SUPPLEMENTAL MATERIAL

Supplemental Table I. Sex-specific hazard ratios (95% confidence intervals) of all-cause mortality according to green tea consumption

	Green tea consumption						P for trend
	None	1-6 Cups/Week	1-2 Cups/d	3-4 Cups/d	5-6 Cups/d	≥7 Cups/d	
Men							
History of stroke							
Person-years	248	527	491	992	858	420	
No. of cases	18	30	20	44	30	16	
Mortality rate (per 1000 person-years)	72.6	56.9	40.7	44.4	35.0	38.1	
Age-adjusted HR (95%CI)	Ref	0.98 (0.54-1.77)	0.58 (0.31-1.11)	0.58 (0.34-1.01)	0.40 (0.22-0.73)	0.47 (0.24-0.92)	<0.001
Multivariable HR (95%CI)	Ref	1.26 (0.56-2.80)	0.72 (0.32-1.62)	0.67 (0.33-1.38)	0.62 (0.29-1.34)	0.52 (0.22-1.22)	0.02
History of MI							
Person-years	489	798	859	1677	1189	873	
No. of cases	29	32	26	54	42	26	
Mortality rate (per 1000 person-years)	59.3	40.1	30.3	32.2	35.3	29.8	
Age-adjusted HR (95%CI)	Ref	0.62 (0.37-1.02)	0.45 (0.26-0.76)	0.50 (0.32-0.79)	0.59 (0.37-0.96)	0.36 (0.21-0.62)	0.02
Multivariable HR (95%CI)	Ref	0.57 (0.31-1.03)	0.36 (0.19-0.66)	0.47 (0.28-0.80)	0.48 (0.27-0.84)	0.26 (0.14-0.48)	0.002
No history of stroke or MI							
Person-years	25664	39231	37058	61478	68816	43766	
No. of cases	515	671	579	1073	1238	862	
Mortality rate (per 1000 person-years)	20.1	17.1	15.6	17.5	18.0	19.7	
Age-adjusted HR (95%CI)	Ref	0.92 (0.82-1.03)	0.90 (0.80-1.02)	0.91 (0.82-1.01)	0.90 (0.81-1.00)	0.90 (0.80-1.00)	0.15
Multivariable HR (95%CI)	Ref	0.96 (0.85-1.08)	0.98 (0.86-1.10)	0.99 (0.88-1.10)	0.96 (0.86-1.07)	0.93 (0.83-1.04)	0.28
Women							
History of stroke							
Person-years	330	225	193	684	547	332	

No. of cases	16	11	9	16	17	5	
Mortality rate (per 1000 person-years)	48.5	48.9	46.6	23.4	31.1	15.1	
Age-adjusted HR (95%CI)	Ref	0.47 (0.21-1.05)	0.76 (0.33-1.74)	0.41 (0.20-0.82)	0.45 (0.22-0.90)	0.18 (0.07-0.51)	0.002
Multivariable HR (95%CI)	Ref	0.36 (0.11-1.20)	1.48 (0.34-6.47)	0.44 (0.15-1.29)	0.52 (0.16-1.63)	0.14 (0.03-0.69)	0.08
History of MI							
Person-years	1332	1429	1053	2076	2124	882	
No. of cases	30	17	17	39	29	14	
Mortality rate (per 1000 person-years)	22.5	11.9	16.1	18.8	13.7	15.9	
Age-adjusted HR (95%CI)	Ref	0.58 (0.32-1.05)	0.79 (0.44-1.44)	0.91 (0.56-1.47)	0.68 (0.41-1.13)	0.70 (0.37-1.33)	0.50
Multivariable HR (95%CI)	Ref	0.72 (0.37-1.39)	1.07 (0.56-2.07)	1.35 (0.78-2.34)	1.05 (0.58-1.91)	0.81 (0.39-1.68)	0.87
No history of stroke or MI							
Person-years	47892	62999	50699	105306	108221	56158	
No. of cases	508	551	375	913	895	486	
Mortality rate (per 1000 person-years)	10.6	8.7	7.4	8.7	8.3	8.7	
Age-adjusted HR (95%CI)	Ref	0.93 (0.82-1.04)	0.87 (0.76-0.99)	0.87 (0.78-0.97)	0.84 (0.75-0.93)	0.85 (0.75-0.96)	0.003
Multivariable HR (95%CI)	Ref	0.97 (0.86-1.10)	0.95 (0.83-1.09)	0.96 (0.85-1.07)	0.91 (0.81-1.02)	0.91 (0.80-1.04)	0.08

HR, hazard ratio; CI, confidence interval.

