SUPPLEMENTAL MATERIAL

Expanded Methods in the Supplemental Data

Mortality Assessment

The underlying causes of death were identified using codes from the *International Classification of Diseases* (*ICD-8*, *-9*, *-10*, respectively): CVD (*ICD-8*: 390-458; *ICD-9*: 390-459; *ICD-10*: I00-I99), heart disease (*ICD-8* and *ICD-9*: 390-398, 401-404, 410-429, and 440-448; *ICD-10*: I00-I13, I20-I51, and I70-I78), stroke (*ICD-8* and *ICD-9*: 430-438; *ICD-10*: I60-I69), cancer (*ICD-8* and *ICD-9*: 140-239; *ICD-10*: C00-D48).

Statistical Analysis

We conducted stratified analyses of overall and CVD mortality based on other exposure variables including age at baseline (< 57, or ≥ 57 years), number of cigarettes smoked per day (<16, 16 to <20, or ≥20), BMI (<30, or ≥30 kg/m^2), history of cardiovascular disease (no, or yes), intervention group (alpha-tocopherol/no alpha-tocopherol, beta-carotene/no beta-carotene), high quality diet (no [quartiles of 1 to 3], or yes [quartiles of 4]; based on the Alternate Mediterranean Diet Score, **Table I in the Supplemental Data**), total energy intake (<2,589, or ≥2,589 kcal; median split), saturated fatty acid intake (low or medium [quartiles 1-3], or high [quartiles 4]), serum cholesterol (<205, or ≥205 mg/dL; median split) (for dietary cholesterol or egg consumption as the primary exposure variable), dietary cholesterol (<538, or ≥538 mg; median split), serum alpha-tocopherol (<11.5, or ≥11.5 mg/L; median split), serum beta-carotene (<172, or ≥172 μg/L; median split), serum retinol (<577, or ≥577 μg/L; median split), follow-up period (0 to <13, 13 to ≤23, ≥23 years). We used likelihood

ratio tests to estimate P values for interactions, by comparing regression models with and without the cross-product terms of the stratified factors and exposure variables including dietary cholesterol, serum total cholesterol or egg consumption.

Systematic review and meta-analysis of associations between egg consumption and risk of CVD and CVD mortality

We primarily used the risk estimate for overall CVD when available. For the studies that reported risk estimates for CHD and stroke separately, but not for overall CVD, risk estimates for CHD and stroke were pooled in fixed effects meta-analysis models. We used the same approach for stroke, primarily using overall stroke risk when the data were available. For studies that separately reported risk estimates for hemorrhagic stroke and ischemic stroke, risk estimates of these two were also pooled using fixed effects meta-analysis models. Therefore, the pooled risk estimates of overall CVD (or overall stroke) were used in our meta-analysis. If there were two studies using the same cohort/study population, and conducted similar analyses for the same CVD endpoint, we selected the larger study of longer follow-up and greater event numbers to include in our meta-analysis (e.g., the Chen and Sun studies of the WHI cohort: risk estimate of CVD mortality was from Sun's study; Zhong study and Djousse study 2021: they have partially overlapping study populations, and risk estimates of ARIC, JHS, MESA were omitted from Djousse study). If there were two studies using the same cohort/study population and conducted analyses for different CVD endpoints, and if there were no overlapping endpoints in the two studies, we included the two studies separately, because the study design and included covariates in the models could differ substantially (i.e.,

fixed effects meta-analysis to pool as one estimate is not an appropriate approach in this case). Repeated risk estimates from the same population were excluded to minimize the over-weighting of participants in the meta-analysis.

Expanded Results in the Supplemental Data

Baseline Characteristics

Higher intake was also related to increased cigarette smoking and dietary energy, saturated fatty acids, alcohol, fruit, vegetables, and red meat, and with a lower Alternate Mediterranean Diet Score (**Table I in the Supplemental Data**). As compared with men with the lowest serum total cholesterol, men in higher quintiles were less educated and likely to be diabetic, and serum cholesterol was positively associated with serum alpha-tocopherol, beta-carotene and retinol, and dietary saturated fatty acids and red meat. Greater egg consumption was related to lower CVD prevalence, and increased dietary energy, saturated fatty acids, alcohol, fruit, vegetables, and red meat (**Table 1**).

Sensitivity Analysis

Propensity score adjustment did not materially change the risk estimates of dietary cholesterol, serum total cholesterol or egg consumption with overall and cause-specific mortality: overall and CVD mortality HRs [95% CIs] of 1.07 [1.04, 1.10] and 1.09 [1.04, 1.14] for each additional 300 mg dietary cholesterol consumed per day; 1.01 [0.99, 1.03] and 1.10 [1.07, 1.13] for each 1-SD increment of serum total cholesterol; 1.06 [1.03, 1.08] and 1.07 [1.04, 1.11] for each additional 50 g egg consumed per day; **Table III in the Supplemental Data**). All risk estimates remained essentially the same in the lag analyses;

e.g., excluding the first 5 years of follow-up, HRs [95% CIs] for CVD mortality per 300 mg increment of dietary cholesterol, 1-SD increment of serum total cholesterol and 50 g increment of egg consumption were 1.14 [1.09, 1.19], 1.13 [1.10, 1.16], and 1.09 [1.06, 1.13], respectively (all P values<0.0001; **Table IV in the Supplemental Data**). Excluding participants with self-reported CVD histories also did not alter the observed associations (for the same increments of dietary cholesterol, serum total cholesterol and egg consumption, CVD mortality HRs [95% CIs] were 1.14 [1.09, 1.19], 1.14 [1.11, 1.18] and 1.09 [1.05, 1.13]; all P values<0.0001; **Table V in the Supplemental Data**). Our findings remained essentially unchanged using parsimonious models (**Table VI in the Supplemental Data**) or Winsorized distributions of dietary cholesterol, serum total cholesterol and egg at the 0.5 and 99.5 percentiles (**Table VII in the Supplemental Data**). The multivariable-adjusted HRs and corresponding 95% CIs of overall and CVD mortality according to gradual increment units for dietary cholesterol, serum total cholesterol and egg consumption are presented in the **Tables VIII-X in the Supplemental Data**. Our findings remained largely unchanged according to the quintiles of exposure variables (CVD mortality for dietary cholesterol, serum total cholesterol and egg consumption in the multivariate model, fifth versus first quintile, HRs [95% CIs]=1.18 [1.06, 1.31], 1.40 [1.29, 1.52] and 1.15 [1.06, 1.24], P for trend=0.003, <0.0001 and 0.0013, respectively; **Table XI in the Supplemental Data**). Quintile models for dietary cholesterol and egg consumption were further adjusted for energy intake using the nutrient density method, and our findings were not materially altered (CVD mortality for dietary cholesterol and egg consumption in the multivariate model, fifth versus first quintile,

HRs [95% CIs]= 1.19 [1.10, 1.29] and 1.18 [1.10, 1.27], and P for trend=0.0001 and 0.0002, respectively; **Table XII in the Supplemental Data**). Our findings remained essentially unchanged after further adjustment for specific foods including vegetables, fruit, legumes, whole grains, red and processed meat, fish and potatoes (all-cause and CVD mortality for egg consumption, fifth versus first quintile, HRs [95% CIs]=1.07 [1.05, 1.10], and 1.09 [1.06, 1.13], P for trend<0.0001, respectively; **Supplemental Table XIII**).

Supplemental Table I. Score criteria for Alternate Mediterranean Diet Score *

Dietary component	**Minimum score of 1 (median intake)**	**Maximum score of 5 (median intake)**
Vegetables (without potatoes), g/1000 kcal per day	First quintile (3.4)	Fifth quintile (18.2)
Fruit, g/1000 kcal per day	First quintile (2.5)	Fifth quintile (22.8)
Whole grains, g/1000 kcal per day	First quintile (0.06)	Fifth quintile (0.95)
Legumes, g/1000 kcal per day †	First quintile (0.07)	Fifth quintile (1.05)
Red and processed meat, g/1000 kcal per day	Fifth quintile (19.6)	First quintile (7.5)
Fish, g/1000 kcal per day	First quintile (1.06)	Fifth quintile (6.9)
Ratio of monounsaturated to saturated fatty acids	First quintile (0.49)	Fifth quintile (0.87)
Alcohol, g/1000 kcal per day	>50	10-30
Total	8	40

* Nutritional factors used based on nutrient density method (g/1000 kcal).

† Nut consumption information was not included in the food frequency questionnaire in this cohort.

Supplemental Table II. Spearman correlation coefficients between dietary cholesterol intake, serum total cholesterol, egg consumption and other dietary factors *

Food or nutrient	Dietary cholesterol		Serum total cholesterol		Egg	
	Coefficient	**P value**	**Coefficient**	**P value**	**Coefficient**	**P value**
Total fat	0.38	<0.0001	0.053	<0.0001	0.12	<0.0001
Saturated fat	0.32	<0.0001	0.089	<0.0001	-0.034	<0.0001
MUFA	0.47	<0.0001	0.036	<0.0001	0.26	<0.0001
PUFA	-0.20	<0.0001	-0.067	<0.0001	0.013	0.04
Fiber	-0.17	<0.0001	0.07	0.27	-0.11	<0.0001
Animal protein	0.47	<0.0001	0.042	<0.0001	0.34	<0.0001
Sodium	0.25	<0.0001	0.019	<0.0001	0.16	<0.0001
Potatoes	0.053	<0.0001	0.032	<0.0001	0.019	0.0023
Vegetables excluding potatoes	-0.10	0.11	-0.005	0.45	0.040	<0.0001
Egg	0.86	<0.0001	**-0.009**	**0.14**	--	
Red meat	0.15	<0.0001	0.044	<0.0001	0.038	<0.0001
Processed meat	0.15	<0.0001	0.0055	0.37	0.078	<0.0001
Fish	0.12	<0.0001	0.055	<0.0001	0.031	<0.0001
Whole grains	-0.16	<0.0001	0.02	<0.0001	-0.12	<0.0001
Refined grains	-0.12	<0.0001	-0.024	<0.0001	-0.01	0.09
aMDS	-0.12	<0.0001	0.001	0.86	-0.012	0.048
Serum total cholesterol	**0.040**	**<0.0001**	--		**-0.009**	**0.14**

Abbreviations: aMDS = Alternate Mediterranean Diet Score, MUFA = monounsaturated fatty acids, PUFA = polyunsaturated fatty acids

* Dietary factors are total energy adjusted.

Supplemental Table III. Associations between dietary cholesterol intake, serum total cholesterol and egg consumption and overall and cause-specific mortality, adjusting for propensity score in the ATBC Study *†

Cause of death	Total event	Dietary cholesterol (per 300 mg)		Serum cholesterol (per 1-SD)		Egg (per 50 g)	
		HR (95% CI)	P value	HR (95% CI)	P value	HR (95% CI)	P value
Overall	22,035	1.07 (1.04, 1.10)	<0.0001	1.01 (0.99, 1.03)	0.35	1.06 (1.03, 1.08)	<0.0001
CVD	9,110	1.09 (1.04, 1.14)	0.0001	1.10 (1.07, 1.13)	<0.0001	1.07 (1.04, 1.11)	<0.0001
Heart disease	7,450	1.10 (1.05, 1.15)	0.0001	1.12 (1.09, 1.16)	<0.0001	1.08 (1.04, 1.12)	<0.0001
Stroke	1,621	1.05 (0.94, 1.16)	0.40	0.99 (0.93, 1.06)	0.86	1.04 (0.96, 1.13)	0.29
Cancer	7,213	1.06 (1.00, 1.11)	0.038	0.96 (0.93, 0.99)	0.0075	1.04 (1.00, 1.08)	0.071

Abbreviations: ATBC = Alpha-Tocopherol, Beta-Carotene Cancer Prevention, CVD = cardiovascular disease, HDL = high-density lipoprotein, HR = hazard ratio, SD = standard deviation

* HRs of overall and cause-specific mortality are for each increment of 300 mg dietary cholesterol, 1-SD serum total cholesterol, and 50 g egg, respectively.

† We generated propensity scores for each quintile of dietary cholesterol, serum cholesterol and egg consumption using the covariates included in the multivariable adjusted model (for dietary cholesterol and serum total cholesterol: age, body mass index, cigarettes smoked per day, years of smoking, serum total and HDL cholesterol, intervention assignment, systolic and diastolic blood pressure, history of cardiovascular disease, diabetes, education, physical activity, levels of serum alpha-tocopherol, beta-carotene and retinol, and daily dietary total energy, alcohol, and percentage of energy from protein, carbohydrates, saturated fatty acids, monounsaturated fatty acids, and polyunsaturated fatty acids. Mutual adjustment was performed for dietary cholesterol and serum total cholesterol. For egg consumption: same covariates, without dietary cholesterol adjustment). The Cox proportional hazard regression models were adjusted for the generated propensity scores.

