

Supplementary Information

Table S1. Association between homocysteine and risk of hypertension

Homocysteine	Model 1			Model 2			Model 3		
	OR	95%CI	P	OR	95%CI	P	OR	95%CI	P
<10µmol/l	1(ref.)			1(ref.)			1(ref.)		
10-14.9µmol/l	1.14	0.95-1.38	0.163	1.16	0.96-1.41	0.132	1.11	0.91-1.36	0.286
≥15µmol/l	3.79	3.13-4.58	<0.001	3.79	3.11-4.61	<0.001	3.74	3.06-4.56	<0.001

#Model 1: adjusted for age and sex. Model 2: adjusted for age, sex and BMI. Model 3: adjusted for age, sex, BMI, marriage status, education level, annual income, smoking status, alcohol drinking level, physical activity, walking, fruit and vegetable intake, fish or seafood intake, sweet food and pickled vegetables.

Table S2. Multivariable logistic regression analysis of risk of hyperhomocysteinemia

Variables	Groups	OR (95%CI)	P
Age(years)		1.02(1.01-1.02)	<0.001
BMI (kg/m ²)		1.05(1.03-1.07)	<0.001
Sex		0.65(0.54-0.79)	<0.001
Marriage	unmarried	Reference	
	married	0.79(0.47-1.32)	0.363
	separation	0.38(0.16-0.87)	0.022
	divorce or widowhood	0.64(0.32-1.31)	0.224
Education	under primary school	Reference	
	Primary school	0.94(0.77-1.14)	0.522
	Junior school	1.07(0.87-1.31)	0.510
	college and above	1.09(0.85-1.39)	0.513
Smoking	not smoking	Reference	
	smoking	1.25(1.02-1.54)	0.035
	smoking at past but not now	1.15(0.85-1.54)	0.364
Alcohol drinking	Abstainer (Non-drinker)	Reference	
	Light or moderate drinker	1.12(0.9-1.39)	0.313
	Heavy drinker	1.24(0.89-1.72)	0.205
	Drinker but not reported the specific drinks	1.12(0.87-1.44)	0.369
Physical activity	1	Reference	
	0	1.17(1-1.36)	0.049
Fruit and vegetable	1	Reference	
	0	1.29(1.11-1.5)	0.001

For physical activity: 1= had moderate or high intensity physical activity for at least 10minutes in the past week, 0=had no moderate or high intensity physical activity for at least 10 minutes in the past week. For fruit and vegetable: 1=consumed fruit once and vegetable once every day, 0=didn't consume consumed fruit once or vegetable once every day. For fish or seafood: 1=consumed fish or seafood once every week, 0=didn't consumed fish or seafood once every week.



Figure S1. Photos to measure the drinks of different kinds of drink in the questionnaire survey.