Multivariable HR: adjusted for age, coffee consumption, history of hypertension, history of diabetes, body mass index, smoking status, alcohol consumption, hours of exercise, hours of walking, perceived mental stress, educational level, regular employment, and dietary intakes of vegetable, fish, fruits and soybeans.

Supplemental Table II. Hazard ratios (95% confidence intervals) of CVD and cancer mortality according to green tea consumption

	None	1-6 Cups/Week	1-2 Cups/d	3-4 Cups/d	5-6 Cups/d	≥7 Cups/d	P for trend
History of stroke							
Person-years	578	752	685	1676	1405	752	
CVD mortality							
No. of cases	16	19	12	28	23	9	
Mortality rate (per 1000 person-years)	27.7	25.3	17.5	16.7	16.4	12.0	
Age- and sex-adjusted HR (95%CI)	Ref	0.87 (0.45-1.69)	0.57 (0.27-1.22)	0.55 (0.29-1.01)	0.48 (0.25-0.92)	0.36 (0.16-0.82)	0.004
Multivariable HR (95%CI)	Ref	0.63 (0.28-1.43)	0.52 (0.21-1.25)	0.54 (0.26-1.13)	0.47 (0.22-0.99)	0.27 (0.10-0.70)	0.016
Cancer mortality							
No. of cases	2	5	8	8	9	4	
Mortality rate (per 1000 person-years)	3.5	6.6	11.7	4.8	6.4	5.3	
Age- and sex-adjusted HR (95%CI)	Ref	1.70 (0.33-8.81)	3.06 (0.65-14.52)	1.23 (0.26-5.82)	1.55 (0.33-7.20)	1.28 (0.23-7.00)	0.55
Multivariable HR (95%CI)	Ref	1.09 (0.15-7.72)	2.50 (0.39-15.89)	0.75 (0.12-4.61)	1.24 (0.20-7.70)	1.00 (0.13-7.89)	0.60
History of MI							
Person-years	1820	2227	1912	3753	3313	1755	
CVD mortality							
No. of cases	29	21	14	42	30	15	
Mortality rate (per 1000 person-years)	15.9	9.4	7.3	11.2	9.1	8.5	
Age- and sex-adjusted HR (95%CI)	Ref	0.57 (0.32-1.00)	0.38 (0.20-0.73)	0.61 (0.38-0.99)	0.57 (0.34-0.95)	0.36 (0.19-0.68)	0.05
Multivariable HR (95%CI)	Ref	0.71 (0.38-1.32)	0.39 (0.19-0.77)	0.77 (0.45-1.31)	0.61 (0.34-1.07)	0.36 (0.18-0.72)	0.05
Cancer mortality							
No. of cases	15	8	16	22	16	9	
Mortality rate (per 1000 person-years)	8.2	3.6	8.4	5.9	4.8	5.1	
Age- and sex-adjusted HR (95%CI)	Ref	0.40 (0.17-0.94)	0.86 (0.42-1.76)	0.61 (0.32-1.19)	0.56 (0.27-1.13)	0.46 (0.20-1.07)	0.19
Multivariable HR (95%CI)	Ref	0.29 (0.11-0.74)	1.02 (0.45-2.27)	0.67 (0.31-1.45)	0.61 (0.28-1.34)	0.33 (0.13-0.87)	0.16

Green tea consumption

No history of stroke or MI							
Person-years	73555	102230	87758	166783	177037	99923	
CVD mortality							
No. of cases	306	356	237	583	582	353	
Mortality rate (per 1000 person-years)	4.2	3.5	2.7	3.5	3.3	3.5	
Age- and sex-adjusted HR (95%CI)	Ref	0.92 (0.79-1.07)	0.77 (0.65-0.91)	0.89 (0.78-1.03)	0.82 (0.72-0.95)	0.80 (0.68-0.93)	0.0096
Multivariable HR (95%CI)	Ref	0.99 (0.84-1.15)	0.85 (0.71-1.01)	0.99 (0.86-1.15)	0.91 (0.79-1.05)	0.87 (0.74-1.02)	0.14
Cancer mortality							
No. of cases	335	423	379	710	811	546	
Mortality rate (per 1000 person-years)	4.6	4.1	4.3	4.3	4.6	5.5	
Age- and sex-adjusted HR (95%CI)	Ref	0.94 (0.82-1.09)	1.01 (0.87-1.17)	0.95 (0.83-1.08)	0.97 (0.86-1.11)	1.05 (0.91-1.20)	0.41
Multivariable HR (95%CI)	Ref	0.96 (0.83-1.11)	1.02 (0.87-1.18)	0.96 (0.84-1.10)	0.97 (0.85-1.11)	1.00 (0.88-1.16)	0.95