Supplemental Table IV. Associations between dietary cholesterol intake, serum total cholesterol and egg consumption and overall and cause-specific mortality in the ATBC Study, excluding the initial 2 or 5 years of follow-up *†

Cause of death	**Dietary cholesterol (per 300 mg)**		**Serum cholesterol (1-SD)**		**Egg (per 50 g)**	
	HR (95% CI)	P value	HR (95% CI)	P value	HR (95% CI)	P value
Excluding initial 2 years						
Overall	1.10 (1.07, 1.13)	<0.0001	1.02 (1.00, 1.04)	0.030	1.06 (1.04, 1.09)	<0.0001
CVD	1.13 (1.08, 1.18)	<0.0001	1.14 (1.11, 1.17)	<0.0001	1.09 (1.05, 1.13)	<0.0001
Heart disease	1.14 (1.08, 1.20)	<0.0001	1.16 (1.13, 1.20)	<0.0001	1.09 (1.05, 1.13)	<0.0001
Stroke	1.10 (0.99, 1.22)	0.082	1.03 (0.97, 1.11)	0.35	1.07 (0.99, 1.16)	0.11
Cancer	1.07 (1.01, 1.12)	0.012	0.96 (0.93, 0.99)	0.017	1.04 (1.00, 1.08)	0.030
Excluding initial 5 years						
Overall	1.10 (1.07, 1.13)	<0.0001	1.02 (1.00, 1.04)	0.051	1.06 (1.04, 1.09)	<0.0001
CVD	1.14 (1.09, 1.19)	<0.0001	1.13 (1.10, 1.16)	<0.0001	1.09 (1.06, 1.13)	<0.0001
Heart disease	1.15 (1.09, 1.21)	<0.0001	1.15 (1.11, 1.19)	<0.0001	1.10 (1.06, 1.15)	<0.0001
Stroke	1.11 (0.99, 1.23)	0.072	1.04 (0.97, 1.11)	0.31	1.07 (0.98, 1.16)	0.13
Cancer	1.06 (1.01, 1.12)	0.024	0.97 (0.93, 1.00)	0.040	1.04 (1.00, 1.08)	0.059

Abbreviations: ATBC = Alpha-Tocopherol, Beta-Carotene Cancer Prevention, CVD = cardiovascular disease, HDL = high-density lipoprotein, HR = hazard ratio, SD = standard deviation

* HRs of overall and cause-specific mortality are for each increment of 300 mg dietary cholesterol, 1-SD serum total cholesterol, and 50 g egg, respectively.

† Models were adjusted for age, body mass index, cigarettes smoked per day, years of smoking, serum total and HDL cholesterol, intervention assignment, systolic and diastolic blood pressure, history of cardiovascular disease, diabetes, education, physical activity, levels of serum alpha-tocopherol, beta-carotene and retinol, and daily dietary total energy, alcohol, and percentage of energy from protein, carbohydrates, saturated fatty acids, monounsaturated fatty acids, and polyunsaturated fatty acids. Mutual adjustment was performed for dietary cholesterol and serum total cholesterol.

Supplemental Table V. Associations between dietary cholesterol intake, serum total cholesterol and egg consumption and overall and cause-specific mortality in the ATBC Study, excluding the participants reporting a history of diabetes at baseline *†

Cause of death	Dietary cholesterol (per 300 mg)		Serum cholesterol (1-SD)		Egg (per 50 g)	
	HR (95% CI)	P value	HR (95% CI)	P value	HR (95% CI)	P value
Overall	1.10 (1.07, 1.14)	<0.0001	1.02 (1.00, 1.04)	0.067	1.07 (1.04, 1.09)	<0.0001
CVD	1.14 (1.09, 1.19)	<0.0001	1.14 (1.11, 1.18)	<0.0001	1.09 (1.05, 1.13)	<0.0001
Heart disease	1.14 (1.09, 1.20)	<0.0001	1.17 (1.14, 1.21)	<0.0001	1.09 (1.05, 1.14)	<0.0001
Stroke	1.12 (1.01, 1.25)	0.038	1.02 (0.95, 1.10)	0.51	1.08 (0.99, 1.17)	0.079
Cancer	1.07 (1.01, 1.12)	0.013	0.96 (0.93, 0.99)	0.013	1.04 (1.00, 1.08)	0.044

Abbreviations: ATBC = Alpha-Tocopherol, Beta-Carotene Cancer Prevention, CVD = cardiovascular disease, HDL = high-density lipoprotein, HR = hazard ratio, SD = standard deviation

* HRs of overall and cause-specific mortality are for each increment of 300 mg dietary cholesterol, 1-SD serum total cholesterol, and 50 g egg, respectively.

† Models were adjusted for age, body mass index, cigarettes smoked per day, years of smoking, serum total and HDL cholesterol, intervention assignment, systolic and diastolic blood pressure, history of cardiovascular disease, education, physical activity, levels of serum alpha-tocopherol, beta-carotene and retinol, and daily dietary total energy, alcohol, and percentage of energy from protein, carbohydrates, saturated fatty acids, monounsaturated fatty acids, and polyunsaturated fatty acids. Mutual adjustment was performed for dietary cholesterol and serum total cholesterol.

Supplemental Table VI. Associations between dietary cholesterol intake, serum total cholesterol and egg consumption and overall and cause-specific mortality in the ATBC Study (parsimonious models) *†

Cause of death	Dietary cholesterol (per 300 mg)		Serum cholesterol (1-SD)		Egg (per 50 g)	
	HR (95% CI)	P value	HR (95% CI)	P value	HR (95% CI)	P value
Overall	1.08 (1.05, 1.10)	<0.0001	1.03 (1.01, 1.04)	0.0026	1.05 (1.03, 1.07)	<0.0001
CVD	1.09 (1.06, 1.13)	<0.0001	1.14 (1.11, 1.16)	<0.0001	1.06 (1.03, 1.09)	0.0001
Heart disease	1.10 (1.06, 1.14)	<0.0001	1.16 (1.13, 1.19)	<0.0001	1.06 (1.03, 1.10)	0.0003
Stroke	1.07 (0.99, 1.16)	0.11	1.03 (0.96, 1.09)	0.46	1.05 (0.98, 1.12)	0.21
Cancer	1.07 (1.03, 1.11)	0.0012	0.98 (0.95, 1.01)	0.19	1.03 (0.99, 1.06)	0.11

Abbreviations: ATBC = Alpha-Tocopherol, Beta-Carotene Cancer Prevention, CVD = cardiovascular disease, HDL = high-density lipoprotein, HR = hazard ratio, SD = standard deviation

* HRs of overall and cause-specific mortality are for each increment of 300 mg dietary cholesterol, 1-SD serum total cholesterol, and 50 g egg, respectively.

† Models were adjusted for age, cigarettes smoked per day, years of smoking, intervention assignment, systolic and diastolic blood pressure, history of cardiovascular disease, education, physical activity, levels of serum alpha-tocopherol, beta-carotene and retinol, and daily dietary total energy and alcohol. Mutual adjustment was performed for dietary cholesterol and serum total cholesterol.

Supplemental Table VII. Associations between dietary cholesterol, serum total cholesterol and egg and overall and cause-specific mortality in the ATBC Study (winsorized models) *†

Cause of death	Dietary cholesterol (per 300 mg)		Serum cholesterol (1-SD)		Egg (per 50 g)	
	HR (95% CI)	P value	HR (95% CI)	P value	HR (95% CI)	P value
Overall	1.10 (1.07, 1.13)	<0.0001	1.02 (1.00, 1.04)	0.05	1.07 (1.04, 1.09)	<0.0001
CVD	1.13 (1.08, 1.19)	<0.0001	1.14 (1.11, 1.18)	<0.0001	1.09 (1.05, 1.13)	<0.0001
Heart disease	1.14 (1.08, 1.20)	<0.0001	1.17 (1.14, 1.21)	<0.0001	1.09 (1.05, 1.14)	<0.0001
Stroke	1.12 (1.00, 1.25)	0.051	1.04 (0.97, 1.11)	0.30	1.08 (0.99, 1.17)	0.092
Cancer	1.07 (1.01, 1.12)	0.019	0.96 (0.93, 0.99)	0.0075	1.05 (1.00, 1.09)	0.033

Abbreviations: ATBC = Alpha-Tocopherol, Beta-Carotene Cancer Prevention, CVD = cardiovascular disease, HDL = high-density lipoprotein, HR = hazard ratio, SD = standard deviation

* The distributions of dietary cholesterol, serum total cholesterol, and egg consumption were winsorized at the 0.5 and 99.5 percentiles. HRs of overall and cause-specific mortality are for each increment of 300 mg dietary cholesterol, 1-SD serum total cholesterol, and 50 g egg, respectively.

† Models were adjusted for age, body mass index, cigarettes smoked per day, years of smoking, serum total and HDL cholesterol, intervention assignment, systolic and diastolic blood pressure, history of cardiovascular disease, diabetes, education, physical activity, levels of serum alpha-tocopherol, beta-carotene and retinol, and daily dietary total energy, alcohol, and percentage of energy from protein, carbohydrates, saturated fatty acids, monounsaturated fatty acids, and polyunsaturated fatty acids. Mutual adjustment was performed for dietary cholesterol and serum total cholesterol.

Supplemental Table VIII. Associations between dietary cholesterol intake and overall and CVD mortality in the ATBC Study, based on differing incremental intake *

Additional increment of dietary cholesterol intake (mg)	Overall mortality		CVD	
	HR (95% CI)	P value	HR (95% CI)	P value
50	1.015 (1.010, 1.020)	<0.0001	1.020 (1.013, 1.028)	<0.0001
100	1.031 (1.021, 1.040)	<0.0001	1.041 (1.025, 1.056)	<0.0001
150	1.046 (1.032, 1.061)	<0.0001	1.062 (1.038, 1.085)	<0.0001
200	1.062 (1.042, 1.083)	<0.0001	1.083 (1.052, 1.115)	<0.0001
250	1.078 (1.053, 1.104)	<0.0001	1.105 (1.065, 1.146)	<0.0001
300	1.095 (1.064, 1.126)	<0.0001	1.127 (1.078, 1.178)	<0.0001
350	1.111 (1.075, 1.149)	<0.0001	1.150 (1.092, 1.210)	<0.0001
400	1.128 (1.086, 1.172)	<0.0001	1.173 (1.106, 1.244)	<0.0001
450	1.145 (1.098, 1.195)	<0.0001	1.196 (1.120, 1.278)	<0.0001
500	1.163 (1.109, 1.219)	<0.0001	1.220 (1.134, 1.313)	<0.0001
550	1.181 (1.120, 1.244)	<0.0001	1.245 (1.148, 1.350)	<0.0001
600	1.198 (1.132, 1.269)	<0.0001	1.270 (1.163, 1.387)	<0.0001

Abbreviations: ATBC = Alpha-Tocopherol, Beta-Carotene Cancer Prevention, CVD = cardiovascular disease, HDL = high-density lipoprotein, HR = hazard ratio, SD = standard deviation

* Models were adjusted for age, body mass index, cigarettes smoked per day, years of smoking, serum total and HDL cholesterol, intervention assignment, systolic and diastolic blood pressure, history of cardiovascular disease, diabetes, education, physical activity, levels of serum alpha-tocopherol, beta-carotene and retinol, and daily dietary total energy, alcohol, and percentage of energy from protein, carbohydrates, saturated fatty acids, monounsaturated fatty acids, and polyunsaturated fatty acids.

