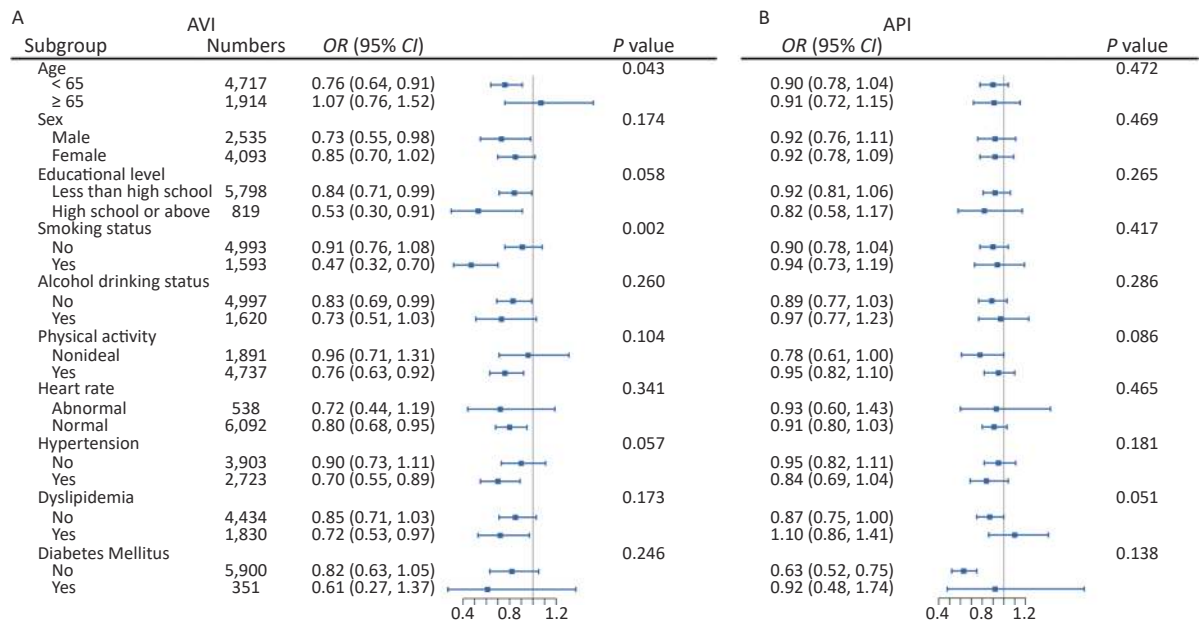
Supplementary Table S5. Baseline characteristics by fruit and vegetable intake change

Variables	Total	Maintaining < 500 g/d	Increasing from < 500 g/d to ≥ 500 g/d	Decreasing from ≥ 500 g/d to < 500 g/d	Maintaining ≥ 500 g/d	P value
Participants	6,481	2,668	1,446	1,290	1,077	
Age (year)	54.14 ± 9.85	53.33 ± 10.67	54.94 ± 9.47	54.76 ± 9.57	54.33 ± 8.28	< 0.001
Female, <i>N</i> (%)	4,007 (61.82)	1,651 (61.88)	885 (61.20)	810 (62.79)	661 (61.37)	0.840
High school or above, <i>N</i> (%)	803 (12.41)	235 (8.82)	177 (12.27)	144 (11.17)	247 (22.98)	< 0.001
Southern, <i>N</i> (%)	5,090 (78.54)	2,427 (90.97)	901 (62.31)	1,139 (88.29)	623 (57.85)	< 0.001
Urban residents, <i>N</i> (%)	524 (8.09)	110 (4.12)	142 (9.82)	56 (4.34)	216 (20.06)	< 0.001
Per-capita household income ≥ 1,000 CNY/month, <i>N</i> (%)	1,042 (16.12)	462 (17.38)	207 (14.32)	172 (13.37)	201 (18.68)	< 0.001
Maintaining smoke status, <i>N</i> (%)	811 (12.60)	379 (14.30)	155 (12.11)	164 (11.43)	113 (10.56)	0.093
Maintaining drink status, <i>N</i> (%)	846 (13.09)	388 (14.56)	187 (14.53)	149 (10.33)	122 (11.40)	< 0.001
Maintaining Ideal physical activity, <i>N</i> (%)	1,852 (28.58)	778 (29.16)	348 (26.98)	407 (28.15)	319 (29.62)	< 0.001
Maintaining Ideal diet score, <i>N</i> (%)	2,278 (35.15)	889 (33.32)	469 (36.36)	494 (34.16)	426 (39.55)	< 0.001
Family history of CVD, <i>N</i> (%)	1,992 (30.74)	963 (36.09)	395 (27.32)	350 (27.13)	284 (26.37)	< 0.001
Heart rate change (beats/min)	-0.78 ± 11.86	-0.09 ± 11.99	-1.46 ± 11.45	-0.40 ± 11.52	-2.03 ± 12.36	< 0.001
BMI change (kg/m ²)	-1.09 ± 2.53	-1.24 ± 2.49	-1.13 ± 2.44	-1.03 ± 2.62	-0.81 ± 2.60	< 0.001
Maintaining hypertension, <i>N</i> (%)	2,460 (38.29)	1,072 (40.53)	575 (40.07)	466 (36.52)	347 (32.49)	< 0.001
Maintaining diabetes mellitus, <i>N</i> (%)	651 (10.05)	254 (9.52)	150 (10.38)	149 (11.57)	254 (9.52)	0.001
Maintaining dyslipidemia, <i>N</i> (%)	999 (16.46)	435 (17.20)	234 (17.36)	172 (14.33)	158 (15.94)	0.271
AVI	22.78 ± 8.42	23.10 ± 8.52	22.67 ± 8.68	23.02 ± 8.38	21.84 ± 7.79	< 0.001
API	36.08 ± 10.72	36.28 ± 10.99	35.91 ± 10.50	36.34 ± 10.60	35.51 ± 10.48	0.164
Elevated AVI	1,078 (16.63)	501 (18.78)	228 (15.77)	223 (17.29)	126 (11.70)	< 0.001
Elevated API	4,334 (66.87)	1,816 (68.07)	954 (65.98)	879 (68.14)	685 (63.60)	0.039
Mean fruit and vegetable intake, g/d	379 (277, 504)	257 (197, 311)	431 (378, 499)	420 (377, 482)	617 (544, 765)	< 0.001

Note. Continuous variables are presented as mean ± standard deviation or median (interquartile range) and categorical variables are presented as numbers (percentages). AVI, arterial velocity–pulse index; API, arterial pressure–volume index; CVD, cardiovascular disease; BMI, body mass index.



Supplementary Figure S1. Subgroup analyses for the associations of per 100 g/d increment in fruit and vegetable intake with AVI and API. The boxes represented coefficient and the horizontal lines represented 95% confidence intervals. AVI, arterial velocity–pulse index; API, arterial pressure–volume index.



Supplementary Figure S2. Subgroup analyses for high fruit and vegetable intake associations with elevated AVI and API. The boxes represented odd ratio and the horizontal lines represented 95% confidence intervals. OR, odd ratio; AVI, arterial velocity–pulse index; API, arterial pressure–volume index.