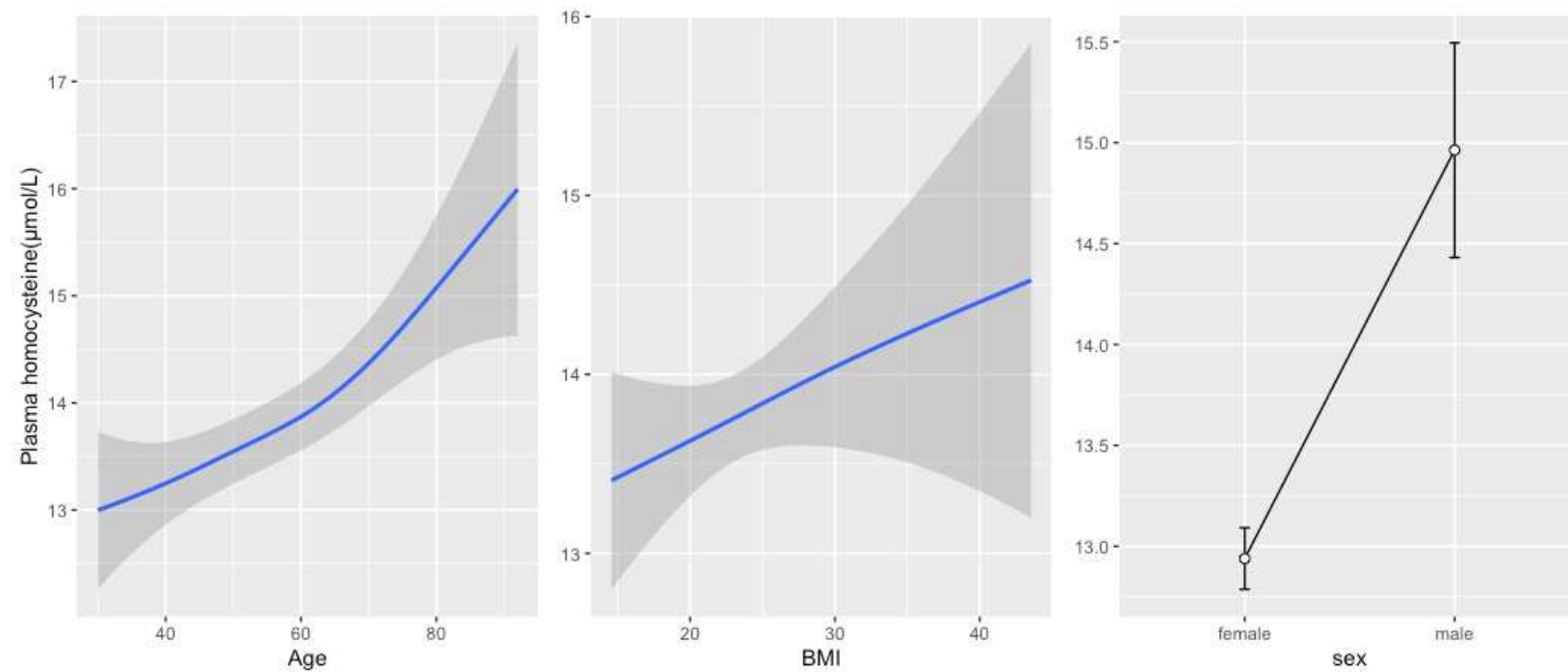


Figure S2. Association between age, BMI, sex and plasma total homocysteine. For age and BMI, concentration-response relationships with *P* values were obtained by linear regression. For sex, means and 95%CI of plasma total homocysteine in different groups were presented with *P* values obtained by ANOVA or independent T tests.