HR, hazard ratio; CI, confidence interval.

Multivariable HR: adjusted for age, sex, coffee consumption, history of hypertension, history of diabetes, body mass index, smoking status, alcohol consumption, hours of exercise, hours of walking, perceived mental stress, educational level, regular employment, and dietary intakes of vegetable, fish, fruits and soybeans.

Supplemental Table III. Sensitivity analyses of all-cause mortality according to green tea consumption, excluding all participants who died during the first five years of follow-up

	None	1-6 Cups/Week	1-2 Cups/d	3-4 Cups/d	5-6 Cups/d	≥7 Cups/d	P for trend
History of stroke							
Person-years	557	735	656	1638	1376	743	
No. of cases	25	33	20	44	35	18	
Mortality rate (per 1000 person-years)	44.9	44.9	30.5	26.9	25.4	24.2	
Age- and sex-adjusted HR (95%CI)	Ref	0.86 (0.51-1.45)	0.60 (0.33-1.08)	0.49 (0.30-0.81)	0.39 (0.23-0.66)	0.36 (0.19-0.66)	<0.001
Multivariable HR (95%CI)	Ref	0.88 (0.46-1.70)	0.69 (0.34-1.42)	0.55 (0.30-1.02)	0.51 (0.28-0.95)	0.35 (0.17-0.73)	0.001
History of MI							
Person-years	1783	2186	1890	3668	3266	1744	
No. of cases	45	35	35	62	55	37	
Mortality rate (per 1000 person-years)	25.2	16.0	18.5	16.9	16.8	21.2	
Age- and sex-adjusted HR (95%CI)	Ref	0.56 (0.36-0.88)	0.60 (0.38-0.93)	0.60 (0.41-0.89)	0.63 (0.42-0.93)	0.54 (0.35-0.85)	0.13
Multivariable HR (95%CI)	Ref	0.64 (0.39-1.03)	0.68 (0.42-1.11)	0.74 (0.48-1.13)	0.73 (0.47-1.13)	0.53 (0.32-0.87)	0.12
No history of stroke or MI							
Person-years	73138	101765	87296	165794	176130	99420	
No. of cases	874	1060	797	1659	1809	1171	
Mortality rate (per 1000 person-years)	12.0	10.4	9.1	10.0	10.3	11.8	
Age- and sex-adjusted HR (95%CI)	Ref	0.92 (0.84-1.01)	0.88 (0.80-0.97)	0.88 (0.81-0.96)	0.86 (0.79-0.93)	0.87 (0.80-0.95)	0.002
Multivariable HR (95%CI)	Ref	0.95 (0.87-1.05)	0.95 (0.86-1.05)	0.96 (0.88-1.04)	0.92 (0.85-1.00)	0.92 (0.84-1.00)	0.05

HR, hazard ratio; CI, confidence interval.

Multivariable HR: adjusted for age, sex, coffee consumption, history of hypertension, history of diabetes, body mass index, smoking status, alcohol consumption, hours of exercise, hours of walking, perceived mental stress, educational level, regular employment, and dietary intakes of vegetable, fish, fruits and soybeans.