Supplemental Table IX. Associations between serum total cholesterol and CVD mortality in the ATBC Study, based on differing concentration increments *

Additional increment of serum total cholesterol	**CVD mortality**	
	HR (95% CI)	**P value**
0.5 mmol/L (or 19.34 mg/dL)	1.057 (1.045, 1.069)	<0.0001
1 mmol/L (or 38.67 mg/dL)	1.117 (1.092, 1.143)	<0.0001
1.5 mmol/L (or 58 mg/dL)	1.181 (1.141, 1.222)	<0.0001
2 mmol/L (or 77.34 mg/dL)	1.248 (1.193, 1.307)	<0.0001
2.5 mmol/L (or 96.67 mg/dL)	1.320 (1.247, 1.397)	<0.0001
3 mmol/L (or 116 mg/dL)	1.395 (1.303, 1.493)	<0.0001

Abbreviations: ATBC = Alpha-Tocopherol, Beta-Carotene Cancer Prevention, CVD = cardiovascular disease, HDL = high-density lipoprotein, HR = hazard ratio, SD = standard deviation

* Models were adjusted for age, body mass index, cigarettes smoked per day, years of smoking, serum HDL cholesterol, intervention assignment, systolic and diastolic blood pressure, history of cardiovascular disease, diabetes, education, physical activity, levels of serum alpha-tocopherol, beta-carotene and retinol, and daily dietary total energy, alcohol, cholesterol, and percentage of energy from protein, carbohydrates, saturated fatty acids, monounsaturated fatty acids, and polyunsaturated fatty acids.

Supplemental Table X. Associations between egg consumption and overall and CVD mortality in the ATBC Study, based on differing incremental consumption *

Additional increment of egg consumption (g)	Overall mortality		CVD	
	HR (95% CI)	P value	HR (95% CI)	P value
25	1.030 (1.019, 1.042)	<0.0001	1.042 (1.024, 1.059)	<0.0001
50	1.062 (1.039, 1.085)	<0.0001	1.085 (1.049, 1.122)	<0.0001
75	1.094 (1.059, 1.130)	<0.0001	1.130 (1.075, 1.188)	<0.0001
100	1.127 (1.079, 1.177)	<0.0001	1.177 (1.101, 1.258)	<0.0001
125	1.161 (1.100, 1.226)	<0.0001	1.225 (1.127, 1.332)	<0.0001
150	1.197 (1.121, 1.277)	<0.0001	1.276 (1.155, 1.411)	<0.0001
175	1.233 (1.143, 1.330)	<0.0001	1.329 (1.183, 1.494)	<0.0001
200	1.270 (1.165, 1.385)	<0.0001	1.384 (1.211, 1.582)	<0.0001

Abbreviations: ATBC = Alpha-Tocopherol, Beta-Carotene Cancer Prevention, CVD = cardiovascular disease, HDL = high-density lipoprotein, HR = hazard ratio, SD = standard deviation

* Models were adjusted for age, body mass index, cigarettes smoked per day, years of smoking, serum total and HDL cholesterol, intervention assignment, systolic and diastolic blood pressure, history of cardiovascular disease, diabetes, education, physical activity, levels of serum alpha-tocopherol, beta-carotene and retinol, and daily dietary total energy, alcohol, and percentage of energy from protein, carbohydrates, saturated fatty acids, monounsaturated fatty acids, and polyunsaturated fatty acids.

Supplemental Table XI. Associations between quintiles of dietary cholesterol intake, serum total cholesterol and egg consumption and overall and cause-specific mortality in the ATBC Study *

	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	P for trend
		HR (95% CI)	HR (95% CI)	HR (95% CI)	HR (95% CI)	
Dietary cholesterol						
Cut-points (mg)	<387	≥387 and <489	≥489 and <594	≥594 and <746	≥746	
Overall	1.00	1.02 (0.98, 1.07)	1.04 (0.99, 1.09)	1.05 (1.00, 1.11)	1.14 (1.06, 1.21)	0.0009
CVD	1.00	1.02 (0.95, 1.09)	1.04 (0.96, 1.12)	1.08 (0.99, 1.17)	1.18 (1.06, 1.31)	0.003
Heart disease	1.00	1.03 (0.96, 1.11)	1.02 (0.94, 1.11)	1.08 (0.99, 1.19)	1.19 (1.06, 1.33)	0.0082
Stroke	1.00	0.97 (0.82, 1.14)	1.08 (0.91, 1.29)	1.04 (0.85, 1.28)	1.15 (0.90, 1.48)	0.22
Cancer	1.00	1.09 (1.00, 1.17)	1.08 (0.99, 1.17)	1.09 (0.99, 1.20)	1.17 (1.04, 1.31)	0.04
Serum cholesterol						
Cut-points (mmol/L)	<5.28	≥5.28 and <5.89	≥5.89 and <6.45	≥6.45 and <7.15	≥7.15	
Overall	1.00	0.98 (0.94, 1.03)	0.95 (0.90, 0.99)	0.99 (0.94, 1.04)	1.04 (0.99, 1.10)	0.18
CVD	1.00	1.08 (1.01, 1.16)	1.13 (1.06, 1.22)	1.19 (1.11, 1.29)	1.40 (1.29, 1.52)	<0.0001
Heart disease	1.00	1.12 (1.04, 1.21)	1.21 (1.12, 1.31)	1.26 (1.16, 1.37)	1.50 (1.37, 1.64)	<0.0001
Stroke	1.00	0.96 (0.82, 1.12)	0.91 (0.77, 1.07)	0.97 (0.81, 1.16)	1.09 (0.90, 1.33)	0.46
Cancer	1.00	0.95 (0.88, 1.02)	0.86 (0.80, 0.93)	0.90 (0.83, 0.97)	0.90 (0.82, 0.98)	0.0092
Egg						
Cut-points (g)	<25.1	≥25.1 and <37.7	≥37.7 and <52.3	≥52.3 and <75.4	≥75.4	
Overall	1.00	1.00 (0.96, 1.04)	1.03 (0.99, 1.08)	1.07 (1.02, 1.12)	1.10 (1.04, 1.15)	<0.0001
CVD	1.00	1.03 (0.96, 1.10)	1.05 (0.98, 1.12)	1.06 (0.98, 1.13)	1.15 (1.06, 1.24)	0.0013
Heart disease	1.00	1.02 (0.95, 1.09)	1.05 (0.97, 1.13)	1.04 (0.96, 1.13)	1.14 (1.05, 1.24)	0.0055
Stroke	1.00	1.08 (0.92, 1.26)	1.04 (0.89, 1.23)	1.10 (0.93, 1.30)	1.16 (0.97, 1.40)	0.14

Cancer	1.00	1.01 (0.94, 1.09)	1.09 (1.01, 1.17)	1.15 (1.06, 1.24)	1.10 (1.01, 1.21)	0.0008

Abbreviations: ATBC = Alpha-Tocopherol, Beta-Carotene Cancer Prevention, CVD = cardiovascular disease, HDL = high-density lipoprotein, HR = hazard ratio, SD = standard deviation

* Models were adjusted for age, body mass index, cigarettes smoked per day, years of smoking, serum total and HDL cholesterol, intervention assignment, systolic and diastolic blood pressure, history of cardiovascular disease, diabetes, education, physical activity, levels of serum alpha-tocopherol, beta-carotene and retinol, and daily dietary total energy, alcohol, and percentage of energy from protein, carbohydrates, saturated fatty acids, monounsaturated fatty acids, and polyunsaturated fatty acids. Mutual adjustment was performed for dietary cholesterol and serum total cholesterol.

Supplemental Table XII. Associations between quintiles of dietary cholesterol and egg consumption and overall and cause-specific mortality in the ATBC Study (nutrient density models) *†

	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	P for trend
		HR (95% CI)	HR (95% CI)	HR (95% CI)	HR (95% CI)	
Dietary cholesterol						
Overall	1.00	1.01 (0.97, 1.06)	1.04 (0.99, 1.09)	1.07 (1.02, 1.13)	1.15 (1.09, 1.21)	<0.0001
CVD	1.00	1.04 (0.97, 1.11)	1.05 (0.98, 1.13)	1.06 (0.98, 1.14)	1.19 (1.10, 1.29)	0.0001
Heart disease	1.00	1.02 (0.95, 1.10)	1.05 (0.97, 1.14)	1.06 (0.97, 1.15)	1.18 (1.08, 1.30)	0.0004
Stroke	1.00	1.11 (0.94, 1.30)	1.04 (0.88, 1.24)	1.06 (0.88, 1.26)	1.22 (1.01, 1.49)	0.13
Cancer	1.00	1.00 (0.93, 1.09)	1.07 (0.99, 1.16)	1.12 (1.03, 1.22)	1.15 (1.05, 1.26)	0.0002
Egg						
Overall	1.00	1.01 (0.97, 1.05)	1.02 (0.97, 1.06)	1.05 (1.00, 1.10)	1.10 (1.05, 1.15)	<0.0001
CVD	1.00	1.06 (1.00, 1.14)	1.04 (0.97, 1.11)	1.05 (0.98, 1.13)	1.18 (1.10, 1.27)	0.0002
Heart disease	1.00	1.07 (1.00, 1.15)	1.03 (0.96, 1.11)	1.03 (0.95, 1.11)	1.18 (1.09, 1.27)	0.0027
Stroke	1.00	1.04 (0.88, 1.21)	1.05 (0.89, 1.23)	1.14 (0.97, 1.34)	1.19 (1.00, 1.41)	0.024
Cancer	1.00	0.97 (0.90, 1.04)	1.05 (0.98, 1.13)	1.06 (0.99, 1.15)	1.09 (1.00, 1.18)	0.0054

Abbreviations: ATBC = Alpha-Tocopherol, Beta-Carotene Cancer Prevention, CVD = cardiovascular disease, HDL = high-density lipoprotein, HR = hazard ratio, SD = standard deviation

* We used the nutrient density model by adjusting daily total energy intake (grams per 1000 kcal), with energy as a continuous covariate in the model.

† Models were adjusted for age, body mass index, cigarettes smoked per day, years of smoking, serum total and HDL cholesterol, intervention assignment, systolic and diastolic blood pressure, history of cardiovascular disease, diabetes, education, physical activity, levels of serum alpha-tocopherol, beta-carotene and retinol, and daily dietary total energy, alcohol, and percentage of energy from protein, carbohydrates, saturated fatty acids, monounsaturated fatty acids, and polyunsaturated fatty acids. Mutual adjustment was performed for dietary cholesterol and serum total cholesterol.

Supplemental Table XIII. Associations Between Daily Egg Consumption and Overall and Cause-Specific Mortality in the ATBC Study

Cause of death	Egg consumption (per 50 g/day)	
	HR (95% CI)	P value
All causes		
Model 1: Multivariable *	1.06 (1.04, 1.09)	<0.0001
Model 2: Multivariable †	1.07 (1.05, 1.10)	<0.0001
CVD		
Model 1: Multivariable *	1.09 (1.05, 1.12)	<0.0001
Model 2: Multivariable †	1.09 (1.06, 1.13)	<0.0001
Heart disease		
Model 1: Multivariable *	1.09 (1.05, 1.13)	<0.0001
Model 2: Multivariable †	1.10 (1.06, 1.15)	<0.0001
Stroke		
Model 1: Multivariable *	1.06 (0.98, 1.15)	0.13
Model 2: Multivariable †	1.06 (0.98, 1.15)	0.17
Cancer		
Model 1: Multivariable *	1.04 (1.00, 1.08)	0.047
Model 2: Multivariable †	1.05 (1.01, 1.09)	0.028

Abbreviations: ATBC = Alpha-Tocopherol, Beta-Carotene Cancer Prevention, CVD = cardiovascular disease, HDL = high-density lipoprotein, HR = hazard ratio, SD = standard deviation

* Models were adjusted for age, body mass index, cigarettes smoked per day, years of smoking, serum total and HDL cholesterol, intervention assignment, systolic and diastolic blood pressure, history of cardiovascular disease, diabetes, education, physical activity, levels of serum alpha-tocopherol, beta-carotene and retinol, and daily dietary total energy, alcohol, and percentage of energy from protein, carbohydrates, saturated fatty acids, monounsaturated fatty acids,

and polyunsaturated fatty acids. Total number of events for all-cause-, CVD-, heart disease-, stroke-, and cancer-death is 22,035, 9,110, 7,450, 1,621 and 7,213, respectively.

† Models were further adjusted for daily dietary intakes of vegetables, fruit, potatoes, legumes, whole grains, red and processed meat and fish (as quintile categories).