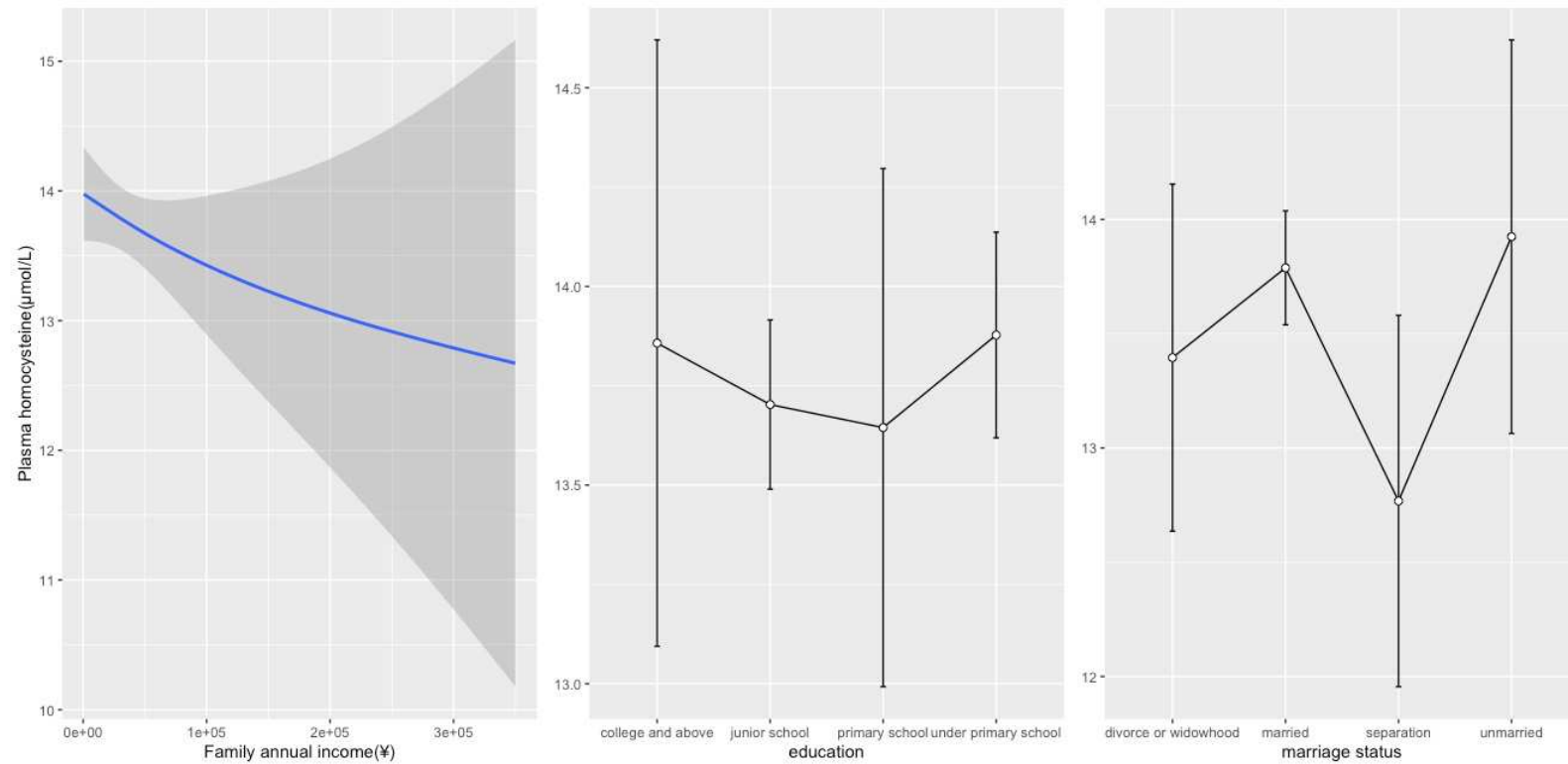


Figure S3. Association between education level, family income, marriage status and plasma total homocysteine. For family income, concentration-response relationships with *P* value were obtained by linear regression. For education and marriage status, means and 95%CI of plasma total homocysteine in different groups were presented with *P* values obtained by ANOVA or independent T tests.

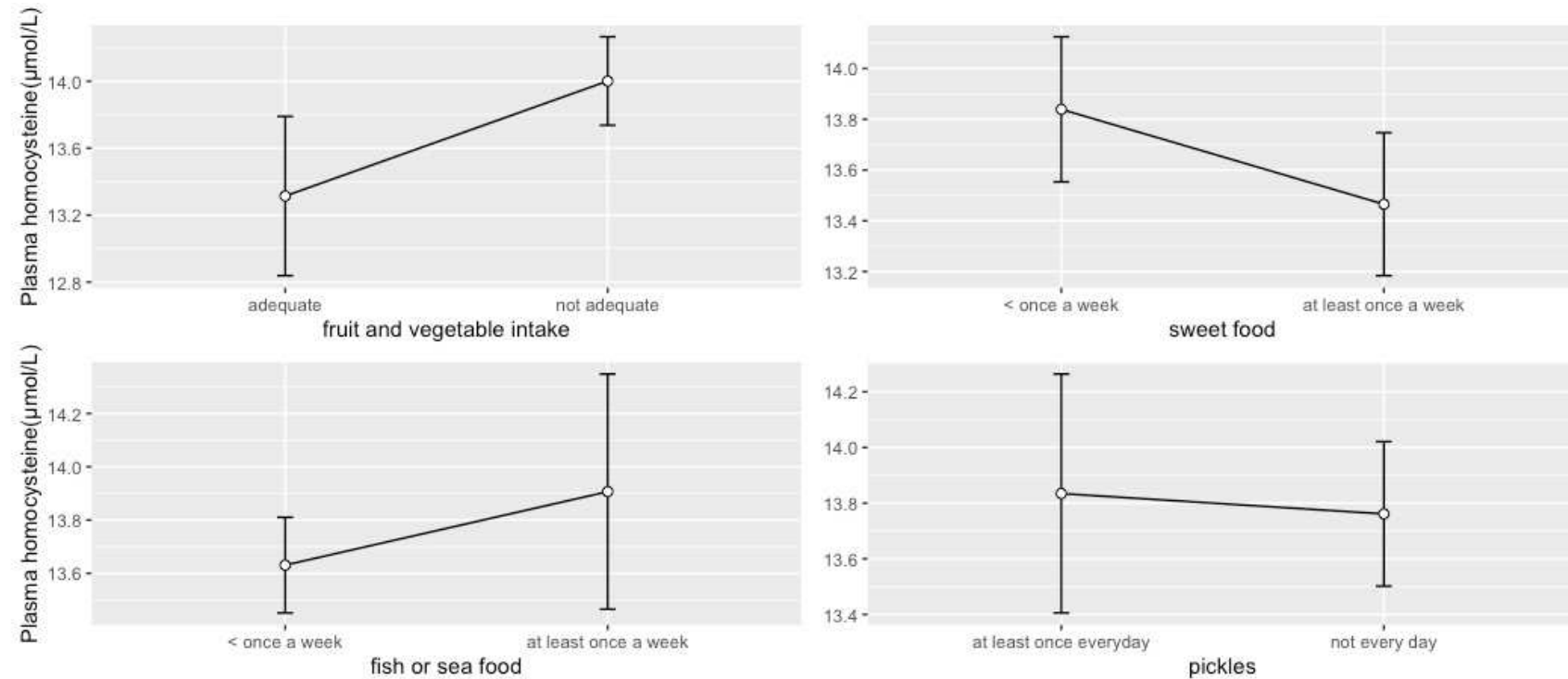


Figure S4. Association between fruit and vegetable intake, sweet food, fish and sea food, pickles and plasma total homocysteine. Means and 95%CI of plasma total homocysteine in different groups were presented with *P* values obtained by independent T tests. For fruit and vegetable: adequate=consumed fruit once and vegetable once every day; inadequate=not consumed fruit once and vegetable once every day.

