Supplementary Table 1 Comparison of baseline characteristics between excluded and included participants

Variable	Overall (N = 23,346)[1]	Excluded (N = 21517)[1]	Included (N = 1829)[1]	P value[2]
Age	50.5 ± 7.7	50.4 ± 7.7	51.2 ± 7.6	<0.001
Sex				<0.001
Female	12,295 (53%)	11,420 (53%)	875 (48%)	
Male	11,051 (47%)	10,097 (47%)	954 (52%)	
Marriage				0.8
Unmarried	1,013 (4.3%)	936 (4.4%)	77 (4.2%)	
Married	22,333 (96%)	20,581 (96%)	1,752 (96%)	
Uneducated	3,935 (17%)	3,665 (17%)	270 (15%)	0.013
Farmer				<0.001
Non-farmer	1,476 (6.3%)	1,253 (5.8%)	223 (12%)	
Farmer	21,870 (94%)	20,264 (94%)	1,606 (88%)	
BMI	23.8 ± 3.0	23.8 ± 3.0	23.9 ± 3.0	0.13
Unknown	2	2	0	
H. pylori status				<0.001
Negative	10,016 (47%)	9,014 (46%)	1,002 (55%)	
Positive	11,275 (53%)	10,458 (54%)	817 (45%)	
Unknown	2,055	2,045	10	
Smoking				0.071
Never	15,416 (66%)	14,251 (66%)	1,165 (64%)	
Current	6,872 (30%)	6,297 (29%)	575 (31%)	
Former	1,005 (4.3%)	918 (4.3%)	87 (4.8%)	
Unknown	53	51	2	
Drinking	1,144 (4.9%)	1,073 (5.0%)	71 (3.9%)	0.036
Eating hot food	13,770 (59%)	12,757 (59%)	1,013 (55%)	0.001
Unknown	4	4	0	
Eating quickly	5,371 (23%)	4,993 (23%)	378 (21%)	0.013

Eating fried foods	332 (1.4%)	305 (1.4%)	27 (1.5%)	0.8
Medical history				
Gastritis	6,597 (28%)	6,333 (29%)	264 (14%)	<0.001
Peptic ulcers	633 (2.7%)	603 (2.8%)	30 (1.6%)	0.003
Gallbladder diseases	2,917 (12%)	2,696 (13%)	221 (12%)	0.6
Gastric polyps	340 (1.5%)	302 (1.4%)	38 (2.1%)	0.021
Family history of gastric cancer	110 (0.5%)	105 (0.5%)	5 (0.3%)	0.2
Energy	1,930.3 ± 1,352.0	1,953.0 ± 1,361.7	1,663.3 ± 1,201.3	<0.001
Physical activity level				<0.001
Low	7,384 (33%)	6,756 (33%)	628 (34%)	
Moderate	7,765 (35%)	6,989 (34%)	776 (42%)	
High	7,000 (32%)	6,575 (32%)	425 (23%)	
Unknown	1,197	1,197	0	

[1]Mean ± SD; n (%)

[2]Wilcoxon rank sum test; Pearson's Chi-squared test

Data are presented as mean ± SD or n (%). P values were calculated using Wilcoxon rank-sum test or χ^2 test, as appropriate.

BMI: Body mass index;

Supplementary Table 2 Association between physical activity and risk of HGD and EGC analyzed separately

	Physical activity level	Case/Control	OR (95% CI)	*P* value[1]	*P* for trend[2]
HGD	Low	32/550	Ref.	-	
	Moderate	22/712	0.53(0.29-0.97)	0.038	
	High	20/385	0.77(0.41-1.44)	0.410	0.379
EGC	Low	43/550	Ref.	-	
	Moderate	34/712	0.68(0.41-1.13)	0.136	
	High	19/385	0.59(0.32-1.07)	0.081	0.008

[1]*P* value for comparison with low physical activity within each stratum.

[2]*P* value for multiplicative interaction.

ORs and 95%CIs were estimated using multivariable logistic regression adjusted for age, sex, marital status, education, occupation, household income, smoking, alcohol consumption, dietary habits, BMI, H. pylori infection, medical history, family history of gastric cancer, and total energy intake.

HGD: High-grade dysplasia; EGC: Early gastric cancer.