Supplemental Table XIV. Search strategy for systematic review *

Pubmed			Embase		
No.	Query	Result	No.	Query	Result
#1	Case-cohort OR Case-control OR Cohort OR Follow-up OR Longitudinal OR Nested OR Prospective	3,779,661	#1	('prospective study' OR 'cohort study' OR 'case control study' OR 'longitudinal study' OR 'follow up' OR 'case-cohort' OR 'case-control') AND [embase]/lim	3,011,695
#2	“Egg” OR “Eggs”	138,514	#2	('egg'/exp OR egg OR 'eggs'/exp OR eggs OR egg.ab.) AND [embase]/lim	103,491
#3	“Cardiovascular Diseases” [Mesh] OR Cardiovascular OR CHD OR Coronary Heart Disease OR Myocardial Infarction OR CVD OR Haemorrhagic Stroke OR Hemorrhagic Stroke OR Heart Failure OR Ischemic Heart Disease OR Ischaemic Heart Disease OR Ischaemic stroke OR Ischemic Stroke OR “Stroke” [Mesh]	3,559,418	#3	('cardiovascular disease'/exp OR cardiovascular.ab. OR 'ischemic heart disease.ab.' OR 'coronary artery disease.ab.' OR 'cerebrovascular accident' OR 'chd.ab.' OR 'cvd.ab.' OR 'coronary heart disease.ab.' OR 'haemorrhagic stroke.ab.' OR 'hemorrhagic stroke.ab.' OR 'heart failure.ab.' OR 'ischaemic heart disease.ab.' OR 'ischaemic stroke.ab.' OR 'ischemic stroke.ab.' OR 'myocardial infarction' OR 'stroke.ab.') AND [embase]/lim	3,953,810
#4	human	20,377,531	#4	'human' AND [embase]/lim	17,908,143
#5	#1 AND #2 AND #3 AND #4	336	#5	(#1 AND #2 AND #3 AND #4)	529

Web of Science		
No.	Query	Result
#1	(TS=((Case-cohort or Case-control or Cohort or Follow-up or Longitudinal or Nested or Prospective) AND (Egg) AND (Cardiovascular or CHD or Coronary Heart Disease or CVD or Heart Failure or Ischaemic Heart Disease or Ischemic Heart Disease or Myocardial Infarction or Stroke))) AND DOCUMENT TYPES: (Article)	441

* Search date: 2021-08-05.

Supplemental Table XV. Study characteristics in the meta-analysis

First author, year of publication	Cohort	Country	Years of follow-up	Number of participants	Range of age	FFQ Assessment	Ascertainment of Cases	Number of endpoints	Exposure categories	Relative Risks (95% CI)*	Covariates in the multivariable-adjusted model
Abdollahi et al. 2019	Kuopio Ischaemic Heart Disease Risk Factor Study	Finland	21.2	1,950 men	42-60 y	Guided 4-day food records, baseline	Computer linkage to the national hospital discharge and death certificate registers	Stroke (217)	<15 g/d	1.00 (reference)	Age, examination year, energy intake, smoking, BMI, leisure-time physical activity, use of hypertension medication, intakes of alcohol, fruits, berries, and vegetables.
									15-26 g/d	1.01 (0.69,1.47)	
									27-45 g/d	1.10 (0.76,1.61)	
									>45 g/d	0.81 (0.54,1.23)	
Chen et al. 2021	WHI	United States	17.8	161,808 women	50-79 y	Self-administered FFQ, baseline and 24-h dietary recalls for 4 times	Questionnaires were used to collect information on clinical outcomes. Deaths were ascertained by reviewing death certificates, medical records, or autopsy reports, or by linkage to the National Death Index.	CVD (9,808)	<1/w	1.00 (reference)	Age, region, race/ethnicity, study group, education, annual family income, health insurance, smoking status, pack-years of smoking, alcohol consumption, quitting smoking/drinking owing to health problems, recreational physical activity, total energy intake, using fat to deep fry/pan fry/sauté, aspirin use, use of nonsteroidal anti-inflammatory drugs, hormone use, self-rated health status, waist circumference, diabetes, systolic and diastolic blood pressure, antihypertensive drug use, dyslipidemia and food groups.
									1-2/w	0.97(0.92, 1.03)	
									2-3/w	1.00(0.94, 1.07)	
									3-7/w	1.05(0.99, 1.12)	
									>7/w	1.14(1.04, 1.25)	
									0.5/d	1.06(1.03, 1.10)	
								CVD death (5,589)	<1/w	1.00 (reference)	
									1-2/w	1.03(0.96, 1.11)	
									2-3/w	1.03(0.95, 1.12)	
									3-7/w	1.11(1.02, 1.20)	
									>7/w	1.23(1.10, 1.39)	
									0.5/d	1.10(1.05, 1.15)	
								IHD (7,091)	<1/w	1.00 (reference)	
									1-2/w	1.01(0.93, 1.10)	
									2-3/w	1.01(0.93, 1.10)	
									3-7/w	1.10(1.01, 1.21)	
									>7/w	1.11(1.01, 1.23)	
									0.5/d	1.09(1.03, 1.16)	

								Ischemic stroke (2,430)	<1/w	1.00 (reference)	
									1-2/w	1.10(0.96, 1.26)	
									2-3/w	1.26(1.09, 1.46)	
									3-7/w	1.13(0.97, 1.33)	
									>7/w	1.34(1.14, 1.59)	
									0.5/d	1.18(1.07, 1.30)	
								Hemorrhagic stroke (535)	<1/w	1.00 (reference)	
									1-2/w	0.94(0.71, 1.24)	
									2-3/w	0.83(0.61, 1.12)	
									3-7/w	0.81(0.59, 1.13)	
									>7/w	0.69(0.49, 0.99)	
									0.5/d	0.83(0.66, 1.04)	
Dehghan et al. 2020	ONTARGET/TRANSCEND	40 middle- and high-income countries	4.7	31,410 men and women	≥55 y	FFQ, baseline, 6 wk, 6 mo, every 6 mo after randomization until study completion	Using standardised criteria, by a blinded central committee	CVD (5,181)	0.2 (0-0.6)/wk	1.00 (reference)	Age; sex; smoking; location; BMI; ducation; physical activity; history of diabetes; history of myocardial infarction; history of stroke; medication; trial allocation; daily intakes of fruit, vegetables, red meat, poultry, fish, dairy and regions.
									1.8 (1.3-2.3)/wk	1.06(0.99, 1.21)	
									3.7 (3.3-4.2)/wk	1.04(0.90, 1.21)	
									6.3 (5.7-6.9)/wk	1.11(0.98, 1.25)	
									8.6 (7.6-12.5)/wk	0.97(0.73, 1.29)	
								CVD death (2,264)	0.2 (0-0.6)/wk	1.00 (reference)	
									1.8 (1.3-2.3)/wk	1.04(0.94, 1.14)	
									3.7 (3.3-4.2)/wk	1.07(0.86, 1.34)	
									6.3 (5.7-6.9)/wk	1.02(0.85, 1.23)	
									8.6 (7.6-12.5)/wk	0.87(0.56, 1.37)	
								MI (1,554)	0.2 (0-0.6)/wk	1.00 (reference)	
									1.8 (1.3-2.3)/wk	1.00(0.89, 1.11)	
									3.7 (3.3-4.2)/wk	0.91(0.69, 1.21)	

									6.3 (5.7-6.9)/wk	1.07(0.86, 1.35)	
									8.6 (7.6-12.5)/wk	1.12(0.68, 1.82)	
								Stroke (1,394)	0.2 (0-0.6)/wk	1.00 (reference)	
									1.8 (1.3-2.3)/wk	1.10(0.97, 1.24)	
									3.7 (3.3-4.2)/wk	1.12(0.85, 1.47)	
									6.3 (5.7-6.9)/wk	1.17(0.95, 1.45)	
									8.6 (7.6-12.5)/wk	0.97(0.58, 1.64)	
								HF (1,337)	0.2 (0-0.6)/wk	1.00 (reference)	
									1.8 (1.3-2.3)/wk	1.14(1.00, 1.29)	
									3.7 (3.3-4.2)/wk	1.09(0.81, 1.47)	
									6.3 (5.7-6.9)/wk	1.33(1.05, 1.68)	
									8.6 (7.6-12.5)/wk	1.25(0.74, 2.11)	
PURE	21 countries	9.5	114,615 men and women	>50 y	FFQ, baseline only	Death certificates (available in 100% of deaths), medical records (MI: 49.4%, stroke 80.8% and heart failure: 76.2%), household interviews and other sources.		CVD (8,477)	0.2 (0-0.6)/wk	1.00 (reference)	Age; sex; smoking; location; education; physical activity; history of diabetes; daily intakes of fruits, vegetables, dairy, red meat, poultry and fish; percentage energy from carbohydrate; total daily energy and center.
									1.8 (1.3-2.3)/wk	0.92(0.85, 0.99)	
									3.7 (3.3-4.2)/wk	0.88(0.80, 0.96)	
									6.3 (5.7-6.9)/wk	0.94(0.84, 1.04)	
									8.6 (7.6-12.5)/wk	0.92(0.83, 1.01)	
								CVD death (3,410)	0.2 (0-0.6)/wk	1.00 (reference)	
									1.8 (1.3-2.3)/wk	0.95(0.84, 1.08)	
									3.7 (3.3-4.2)/wk	0.91(0.78, 1.06)	
									6.3 (5.7-6.9)/wk	0.92(0.77, 1.10)	
									8.6 (7.6-12.5)/wk	1.00(0.85, 1.19)	
								MI (3,664)	0.2 (0-0.6)/wk	1.00 (reference)	
									1.8 (1.3-2.3)/wk	0.83(0.74, 0.93)	
									3.7 (3.3-4.2)/wk	0.78(0.68, 0.89)	

									6.3 (5.7-6.9)/wk	0.79(0.67, 0.93)	
									8.6 (7.6-12.5)/wk	0.84(0.72, 0.98)	
								Stroke (3,916)	0.2 (0-0.6)/wk	1.00 (reference)	
									1.8 (1.3-2.3)/wk	1.03(0.9, 1.16)	
									3.7 (3.3-4.2)/wk	0.97(0.85, 1.12)	
									6.3 (5.7-6.9)/wk	1.05(0.90, 1.21)	
									8.6 (7.6-12.5)/wk	0.97(0.84, 1.13)	
								HF (939)	0.2 (0-0.6)/wk	1.00 (reference)	
									1.8 (1.3-2.3)/wk	1.08(0.83, 1.39)	
									3.7 (3.3-4.2)/wk	1.10(0.82, 1.46)	
									6.3 (5.7-6.9)/wk	1.14(0.81, 1.61)	
									8.6 (7.6-12.5)/wk	1.24(0.90, 1.70)	
Díez-Espino et al. 2017	PREDIMED study	Spain	5.8	7,216 men and women	55-80 y	Interviewer-administered FFQ, every year (cumulative average), but HR calculated from baseline intake	Repeated contacts with participants, general practitioners who were responsible for the clinical care of the participants, yearly review of medical records, and consultation of the National Death Index	CVD† (342)	<2/wk	1.00 (reference)	Age, sex, BMI and intervention group, recruitment center, smoking status, physical activity during leisure time, educational status, diabetes, hypertension, hypercholesterolemia, family history of CVD, Mediterranean food pattern, alcohol intake and total energy intake.
									2-4/wk	0.95 (0.75, 1.19)	
									>4/wk	1.22 (0.72, 2.07)	
Djousse et al. 2008	PHS (Physicians' Health Study)	United States	20	21,275 men	40-85 y	SFFQ, baseline, 24, 48, 72, 96, and 120 months after randomization	Questionnaire were used to gather the information of the occurrence of new medical diagnoses including HF and confirmed by physicians or medical records	HF (1,337)	<1/wk	1.00 (reference)	Age, body mass index, smoking, alcohol consumption, history of diabetes mellitus, atrial fibrillation, hypertension, physical activity, history of valvular heart disease and treatment for cholesterol.
									1/wk	0.93(0.78, 1.12)	
									2-4/wk	1.03(0.86, 1.22)	
									5-6/wk	1.01(0.78, 1.32)	
									1/d	1.28(1.02, 1.61)	
									≥2/d	1.64(1.08, 2.49)	