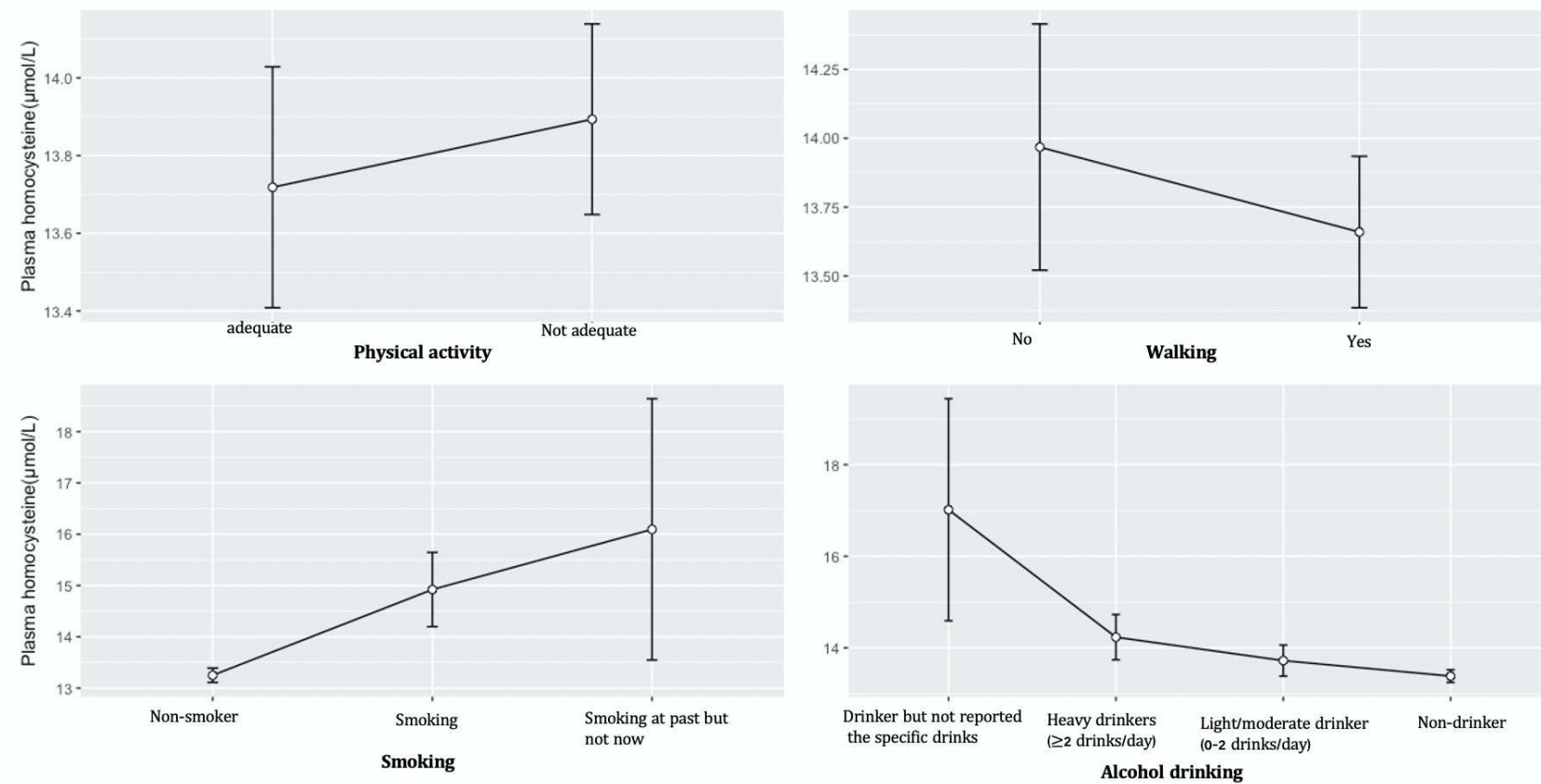


Figure S5. Association between smoking, alcohol drinking, physical activity and walking and plasma total homocysteine. Means and 95%CI of plasma total homocysteine in different groups were presented with *P* values obtained by ANOVA or independent T tests.