Supplemental Table IV. Sex-specific hazard ratios (95% confidence intervals) of all-cause mortality according to coffee consumption

	Coffee consumption				P for trend
	None	1-6 Cups/Week	1 Cup/d	≥2 Cups/d	
Men					
History of stroke					
Person-years	1447	1384	372	335	
No. of cases	71	57	13	17	
Mortality rate (per 1000 person-years)	49.1	41.2	34.9	50.7	
Age-adjusted HR (95%CI)	Ref	0.97 (0.69-1.38)	0.83 (0.46-1.50)	1.48 (0.87-2.53)	0.29
Multivariable HR (95%CI)	Ref	1.18 (0.77-1.80)	0.95 (0.46-1.93)	1.61 (0.82-3.17)	0.26
History of MI					
Person-years	1691	2103	836	1255	
No. of cases	90	59	27	33	
Mortality rate (per 1000 person-years)	53.2	28.1	32.3	26.3	
Age-adjusted HR (95%CI)	Ref	0.62 (0.44-0.86)	0.77 (0.50-1.18)	0.65 (0.44-0.98)	0.12
Multivariable HR (95%CI)	Ref	0.51 (0.35-0.74)	0.73 (0.45-1.19)	0.58 (0.37-0.93)	0.13
No history of stroke or MI					
Person-years	79655	99884	35481	60991	
No. of cases	1913	1700	608	717	
Mortality rate (per 1000 person-years)	24.0	17.0	17.1	11.8	
Age-adjusted HR (95%CI)	Ref	0.84 (0.78-0.89)	0.93 (0.85-1.02)	0.88 (0.80-0.96)	<0.001
Multivariable HR (95%CI)	Ref	0.87 (0.81-0.93)	0.96 (0.87-1.05)	0.84 (0.76-0.92)	0.003
Women					
History of stroke					
Person-years	1256	688	163	203	

No. of cases	45	25	1	3	
Mortality rate (per 1000 person-years)	35.8	36.3	6.1	14.8	
Age-adjusted HR (95%CI)	Ref	1.10 (0.67-1.80)	0.26 (0.04-1.89)	0.58 (0.18-1.89)	0.22
Multivariable HR (95%CI)	Ref	1.54 (0.72-3.29)	0.27 (0.02-3.14)	2.02 (0.42-9.63)	0.58
History of MI					
Person-years	3401	2761	1562	1172	
No. of cases	73	45	22	6	
Mortality rate (per 1000 person-years)	21.5	16.3	14.1	5.1	
Age-adjusted HR (95%CI)	Ref	0.91 (0.63-1.33)	0.90 (0.55-1.46)	0.52 (0.22-1.20)	0.15
Multivariable HR (95%CI)	Ref	0.99 (0.64-1.54)	0.75 (0.43-1.32)	0.52 (0.21-1.29)	0.10
No history of stroke or MI					
Person-years	136281	148546	69226	77221	
No. of cases	1821	1132	426	349	
Mortality rate (per 1000 person-years)	13.4	7.6	6.2	4.5	
Age-adjusted HR (95%CI)	Ref	0.82 (0.76-0.89)	0.73 (0.65-0.81)	0.80 (0.71-0.90)	<0.001
Multivariable HR (95%CI)	Ref	0.88 (0.81-0.95)	0.77 (0.69-0.86)	0.82 (0.73-0.93)	<0.001

HR, hazard ratio; CI, confidence interval.

Multivariable HR: adjusted for age, green tea consumption, history of hypertension, history of diabetes, body mass index, smoking status, alcohol consumption, hours of exercise, hours of walking, perceived mental stress, educational level, regular employment, and dietary intakes of vegetable, fish, fruits and soybeans.

Supplemental Table V. Hazard ratios (95% confidence intervals) of CVD and cancer mortality according to coffee consumption