Djousse et al. 2008	PHS (Physicians' Health Study)	United States	20	21,327 men	40-86 y	SFFQ, baseline, 24, 48, 72, 96, and 120 months after randomization	Questionnaire were used to gather the information of the occurrence of new medical diagnoses including MI, stroke and confirmed by physicians or medical records, death certificates were obtained for confirmation and review of cause of death	MI (1,550)	<1/wk	1.00 (reference)	Age, BMI, smoking, history of hypertension, vitamin intake, alcohol, physical activity, breakfast cereal, vegetables, treatment arm, atrial fibrillation, diabetes, hypercholesterolemia, and premature myocardial infarction.
									1/wk	1.12 (0.96, 1.31)	
									2-4/wk	1.16 (1.00, 1.36)	
									5-6/wk	1.18 (0.93, 1.49)	
									>7/wk	0.90 (0.72, 1.14)	
								Stroke (1,342)	<1/wk	1.00 (reference)	
									1/wk	0.96 (0.82, 1.13)	
									2-4/wk	1.06 (0.91, 1.24)	
									5-6/wk	1.13 (0.89, 1.42)	
									>7/wk	0.99 (0.80, 1.23)	
Djousse et al. 2020	MVP	United States	3.24	188,267 men and women	64.4 y	SFFQ, baseline	Veterans Health Administration (VHA) electronic medical records system	MI (10,260)	<1/month	1.00 (reference)	Age, sex, race, education, body mass index, exercise, smoking, alcohol intake, and DASH score.
									1-3/month	0.93(0.85, 1.02)	
									1/week	0.96(0.87, 1.05)	
									2-4/week	0.98(0.89, 1.07)	
									5-6/week	1.08(0.98, 1.19)	
									1/day	1.11(1.00, 1.24)	
									>2/day	1.13(1.00, 1.28)	
Djousse et al. 2021	ARIC, CHS, JHS, MESA, PHS, WACS, WHS	United States	ARIC: 20.8; CHS:NA; JHS: 7; MESA: 13.2, PHS: 9, WACS: 9.4, WHS: NA	89,687 men and women	24.9-73.0 y	FFQ or diet history, baseline	Medical records, adjudicated by cohort-specific endpoint committees	CHD (5,867)	<1/month	1.00 (reference)	Age, sex, body mass index, smoking, alcohol intake, exercise, and components of DASH score.
									1-3/month	1.00(0.92, 1.08)	
									1/week	0.93(0.85, 1.02)	
									2-4/week	0.97(0.89, 1.05)	
									5-6/week	0.94(0.82, 1.06)	
									≥7/w	1.06(0.92, 1.9)	
Drouin-Chartier et al. 2020	NHS	United States	32	83,349 women	30-55 y	Self-administered SFFQ, every 4 years	Self-report with or without validation with medical records	CVD (7,411)	<1/mo	1.00 (reference)	Age, calendar time, smoking status, BMI, physical activity, postmenopausal
									1-<4/mo	1.01 (0.89, 1.14)	

									1-<3/wk	0.96 (0.84, 1.08)	hormone use, race, family history of myocardial infarction, baseline high blood cholesterol, baseline high blood pressure, alcohol intake, multivitamin use, daily intake of total calories, full-fat milk, bacon, red meat, other processed meats, refined grains, fruits, vegetables, potatoes, coffee, fruit juices, and sugar-sweetened beverages
									3-<5/wk	0.91 (0.79, 1.03)	
									5-<7/wk	0.90 (0.75, 1.07)	
									>1/d	0.93 (0.77, 1.14)	
									Per 1 egg/d	0.94 (0.85, 1.04)	
								CHD (3,896)	<1/mo	1.00 (reference)	
									1-<4/mo	0.94 (0.79, 1.12)	
									1-<3/wk	0.89 (0.76, 1.05)	
									3-<5/wk	0.85 (0.71, 1.01)	
									5-<7/wk	0.88 (0.69, 1.11)	
									>1/d	0.85 (0.65, 1.11)	
									Per 1 egg/d	0.92 (0.80, 1.05)	
								Stroke (3,587)	<1/mo	1.00 (reference)	
									1-<4/mo	1.09 (0.90, 1.31)	
									1-<3/wk	1.03 (0.86, 1.24)	
									3-<5/wk	0.97 (0.79, 1.17)	
									5-<7/wk	0.91 (0.69, 1.20)	
									>1/d	1.04 (0.77, 1.40)	
									Per 1 egg/d	0.96 (0.83, 1.12)	
NHS II	United States	22	90,214 women	25-44 y	Self-administered SFFQ, every 4 years	Self-report with or without validation with medical records	CVD (1,225)	<1/mo	1.00 (reference)	Age, calendar time, smoking status, BMI, physical activity, postmenopausal hormone use, race, family history of myocardial infarction, baseline high blood cholesterol, baseline high blood pressure, alcohol intake, multivitamin use, daily intake of total
									1-<4/mo	0.84 (0.69, 1.03)	
									1-<3/wk	0.95 (0.77, 1.17)	
									3-<5/wk	0.76 (0.59, 0.99)	
									5-<7/wk	1.32 (0.86, 2.02)	
									>1/d	0.61 (0.28, 1.31)	

									Per 1 egg/d	0.97 (0.71, 1.33)	calories, full-fat milk, bacon, red meat, other processed meats, refined grains, fruits, vegetables, potatoes, coffee, fruit juices, and sugar-sweetened beverages.
								CHD (653)	<1/mo	1.00 (reference)	
									1-<4/mo	0.77 (0.59, 1.01)	
									1-<3/wk	0.86 (0.65, 1.14)	
									3-<5/wk	0.56 (0.39, 0.81)	
									5-<7/wk	1.31 (0.75, 2.27)	
									>1/d	0.43 (0.13, 1.38)	
									Per 1 egg/d	0.91 (0.59, 1.42)	
								Stroke (576)	<1/mo	1.00 (reference)	
									1-<4/mo	0.91 (0.67, 1.22)	
									1-<3/wk	1.03 (0.76, 1.40)	
									3-<5/wk	1.03 (0.71, 1.50)	
HPFS	United States	26	42,055 men	40-75 y	Self-administered SFFQ, every 4 years	Self-report with or without validation with medical records		CVD (1,725)	<1/mo	1.00 (reference)	Age, calendar time, smoking status, BMI, physical activity, postmenopausal hormone use, race, family history of myocardial infarction, baseline high blood cholesterol, baseline high blood pressure, alcohol intake, multivitamin use, daily intake of total calories, full-fat milk, bacon, red meat, other processed meats, refined grains, fruits, vegetables, potatoes, coffee, fruit juices, and sugar-sweetened beverages.
									1-<4/mo	0.84 (0.61, 1.16)	
									1-<3/wk	0.99 (0.73, 1.34)	
									3-<5/wk	1.06 (0.77, 1.45)	
									5-<7/wk	1.23 (0.85, 1.78)	
									>1/d	1.26 (0.84, 1.88)	
									Per 1 egg/d	1.29 (1.08, 1.54)	
								CVD (226)	<1/mo	1.00 (reference)	
									1-<4/mo	0.44 (0.26, 0.75)	
									1-<3/wk	0.44 (0.26, 0.74)	
									3-<5/wk	0.39 (0.21, 0.73)	
									5-<7/wk	0.66 (0.25, 1.73)	
									>1/d	0.57 (0.17, 1.91)	

									Per 1 egg/d	1.02 (0.52, 2.00)	
								CVD (1,038)	<1/mo	1.00 (reference)	
									1-<4/mo	1.06 (0.78, 1.45)	
									1-<3/wk	1.00 (0.74, 1.36)	
									3-<5/wk	0.99 (0.71, 1.37)	
									5-<7/wk	1.05 (0.68, 1.63)	
									>1/d	1.05 (0.69, 1.61)	
									Per 1 egg/d	0.93 (0.75, 1.16)	
Farvid et al. 2017	Golestan Cohort Study	Iran	11	42,403 men and women	36-85 y	Interviewer administered FFQ baseline only	Reported by family members, friends, or local health workers during annual telephone calls, and a physician visited the house to complete a validated verbal autopsy questionnaire by interviewing the next of kin	CVD death (1,467)	0.00/d	1.00 (reference)	Gender, age, ethnicity, education, marital status, residency, smoking, opium use, alcohol, BMI, systolic blood pressure, occupational physical activity, family history of cancer, wealth score, medication and energy intake.
									0.06/d	1.01 (0.87, 1.16)	
									0.18/d	0.93 (0.80, 1.08)	
									0.48/d	0.92 (0.79, 1.07)	
									Per 3/wk	0.92 (0.81, 1.05)	
								CHD death (764)	0.00/d	1.00 (reference)	
									0.06/d	1.03 (0.84, 1.26)	
									0.18/d	0.99 (0.80, 1.21)	
									0.48/d	0.92 (0.74, 1.14)	
									Per 3/wk	0.91 (0.77, 1.09)	
								Stroke death (507)	0.00/d	1.00 (reference)	
									0.06/d	1.00 (0.79, 1.26)	
									0.18/d	0.80 (0.62, 1.04)	
									0.48/d	0.94 (0.73, 1.21)	
									Per 3/wk	0.94 (0.75, 1.17)	
Goldberg et al. 2014	Northern Manhattan Study	United States	11	2,669 men and women	>40 y	Interviewer-administered	Detected through ongoing hospital surveillance of	CVD (719)	<1/mo	1.00 (reference)	Age, sex, race/ethnicity, BMI, diabetes, hypertension, LDL-C,
									1/mo	0.94 (0.75, 1.16)	

									2-3/mo	0.85 (0.66, 1.09)	HDL-C, TG, cholesterol lowering medication, moderate alcohol use, moderate-heavy physical activity, smoking, high-school completion, energy intake, Mediterranean diet score, family history of stroke in siblings, family history of MI in siblings, consumption of saturated and unsaturated fats, carbohydrates and proteins.
									1/wk	0.96 (0.79, 1.18)	
									>2/wk	1.03 (0.67, 1.60)	
									Per 1 egg/wk	1.05 (0.95, 1.16)	
								Stroke (266)	<1/mo	1.00 (reference)	
									1/mo	0.97 (0.69, 1.37)	
									2-3/mo	0.76 (0.50, 1.14)	
									1/wk	0.83 (0.60, 1.16)	
									>2/wk	1.18 (0.60, 2.30)	
									Per 1 egg/wk	1.04 (0.88, 1.22)	
								CHD (226)	<1/mo	1.00 (reference)	
									1/mo	0.83 (0.57, 1.22)	
									2-3/mo	0.66 (0.40, 1.06)	
									1/wk	1.09 (0.77, 1.55)	
									>2/wk	0.81 (0.34, 1.93)	
									Per 1 egg/wk	1.04 (0.87, 1.26)	
Guo et al. 2018	CAPS	United Kingdom	22.8	1,781 men	45-59 y	SFFQ, updated every 5-years	Hospital and general practitioner database, confirmed by two independent expert clinicians and an epidemiologist, including computed tomography, radiological and pathological information and National Registry	CVD (715)	0-1/wk	1.00 (reference)	Age, BMI, total energy intake, alcohol consumption, smoking, energy expenditure, social class, family history of myocardial infarction, diabetes mellitus, sugar intake, fruit consumption, red meat consumption and fiber intake.
									1-2/wk	0.98 (0.76, 1.26)	
									2-3/wk	1.14 (0.89, 1.46)	
									3-5/wk	1.01 (0.77, 1.33)	
									>5/wk	1.25 (0.94, 1.66)	
								Stroke (248)	0-1/wk	1.00 (reference)	
									1-2/wk	1.01 (0.65, 1.56)	
									2-3/wk	1.00 (0.64, 1.55)	
									3-5/wk	1.15 (0.72, 1.84)	

									>5/wk	1.60 (1.00, 2.57)	
								CHD (477)	0-1/wk	1.00 (reference)	
									1-2/wk	0.97 (0.72, 1.31)	
									2-3/wk	1.14 (0.85, 1.52)	
									3-5/wk	1.01 (0.72, 1.4)	
									>5/wk	0.91 (0.64, 1.31)	
Houston et al. 2011	Health, Aging and Body Composition (Health ABC) Study	United States	9	1,600 men and women (non-T2D)	70-79 y	Interviewer-administered FFQ, at year 2	Annual in-person clinic exams, semi-annual phone interviews, medical record and death certificate	CVD (158)	<1/wk	1.00 (reference)	Age, sex, race, education, field center, smoking, alcohol use, physical activity, BMI, total energy intake, protein intake, fiber intake, multivitamin use, supplemental vitamin E use, statin use, aspirin use, oral estrogen use (women), prevalent hypertension, saturated fatty acid intake.
									1-2/wk	1.03 (0.71, 1.49)	
									>3/wk	1.38 (0.88, 2.16)	
				31 men and women (T2D)	70-79 y	Interviewer-administered FFQ, at year 2	Annual in-person clinic exams, semi-annual phone interviews, medical record and death certificate	CVD (45)	<1/wk	1.00 (reference)	
									1-2/wk	3.33(1.18, 9.41)	
									>3/wk	5.02(1.63, 15.52)	
Jang et al. 2018	Korean Genome and Epidemiology Study	Korea	7.3	9,248 men and women	40-69 y	SFFQ, baseline and second follow-up	Identified through biennial questionnaires, and all reported cases were confirmed by trained staff during personal interviews	CVD (570)	0.1/wk	1.00 (reference)	Age, sex, educational level, residential area, monthly household income, alcohol drinking, smoking in pack-years, physical activity level, dietary supplement use, history of hypertension and dyslipidemia, and intakes of total energy, total vegetables, total fruits, red meat, fiber, vitamin E, and BMI.
									0.7/wk	1.27 (0.99, 1.61)	
									1.6/wk	1.23 (0.95, 1.60)	
									4.2/wk	1.14 (0.87, 1.49)	
Key et al. 2019	EPIC	Denmark, Norway, Sweden, France, Netherlands, UK, Greece,	12.6	409,885 men and women	21-83 y	FFQ, baseline only	Record linkage to morbidity or hospital registries, and self-reports followed by confirmation with medical	CHD (7,198)	4 g/d	1.00 (reference)	Age, smoking status, number of cigarettes per day, history of diabetes, previous hypertension, prior hyperlipidemia, Cambridge physical activity index,
									9 g/d	0.96 (0.89-1.04)	
									15 g/d	0.97 (0.90-1.05)	
									22 g/d	1.02 (0.94-1.09)	

		Italy, Spain, Germany					records; vital status collected from mortality registries at the regional or national level or by active follow-up of study participants and next of kin		40 g/d	0.93 (0.86-1.01)	employment status, level of education completed, BMI, current alcohol consumption, and intakes of energy, fruit and vegetables combined, sugars and fibre from cereals, sex, and EPIC centre; Dose response analysis further adjusted for intakes of red and processed meat, poultry meat, white fish, fatty fish, milk, yogurt and cheese.
									Per 20 g/d	0.93 (0.88, 0.99)	
Larsson et al. 2015	Cohort of Swedish Men	Sweden	13	37,766 men	45-79 y	SFFQ, baseline only	Confirmed by Swedish National Patient and Cause of Death Registers	CHD (3,262)	0-3/mo	1.00 (reference)	Age, education, family history of CHD before 60 y of age, smoking status and pack-years of smoking, aspirin use, walking/cycling, exercise, BMI, history of hypertension, hypercholesterolemia, and diabetes, and intakes of total energy, alcohol, fruits and vegetables, and processed meat.
									1-2/wk	0.98 (0.90, 1.05)	
									3-6/wk	0.95 (0.84, 1.08)	
									1.2/d	1.03 (0.84, 1.27)	
								Ischemic stroke (2,039)	0-3/mo	1.00 (reference)	
									1-2/wk	0.91 (0.83, 1.00)	
									3-6/wk	1.07 (0.92, 1.24)	
									1.2/d	0.87 (0.66, 1.14)	
								Hemorrhagic stroke (405)	0-3/mo	1.00 (reference)	
									1-2/wk	0.91 (0.73, 1.14)	
									3-6/wk	1.04 (0.74, 1.45)	
									1.2/d	1.05 (0.59, 1.88)	
	Swedish Mammography Cohort	Sweden	13	32,805 women	49-83 y	SFFQ, baseline only	Confirmed by Swedish National Patient and Cause of Death Registers	CHD (1,504)	0-3/mo	1.00 (reference)	Age, education, family history of CHD before 60 y of age, smoking status and pack-years of smoking, aspirin use, walking/cycling, exercise, BMI,
									1-2/wk	0.94 (0.84, 1.05)	
									3-6/wk	1.03 (0.86, 1.24)	
									1.1/d	0.85 (0.59, 1.23)	

								Ischemic stroke (1,561)	0-3/mo	1.00 (reference)	history of hypertension, hypercholesterolemia and diabetes, intakes of total energy, alcohol, fruits and vegetables, and processed meat.
									1-2/wk	1.06 (0.95, 1.19)	
									3-6/wk	1.07 (0.90, 1.28)	
									1.1/d	1.06 (0.76, 1.47)	
								Hemorrhagic stroke (294)	0-3/mo	1.00 (ref)	
									1-2/wk	1.06 (0.82, 1.36)	
									3-6/wk	0.80 (0.52, 1.25)	
									1.1/d	0.96 (0.44, 2.12)	
Mann et al. 1997	Vegetarian Society	United Kingdom	13.3	9,980 men and women	16-79 y	Self-administered SFFQ Baseline only	Confirmed by the National Health Service Central Register	CHD death (64)	<1/wk	1.00 (reference)	Age, sex, smoking and social class.
									1-5/wk	1.28(0.59, 2.79)	
									≥6/wk	2.68(1.19, 6.02)	
Nakamura et al. 2004	NIPPON DATA80	Japan	14	4,077 men	≥30 y	Self-administered FFQ baseline only	Confirmed by National Registry (computer matching of data from the National Vital Statistics)	CHD death (39)	1/d	1.00 (reference)	Age, serum creatinine, total cholesterol, blood glucose, BMI, systolic and diastolic BP, use of BP-lowering drugs, cigarette smoking, and alcohol intake.
									0.5 d	1.49 (0.63, 3.48)	
									1-2/wk	1.71 (0.78, 3.76)	
									Seldom	1.18 (0.26, 5.42)	
								Stroke death (112)	>2/d	0.25 (0.03, 1.81)	
									1/d	1.00 (reference)	
									0.5 d	1.10 (0.68, 1.76)	
									1-2/wk	1.09 (0.69, 1.72)	
									Seldom	0.93 (0.36, 2.40)	
				5,186 women	≥30 y	Self-administered FFQ baseline only	Confirmed by National Registry (computer matching of data from the National Vital Statistics)	CHD death (41)	>2/d	1.27 (0.16, 9.80)	Age, serum creatinine, total cholesterol, blood glucose, BMI, systolic and diastolic BP, use of BP-lowering drugs, cigarette smoking and alcohol intake.
									1/d	1.00 (reference)	
									0.5 d	0.78 (0.35, 1.82)	
									1-2/wk	0.64 (0.28, 1.44)	
									Seldom	1.42 (0.56, 3.62)	

								Stroke death (107)	>2/d	1.22 (0.29, 5.17)	
									1/d	1.00 (reference)	
									1/2 d	1.46 (0.89, 2.40)	
									1-2/wk	0.79 (0.47, 1.33)	
									Seldom	0.78 (0.35, 1.73)	
Nakamura et al. 2006	Japan Public Health Centerbased prospective study	Japan	10.2	90,735 men and women	40-69 y	Self-administered questionnaire, baseline only	Confirmed by medical records, letter, telephone or death certificate	CHD (3,587)	<1/wk	1.19 (0.86, 1.64)	Age, sex, BMI, hypertension, diabetes, use of cholesterol lowering drugs, smoking, alcohol drinking, whether participants intended to avoid cholesterol rich diets, consumption of meat, fish, vegetables, and fruits and cohort effects.
									1-2/wk	1.00 (0.77, 1.3)	
									3-4/wk	1.00 (0.79, 1.26)	
									Almost daily	1.00 (reference)	
Nakamura et al. 2018	NIPPON DATA90	Japan	15	4,686 women	≥30 y	Self-administered questionnaire baseline only	Identified through the National Vital Statistics	CVD death (183)	<1/week	1.09 (0.60, 1.97)	Age, BMI, BMIxBMI, hypertension, diabetes, cigarette smoking, alcohol drinking, dyslipidemia therapy, intake of fiber, meat and sodium.
									1-2/week	1.16 (0.81, 1.67)	
									0.5/d	0.92 (0.61, 1.38)	
									1/d	1.00 (reference)	
									>2/day	1.24 (0.38, 4.10)	
Nettleton et al. 2008	ARIC	United States	13.3	7,082 men and 8,710 women	45-64 y	Interviewer-administered FFQ, baseline and Exam 3	Confirmed by county death certificates and local hospital discharge lists	HF (1,140)	Per 1 servig egg/d	1.23(1.08,1.41)	Energy intake, age, sex, race/center, education level, physical activity level, smoking, drinking status, prevalent disease status: cardiovascular disease, diabetes, and hypertension.
Pan et al. 2021	SCCS	United States	12	47,789 Black Americans	40-79 y	FFQ, baseline only	Linkage of the cohort to the National Death Index and Social Security Administration mortality files	CHD death (1,179)	1/wk	1.00 (reference)	Age, sex, education, annual income, marital status, total energy intake, smoking status, smoking pack-years, alcohol consumption, physical activity
									3/wk	1.05(0.97, 1.13)	
									5/wk	1.07(0.95, 1.20)	
									7/wk	1.06(0.93, 1.21)	

									10/wk	1.01(0.88, 1.16)	level, body mass index, healthy eating index, history of diabetes, hypertension, dyslipidemia, coronary heart disease, and stroke, and hormone replacement therapy (for women only).
							Stroke death (577)	1/wk	1.00 (reference)	
								3/wk	1.01(0.90, 1.12)	
								5/wk	1.02(0.86, 1.20)	
								7/wk	1.03(0.85, 1.24)	
								10/wk	1.05(0.86, 1.28)	
			20,360 White Americans	40-79 y	FFQ, baseline only	Linkage of the cohort to the National Death Index and Social Security Administration mortality files	CHD death (595)	1/wk	1.00 (reference)	Age, sex, education, annual income, marital status, total energy intake, smoking status, smoking pack-years, alcohol consumption, physical activity level, body mass index, healthy eating index, history of diabetes, hypertension, dyslipidemia, coronary heart disease, and stroke, and hormone replacement therapy (for women only).
								3/wk	1.00(0.89, 1.12)	
								5/wk	1.03(0.87, 1.21)	
								7/wk	1.08(0.91, 1.28)	
								10/wk	1.20(0.98, 1.47)	
							Stroke death (142)	1/wk	1.00 (reference)	
								3/wk	0.93(0.73, 1.19)	
								5/wk	0.96(0.69, 1.34)	
								7/wk	1.07(0.75, 1.51)	
								10/wk	1.34(0.89, 2.02)	
SMHS, SWHS	China	15.5	134,280 Chinese	40-79 y	FFQ, baseline only	Linkage to the Shanghai Vital Statistics Registry	CHD death (2,182)	1/wk	1.00 (reference)	Age, sex, education, annual income, marital status, total energy intake, smoking status, smoking pack-years, alcohol consumption, physical activity level, body mass index, healthy eating index, history of diabetes, hypertension, dyslipidemia, coronary heart disease, and stroke, hormone replacement therapy (for women
								3/wk	0.96(0.90, 1.04)	
								5/wk	0.97(0.88, 1.07)	
								7/wk	1.01(0.92, 1.12)	
								10/wk	1.08(0.95, 1.24)	
							Stroke death (2955)	1/wk	1.00 (reference)	
								3/wk	0.94(0.88, 1.00)	
								5/wk	0.91(0.84, 0.99)	
								7/wk	0.91(0.84, 0.99)	

									10/wk	0.92(0.81, 1.03)	only) and intake of refined carbohydrate.
Qin et al. 2018	CKB	China	8.9	461,213 men and women	30-79 y	Intervieweradministered FFQ, baseline, second and third survey	Obtained regularly via local disease and death registries, checked against the national health insurance system with electronic linkage to all hospitalizations, or ascertained through active follow-up	CVD (83,977)	0.29/d	0.97 (0.95, 1.00)	Age at recruitment, sex, education level, household income, marital status, alcohol consumption, tobacco smoking, physical activity in MET-hours/day, BMI, waist to hip ratio, prevalent hypertension, use of aspirin, family history of CVD, multivitamin supplementation, and dietary pattern.
									0.36/d	0.97 (0.95, 1.00)	
									0.46/d	0.92 (0.90, 0.94)	
									0.56/d	0.90 (0.87, 0.93)	
									0.76/d	0.89 (0.87, 0.92)	
									Per 1 egg/wk	0.97 (0.96, 0.98)	
								CHD (30,169)	0.29/d	1.00 (reference)	
									0.36/d	0.95 (0.91, 0.99)	
									0.46/d	0.92 (0.88, 0.96)	
									0.56/d	0.86 (0.81, 0.91)	
									0.76/d	0.88 (0.84, 0.93)	
									Per 1 egg/wk	0.97 (0.95, 0.98)	
								Hemorrhagic stroke (7,078)	0.29/d	1.00 (reference)	
									0.36/d	0.86 (0.79, 0.93)	
									0.46/d	0.82 (0.76, 0.88)	
									0.56/d	0.77 (0.70, 0.86)	
									0.76/d	0.74 (0.67, 0.82)	
									Per 1 egg/wk	0.92(0.90, 0.95)	
								Ischemic stroke (27,745)	0.29/d	1.00 (reference)	
									0.36/d	0.98 (0.94, 1.03)	
									0.46/d	0.95 (0.91, 1.00)	
									0.56/d	0.95 (0.90, 1.00)	
									0.76/d	0.90 (0.85, 0.95)	
									Per 1 egg/wk	0.97 (0.96, 0.98)	