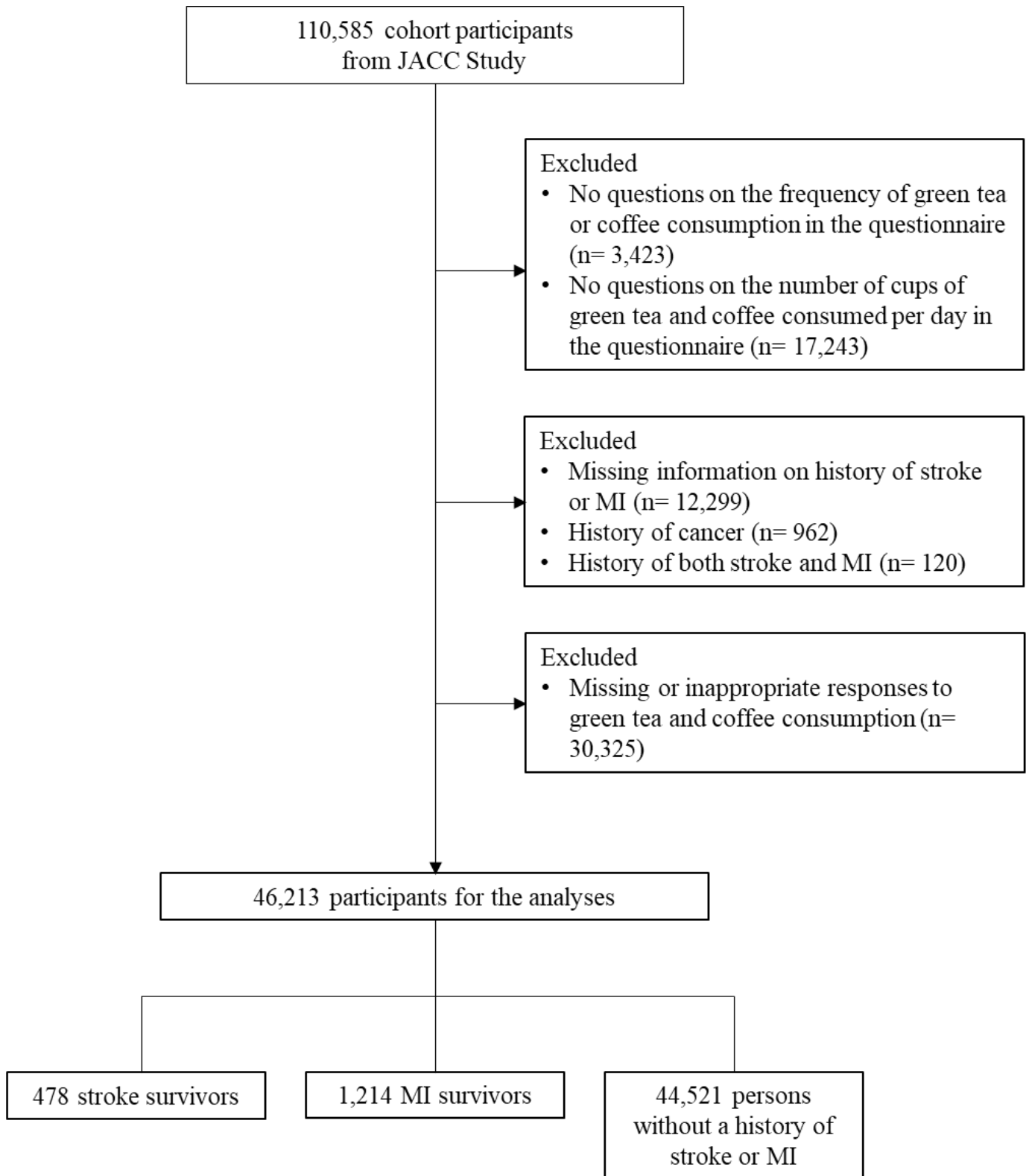|	Coffee consumption				P for trend
	None	1-6 Cups/Week	1 Cup/d	≥2 Cups/d	
History of stroke					
Person-years	2703	2072	535	538	
CVD mortality					
No. of cases	52	42	3	10	
Mortality rate (per 1000 person-years)	19.2	20.3	5.6	18.6	
Age- and sex-adjusted HR (95%CI)	Ref	1.15 (0.77-1.74)	0.34 (0.11-1.08)	1.28 (0.65-2.54)	0.97
Multivariable HR (95%CI)	Ref	1.36 (0.84-2.21)	0.36 (0.10-1.23)	2.03 (0.90-4.59)	0.40
Cancer mortality					
No. of cases	12	16	6	2	
Mortality rate (per 1000 person-years)	4.4	7.7	11.2	3.7	
Age- and sex-adjusted HR (95%CI)	Ref	1.78 (0.84-3.80)	2.68 (0.99-7.23)	0.99 (0.22-4.46)	0.55
Multivariable HR (95%CI)	Ref	2.71 (1.00-7.36)	3.72 (0.97-14.35)	0.62 (0.07-5.54)	0.87
History of MI					
Person-years	5092	4864	2398	2427	
CVD mortality					
No. of cases	66	49	21	15	
Mortality rate (per 1000 person-years)	13.0	10.1	8.8	6.2	
Age- and sex-adjusted HR (95%CI)	Ref	0.87 (0.60-1.27)	0.88 (0.53-1.44)	0.64 (0.36-1.13)	0.14
Multivariable HR (95%CI)	Ref	0.84 (0.55-1.28)	0.81 (0.47-1.40)	0.58 (0.31-1.09)	0.10
Cancer mortality					
No. of cases	30	26	14	16	
Mortality rate (per 1000 person-years)	5.9	5.3	5.8	6.6	
Age- and sex-adjusted HR (95%CI)	Ref	0.90 (0.53-1.53)	1.13 (0.60-2.14)	1.21 (0.65-2.27)	0.42
Multivariable HR (95%CI)	Ref	1.04 (0.58-1.87)	0.98 (0.48-1.98)	1.06 (0.51-2.21)	0.92