Qureshi et al. 2007	NHANES-I	United States	20	9,734 men and women	25-74 y	Self-administered nutritional questionnaire, baseline only	Confirmed by medical records or death certificate	Stroke (655)	<1/wk	1.00 (reference)	Age, sex, race/ethnicity, systolic blood pressure, diabetes, serum cholesterol, smoking, BMI and education
									1-6/wk	0.90(0.70, 1.00)	
									>6/wk	0.90(0.70, 1.10)	
								Ischemic stroke (591)	<1/wk	1.00 (reference)	
									1-6/wk	0.80(0.70, 1,00)	
									>6/wk	0.90(0.70, 1.10)	
								CHD (1,584)	<1/wk	1.00 (reference)	
									1-6/wk	1.00(0.90, 1.10)	
									>6/wk	1.10(0.90,1.30)	
Ruggiero et al. 2021	Moli-sani Study	Italy	8.3	20,562 men and women	≥35 y	Interviewer-administered FFQ, Baseline only	Assessed by the Italian mortality registry (ReNCaM registry), validated by Italian death certificates (ISTAT form)	CVD death (271)	0.63(0.39-0.85)/wk	1.00 (reference)	Age, sex, energy intake, educational level, household income, residence, smoking, BMI, leisure-time PA, baseline diabetes, hypertension, hyperlipidaemia and the Mediterranean diet score.
									1.47(1.23-1.64)/wk	1.29(0.94, 1.77)	
									2.55(2.20-3.07)/wk	1.43(1.03, 1.97)	
									4.60(4.19-5.26)/wk	1.75(1.07, 2.87)	
Sauvaget et al. 2003	Life Span Study	Japan	16	37,130 men and women	34-103 y	Self-administered FFQ baseline only	Confirmed by the nationwide family registration system of Japan	Stroke death (1,462)	Never	1.00 (reference)	Sex, birth cohort, and adjusted for city, radiation dose, self-reported body mass index, smoking status, alcohol habits, education level and history of diabetes, or hypertension.
									<1 time/week	0.75(0.55, 1.01)	
									2-4 time/week	0.77(0.57, 1.03)	
									Almost daily	0.70(0.51, 0.95)	
Scrafford et al. 2011	NHANES III	United States	8.8	6,833 men	>17 y	Self-administered FFQ baseline only	Linking death records from National Death Index	CHD death (198)	0.27/wk	1.00 (reference)	Age, energy, marital status, education status, race-ethnicity, BMI, diabetes, hypertension, and alcohol intake
									1.93/wk	1.26(0.79, 2.00)	
									7.54/wk	1.13(0.61, 2.11)	
								Stroke death (63)	0.27/wk	1.00 (reference)	
									1.93/wk	1.00(0.49, 2.02)	
									7.54/wk	0.27(0.10, 0.73)	
			8.9	8,113 women	>17 y	Self-administered FFQ baseline only	Linking death records from	CHD death (168)	0.24/wk	1.00 (reference)	Age, energy, marital status, education

							National Death Index		1.79/wk	1.12(0.66, 1.89)	status, race-ethnicity, BMI, diabetes, hypertension, and alcohol intake
									7.41/wk	0.92(0.27, 3.11)	
								Stroke death (74)	0.24/wk	1.00 (reference)	
									1.79/wk	0.93(0.46, 1.90)	
									7.41/wk	1.03(0.25, 4,22)	
Sun et al. 2021	WHI	United States	18.1	10,251 women	50-79 y	Self-administered FFQ, baseline only	Death certificates, medical records, autopsy reports, or by linkage to the National Death Index.	CVD death (6,993)	0.03oz/d	1.00 (reference)	Age at baseline, race/ethnicity, education, income, OS/CT, unopposed estrogen use, estrogen + progesterone use, smoking status, physical activity, alcohol intake, total energy intake, baseline diabetes status, baseline high blood cholesterol status, family history of heart attack/stroke, whole grain consumption, vegetable consumption, fruit consumption, sugar-sweetened beverage consumption, and mutual adjustment for other protein sources.
									0.1oz/d	1.05(0.96,1.12)	
									0.2oz/d	1.008(0.99, 1.12)	
									0.3oz/d	1.13(1.03, 1.20)	
									0.7oz/d	1.24(1.14, 1.34)	
									per 1oz/d	1.21(1.14, 1.28)	
Tong et al. 2020	EPIC	Denmark, Germany, Greece, Italy, the Netherlands, Norway, Spain, Sweden, and the UK	12.7	140,117 men and 278,212 women	≥55 y	FFQ, baseline only	Record linkage to morbidity or hospital registries, and self-reports followed by confirmation with medical records; vital status collected from mortality registries at the regional or national level or by active follow-up of study participants and next of kin	Stroke (6,748)	3g/d	1.00 (reference)	Age, smoking status and number of cigarettes per day, history of diabetes, prior hypertension, prior hyperlipidemia, Cambridge physical activity index, employment status, level of education completed, current alcohol consumption, BMI, observed intake of energy, stratified by sex and EPIC center.
									7.8g/d	0.95(0.87, 1.03)	
									13.7g/d	0.94(0.87, 1.02)	
									21.5g/d	0.98(0.90, 1.06)	
									35.6g/d	1.04(0.96, 1.12)	
									per unit 20g/d	1.04(1.01, 1.07)	

Trichopoulou et al. 2006	EPIC-Greece	Greece	4.5	1,013 men and women		Interviewer-administered FFQ baseline only	Based on death certificate information.	CVD Death (46)	Per 10g/d	1.54 (1.20, 1.97)	Gender, age, educational level, smoking, waist-to-height, hip circumference, MET score, treatment with insulin, treatment for hypertension at enrolment and treatment for hypercholesterolaemia at enrolment, and other indicated food groups.
van den Brandt et al. 2019	NLCS	Netherlands	10	120,852 men and women	55-69 y	Self-administered FFQ baseline only	Death certificates linkage to statistics Netherlands	CVD Death (2,985)	0 g/day 7.1 g/day 14.2 g/day 21.4 g/day Per 50g/day	1.00 (reference) 0.89 (0.69, 1.16) 0.90 (0.70, 1.16) 0.92 (0.71, 1.19) 0.92 (0.70, 1.20)	Age at baseline, sex, cigarette smoking status, number of cigarettes smoked per day, and years of smoking, history of physician-diagnosed hypertension and diabetes, body height, BMI, non-occupational physical activity, highest level of education, intake of alcohol, vegetables and fruit, energy, use of nutritional supplements, and postmenopausal HRT (women).
Virtanen et al. 2016	Kuopio Ischaemic Heart Disease Risk Factor Study	Finland	20.8	1,032 men	42-60 y	Guided 4-day food records, baseline only	Computer linkage to the national hospital discharge and death certificate registers	CHD (230)	11 g/d 26 g/d 52 g/d	1.00 (reference) 0.96 (0.69, 1.34) 1.18 (0.85, 1.66)	Age, examination year, energy intake, smoking, BMI, diabetes, hypertension, leisure-time physical activity, coronary artery disease history in close relatives, education, and intakes of alcohol, fruits, berries, vegetables, fiber, polyunsaturated fatty acids, and saturated fatty acids.
Wang et al. 2016	Linxian NIT	China	26	2,445 men and women	40-69 y	Interviewer administered FFQ baseline only	Doctor visits/ Hospital records reviews/ National registry	CHD death (355) Stroke death (452)	Per 4 times/month Per 4 times/month	1.00 (0.95, 1.06) 1.00 (0.96, 1.06)	Age, sex, commune, smoking, drinking, season and BMI

Xia et al. 2020	NHANES	United States	7.8	18,634 men and 18,487 women	≥20 y	Assessed via 24-hour dietary recalls by trained interviewers, baseline only	Ascertained by probabilistic matching with the National Death Index	CHD death (870)	<0.5/d	1.00 (reference)	Age, sex, race/ethnicity, education, family income poverty ratio, marital status, NHANES cycles, total energy intake, cigarette smoking, alcohol drinking, physical activity, BMI, hypertension, diabetes, hypercholesterolemia, CVD, and cancer.
									0.5-1/d	0.97(0.81, 1.17)	
									>1/d	0.89(0.64, 1.23)	
Xia et al. 2020	China-MUCA, InterAISA, CIMIC	China	7.6	102,136 men and women	China-MUCA: 35–59 y; InterAISA: 35–74 y; CIMIC: ≥ 18 y	Interviewer administered FFQ,repeated during the follow-up	recorded by well-trained local investigators and further adjudicated by the outcome assessment committee at Fuwai Hospital	CVD (4,848)	<1/w	1.22(1.11, 1.35)	Age, gender, urban or rural resident, per-capita household income, education attainment, tobacco smoking, alcohol consumption, family history of CVD, physical activity, BMI and dietary factors (red meat intake, fresh fruit and vegetable intake)
									1~3/w	1.09(1.00, 1.19)	
									3~6/w	1.00 (reference)	
									6-10/w	1.25(1.14, 1.38)	
									>10/w	1.39(1.28, 1.52)	
								CHD (1,273)	<1/w	1.07(0.88, 1.32)	
									1~3/w	1.01(0.85, 1.21)	
									3~6/w	1.00 (reference)	
									6-10/w	1.34(1.12, 1.61)	
									>10/w	1.86(1.57, 2.22)	
								Stroke (2,919)	<1/w	1.27(1.12, 1.44)	
									1~3/w	1.13(1.01, 1.26)	
									3~6/w	1.00 (reference)	
									6-10/w	1.21(1.07, 1.36)	
									>10/w	1.18(1.05, 1.33)	
Xu et al. 2018	Guangzhou Biobank Cohort Study	China	9.8	28,024 men and women	≥50 y	FFQ baseline only	Obtained via record linkage with the Guangzhou Center for Disease Control	CVD death (873)	<1/week	1.00 (reference)	Sex, age, education, occupation, family income, smoking status, physical activity, alcohol drinking, self-rated
									1-2/week	0.92 (0.77, 1.10)	
									3-4/week	0.96 (0.80, 1.14)	

							and Prevention (GCDC)		5-6/week	0.81 (0.58, 1.14)	health and chronic disease history (diabetes, hypertension and dyslipidemia).
									>7/week	0.99 (0.76, 1.27)	
								CHD death (388)	<1/week	1.00 (reference)	
									1-2/week	0.86 (0.66, 1.13)	
									3-4/week	1.03 (0.79, 1.34)	
									5-6/week	0.75 (0.44, 1.27)	
									>7/week	0.92 (0.63, 1.36)	
								Stroke death (341)	<1/week	1.00 (reference)	
									1-2/week	0.99 (0.75, 1.30)	
									3-4/week	0.90 (0.68, 1.20)	
									5-6/week	0.81 (0.47, 1.38)	
									>7/week	0.88 (0.57, 1.35)	
Zamora-Ros et al. 2019	EPIC-Spain study (The European Prospective Investigation into Cancer and Nutrition-Spain cohort)	Spain	18.4	15,323 men and 25298 women	29-69 y	Interviewer-administered FFQ baseline only	Based on death certificate information.	CVD death (761)	<10.8 g/d (women) <14.4 g/d (men)	1.00 (reference)	Center, age at recruitment in 5 years categories, sex, smoking intensity, BMI, lifetime alcohol intake, education level, physical activity, energy intake, and adherence to Mediterranean diet
									10.8-19.9 g/d (women) 14.4-26.8 g/d (men)	1.11(0.91, 1.34)	
									20.0-30.4 g/d (women) 26.9-42.6 g/d (men)	1.10(0.90, 1.34)	
									>30.4 g/d (women) >42.6 g/d (men)	1.07(0.86, 1.32)	
									Per 1 egg/wk	1.00(0.98, 1.03)	
Zazpe et al. 2011	The SUN Project	Spain	5.8	14,185 men and women	20-90 y	Self-administered questionnaire, baseline only	Self-reported questionnaire and confirmed by medical record	CVD (91)	<1/wk	1.00 (reference)	Age, sex, total energy intake, adherence to the Mediterranean food pattern, alcohol intake, BMI, smoking status, physical activity, family history of CVD, diabetes,
									1/wk	0.78 (0.36, 1.70)	
									2-4/wk	1.00 (0.51, 1.97)	
									>4/wk	1.10 (0.46, 2.63)	