No history of stroke or MI					
Person-years	215936	248431	104707	138212	
CVD mortality					
No. of cases	1145	731	273	268	
Mortality rate (per 1000 person-years)	5.3	2.9	2.6	1.9	
Age- and sex-adjusted HR (95%CI)	Ref	0.73 (0.67-0.81)	0.76 (0.66-0.86)	0.80 (0.70-0.92)	<0.001
Multivariable HR (95%CI)	Ref	0.79 (0.72-0.87)	0.81 (0.71-0.93)	0.81 (0.71-0.94)	0.004
Cancer mortality					
No. of cases	1191	1106	437	470	
Mortality rate (per 1000 person-years)	5.5	4.5	4.2	3.4	
Age- and sex-adjusted HR (95%CI)	Ref	0.94 (0.86-1.02)	1.01 (0.90-1.13)	0.96 (0.86-1.07)	0.77
Multivariable HR (95%CI)	Ref	0.95 (0.88-1.03)	1.00 (0.90-1.12)	0.89 (0.80-1.00)	0.11

HR, hazard ratio; CI, confidence interval.

Multivariable HR: adjusted for age, sex, green tea consumption, history of hypertension, history of diabetes, body mass index, smoking status, alcohol consumption, hours of exercise, hours of walking, perceived mental stress, educational level, regular employment, and dietary intakes of vegetable, fish, fruits and soybeans.

Supplemental Table VI. Sensitivity analyses of all-cause mortality according to coffee consumption, excluding all participants who died during the first five years of follow-up

	Coffee consumption				P for trend
	None	1-6 Cups/Week	1 Cup/d	≥2 Cups/d	
History of stroke					
Person-years	2629	2031	528	517	
No. of cases	84	65	12	14	
Mortality rate (per 1000 person-years)	32.0	32.0	22.7	27.1	
Age- and sex-adjusted HR (95%CI)	Ref	1.11 (0.80-1.54)	0.87 (0.47-1.61)	1.23 (0.69-2.18)	0.66
Multivariable HR (95%CI)	Ref	1.76 (1.18-2.61)	0.92 (0.45-1.86)	1.76 (0.89-3.46)	0.24
History of MI					
Person-years	4978	4823	2348	2387	
No. of cases	121	88	34	26	
Mortality rate (per 1000 person-years)	24.3	18.2	14.5	10.9	
Age- and sex-adjusted HR (95%CI)	Ref	0.84 (0.64-1.11)	0.85 (0.58-1.25)	0.67 (0.43-1.04)	0.09
Multivariable HR (95%CI)	Ref	0.73 (0.53-0.99)	0.73 (0.48-1.10)	0.56 (0.35-0.91)	0.02
No history of stroke or MI					
Person-years	214332	247338	104195	137677	
No. of cases	3166	2458	861	885	
Mortality rate (per 1000 person-years)	14.8	9.9	8.3	6.4	
Age- and sex-adjusted HR (95%CI)	Ref	0.84 (0.79-0.88)	0.84 (0.77-0.90)	0.84 (0.78-0.91)	<0.001
Multivariable HR (95%CI)	Ref	0.87 (0.83-0.92)	0.87 (0.80-0.93)	0.82 (0.76-0.89)	<0.001

HR, hazard ratio; CI, confidence interval.

Multivariable HR: adjusted for age, sex, green tea consumption, history of hypertension, history of diabetes, body mass index, smoking status, alcohol consumption, hours of exercise, hours of walking, perceived mental stress, educational level, regular employment, and dietary intakes of vegetable, fish, fruits and soybeans.

Supplemental Figure I. Flow chart of study population selection

JACC Study = Japan Collaborative Cohort Study for Evaluation of Cancer Risk

MI = myocardial infarction