											hypertension, and hypercholesterolemia.
Zhong et al. 2019	The Lifetime Risk Pooling Project, 6 cohorts (ARIC, CARDIA, FHS, FOS, JHS, MESA)	United States	17.5	29,615 men and women	51.6±13.5 y	FFQs, baseline only	Adjudicated cause of death by review of medical records and/or autopsies by study investigators	CVD (5,400)	0/d	1.00 (reference)	Age, sex, race/ethnicity, education, total energy, smoking status, smoking pack-years, cohort-specific physical activity z-score, alcohol consumption, and use of hormone replacement therapy, BMI, diabetes status, systolic blood pressure, use of antihypertensive medications, high density lipoprotein cholesterol, non-HDL-C, and use of lipid-lowering medications.
									<0.5/d	1.06 (0.98, 1.14)	
									0.5-1/d	1.05 (0.92, 1.20)	
									1-2/d	1.17 (1.04, 1.31)	
									>2/d	1.29 (1.04, 1.59)	
								CHD (2,088)	Per 0.5/d	1.07 (1.01, 1.12)	
								Stroke (1,302)	Per 0.5/d	1.10 (1.03, 1.18)	
Zhuang et al 2021, CVD death	NIH-AARP	United States	16	521,120 men and women	50-71 y	FFQs, baseline only	Linkage to the National Death Index Plus maintained by the National Center for Health Statistics	CVD death (38,747)	0.1±0.2g/d	1.00 (reference)	Age, sex, BMI, race, high cholesterol level, heart disease, stroke, diabetes, cancer at baseline, total energy, egg whites/substitutes, dietary cholesterol, red meat, fish, poultry, dairy products, fruit, vegetables, potatoes, nuts/legumes, whole grains, refined grains, coffee, sugar-sweetened beverages and Healthy Eating Index–2015
									3±1.2g/d	1.01(0.97, 1.04)	
									7.6±1.5g/d	1.01(0.97, 1.05)	
									14±2.4g/d	1.07(1.03, 1.11)	
									34.7±19.8g/d	1.14(1.11, 1.18)	

* Cox proportional hazards regression models were used for relative risk estimates from all studies.

Abbreviations: BMI = body mass index; CHD = coronary heart disease; CVD = cardiovascular disease; FFQ = food frequency questionnaire; HDL = high-density lipoprotein cholesterol; HF = heart failure; LDL = low-density lipoprotein cholesterol; SD = standard deviation; SFFQ = semiquantitative food frequency questionnaire; TG = triglyceride

Supplemental Table XVI. Overview of the covariates adjusted in multivariable model among studies in the meta-analysis *

Covariates	Abdollahi et al. 2019	Chen et al 2021	Dehghan et al 2020	Diez-Espino et al. 2017	Djousse et al. 2008	Djousse et al. 2008	Djousse et al 2020	Djousse et al.2021	Drouin-Chartier et al. 2020	Farvid et al. 2017	Goldberg et al. 2014	Guo et al. 2018	Houston et al. 2011	Jang et al. 2018	Key et al. 2019	Larsson et al. 2015	Mann et al. 1997	Misirli et al. 2012	Nakamura et al. 2004	Nakamura et al. 2006	Nakamura et al. 2018	Nettleton et al. 2008	Pan et al 2021	Qin et al. 2018	Qureshi et al. 2007	Ruggiero et al 2021	Sauvaget et al. 2003	Scrafford et al. 2011	Sun et al 2021	Tong et al 2020	Trichopoulou et al 2006	van den Brandt et al. 2019	Virtanen et al. 2016	Wang et al. 2016	Xia et al 2020	Xia et al 2020	Xu et al. 2018	Yaemsiri et al. 2012	Zamora-Ros et al 2019	Zazpe et al. 2011	Zhong et al. 2019	Zhuang et al 2021
Primary confounding factors																																									
Age	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★
Sex	NA	NA	★	★	NA	NA	★	★	NA	★	★	NA	★	★	★	NA	★	★	NA	★	NA	★	★	★	★	★	★	NA	NA	★	★	★	NA	★	★	★	★	NA	★	★	★	★
Body mass index	★		★	★	★	★	★	★	★	★	★	★	★	★	★	★		★	★	★	★		★	★	★	★	★	★		★		★	★	★	★	★		★	★	★	★	★
Smoking	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★		★	★	★	★	★	★	★	★	★	★	★	★	
Physical activity	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★		★				★	★	★		★			★	★		★	★		★	★	★	★	★	★	
Alcohol consumption	★	★		★	★	★	★	★	★	★	★	★	★	★	★	★			★	★	★	★	★	★			★	★	★	★	★	★	★	★	★	★	★	★		★	★	
Total energy intake	★	★	★	★					★	★	★	★	★	★	★	★		★				★	★			★		★	★	★	★	★	★		★			★	★	★	★	★
Secondary confounding factors																																									
Hypertension/ blood pressure / blood pressure lowering drugs	★	★		★	★	★			★	★	★		★	★	★	★		★	★	★	★	★	★	★	★	★	★	★		★	★	★	★		★		★	★		★	★	
Dyslipidemia / lipid profile / lipid-lowering drugs		★		★	★	★			★		★		★	★	★	★			★	★	★		★		★	★			★		★					★		★	★			★	★
Red meat / processed meat intake		★	★						★			★		★	★	★				★	★										★											★

Dietary pattern (including red meat or processed meat)				★							★													★		★													★			
Other confounding factors																																										
Refined grains, white bread		★							★																																	★
Coffee		★							★																						★											★
Milk or Dairy products			★						★						★																★											
Poultry			★												★																											★
Fruit juices		★							★			★																			★											
Fish		★	★												★					★											★											★
Vegetables	★	★	★			★								★	★	★				★									★		★	★	★			★		★				★
Fruits	★													★	★	★				★									★		★	★				★		★				★
Berries	★																																★									
Breakfast cereal						★																																				
Potatoes		★							★																						★											★
Legumes																															★											
Nuts																															★											★
Sugar-sweetened beverages									★																				★													★
Sugar and confectioneries												★			★																★											
Non-alcoholic beverages																																										
Proteins											★		★																★													
Fibers												★	★	★	★						★			★									★					★				
Cereals																													★		★											★
Carbohydrates			★								★											★																				
Monounsaturated fatty acids (MUFA)																																										
Saturated fatty acids (SFA)											★		★																				★									

Polyunsaturated fatty acids																																	★									
Sodium																					★																					
Olive oil																															★											
Dietary supplement use														★																		★										
Vitamin/multivitamin use						★			★				★	★																								★				
Egg whites/substitutes																																										★
Opium use										★																																
Whether participants intended to avoid cholesterol rich diets																				★																						★
Diabetes/blood glucose/treatment for diabetes		★	★	★	★	★					★	★	NA		★	★		★	★	★	★	★			★	★	★	★	★		★	★	★		★		★	★		★	★	★
Aspirin use		★											★			★								★														★				
Nonsteroidal anti-inflammatory drugs use		★																																								
Oral estrogen use									★				★																									★			★	
Oral contraceptive use									★																																	
Postmenopausal HRT		★																				★							★			★										
Medication		★	★							★																																
Family history of CVD				★					★		★	★				★								★					★				★			★		★		★		
Family history of cancer										★																																
Social class												★					★																									
City/center/residency/commune		★	★	★						★			★	★	★											★	★			★				★		★			★			

Education		★	★	★						★			★	★	★	★		★				★		★	★		★	★	★	★	★	★	★		★		★	★	★		★	
Employment status															★															★							★					
Marital status										★													★	★				★							★							
Race/ethnicity		★					★		★	★	★		★									★			★			★	★						★			★			★	★
Season																																		★								
Family income/wealth score		★								★				★									★	★					★							★	★	★				
Height																																★									
Waist-to-hip																								★																	
Waist		★																																							
Waist-to-height																															★										
Hip circumference																															★										
Treatment arm			★			★																																			
Atrial fibrillation					★	★																																★				
Premature myocardial infarction						★																																				★
Cohort effects																				★							★														
Examination year	★																																★								
Radiation dose																											★														
Serum creatinine																			★																						
MET score																															★										
Self-rated health		★																																			★					
Health insurance		★																																							
DASH score							★	★																																	
Health Eating Index-2015																																									★

* ★=Covariates adjusted in multivariable model.

Supplemental Table XVII. Evaluation of risk of bias according to the Newcastle-Ottawa Scale *

Author, year	Newcastle-Ottawa Scale									Total
	Selection				Comparability		Outcome			
	1†	2‡	3§	4‖	5¶	6#	7**	8††	9‡‡	
Abdollahi et al. 2019	★	★	-	★	★	-	★	★	★	7
Chen et al 2021	-	★	★	★	-	★	★	★	★	7
Dehghan et al 2020	-	★	★	★	-	-	★	-	★	5
Diez-Espino et al. 2017	-	★	★	★	★	★	★	-	★	7
Djousse et al. 2008	-	★	★	★	-	-	★	★	★	6
Djousse et al. 2008	-	★	★	★	-	-	★	★	★	6
Djousse et al. 2020	-	★	-	★	★	-	★	-	★	5
Djousse et al. 2021	★	★	-	-	★	-	★	★	★	6
Drouin-Chartier et al. 2020	-	★	★	★	★	★	★	★	★	8
Farvid et al. 2017	★	★	-	★	★	-	-	★	★	6
Goldberg et al. 2014	★	★	-	★	★	★	★	★	★	8
Guo et al. 2018	★	★	★	★	★	-	★	★	★	8
Houston et al. 2011	★	★	-	★	★	-	★	-	★	6
Jang et al. 2018	★	★	★	★	★	★	★	-	-	7
Key et al. 2019	★	★	-	★	★	★	★	★	★	8
Larsson et al. 2015	★	★	-	★	★	★	★	★	★	8
Mann et al. 1997	-	★	-	★	-	-	★	★	★	5
Nakamura et al. 2004	★	★	-	★	-	-	★	★	★	6
Nakamura et al. 2006	★	★	-	★	-	★	★	★	★	7
Nakamura et al. 2018	★	★	-	★	-	★	★	★	★	7
Nettleton et al. 2008	★	★	★	★	-	-	★	★	★	7
Pan et al 2021	★	★	-	-	★	-	★	★	★	6
Qin et al. 2018	★	★	★	★	-	-	★	-	★	6
Qureshi et al. 2007	★	★	-	★	-	-	★	★	★	6
Ruggiero et al 2021	★	★	-	★	-	★	★	-	★	6
Sauvaget et al. 2003	★	★	-	★	-	-	★	★	★	6
Scrafford et al. 2011	★	★	-	★	-	-	★	-	★	5
Sun et al 2021	-	★	-	★	-	-	★	★	★	5
Tong et al 2020	★	★	-	★	★	-	★	★	★	7
Trichopoulou et al 2006	★	★	-	★	-	★	★	-	★	6
van den Brandt et al. 2019	★	★	-	★	★	-	★	★	★	7
Virtanen et al. 2016	★	★	-	★	★	-	★	★	★	7
Wang et al. 2016	-	★	-	★	-	-	★	★	★	5
Xia et al 2020	★	★	-	-	★	-	★	-	★	5
Xia et al 2020	★	★	★	★	★	-	★	-	★	8
Xu et al. 2018	★	★	-	★	-	-	★	-	★	5
Zamora-Ros et al 2019	★	★	-	-	-	-	★	★	★	5

Zazpe et al. 2011	-	★	-	★	★	-	★	-	★	5
Zhong et al. 2019	★	★	-	★	★	-	★	★	-	6
Zhuang et al 2021	★	★	-	-	-	-	★	★	★	5
Zhao et al (current)	★	★	-	★	★	-	★	★	★	7

*★ represents 1 point awarded.

† If the exposed cohort is a community-based population cohort;

‡ If the non-exposed cohort drawn from the same community as the exposed cohort;

§ Ascertainment of exposure: if diet data extracted at baseline and ≥1 time during follow-up period;

|| If participants with prevalent CVD (outcome of interest) at baseline were excluded;

¶ If models were adjustment for age, sex, BMI, smoking status, alcohol intake, and physical activity (as primary confounders);

If models were adjustment for hypertension/blood pressure/blood pressure-lowering drugs, and dyslipidemia/lipid profiles/lipid-lowering drugs, and total energy intake, and intakes of red meat/processed meat (as secondary confounders);

Outcome:

** If non-lethal cases were assessed by physician's diagnosis, and lethal cases assessed using death certificates;

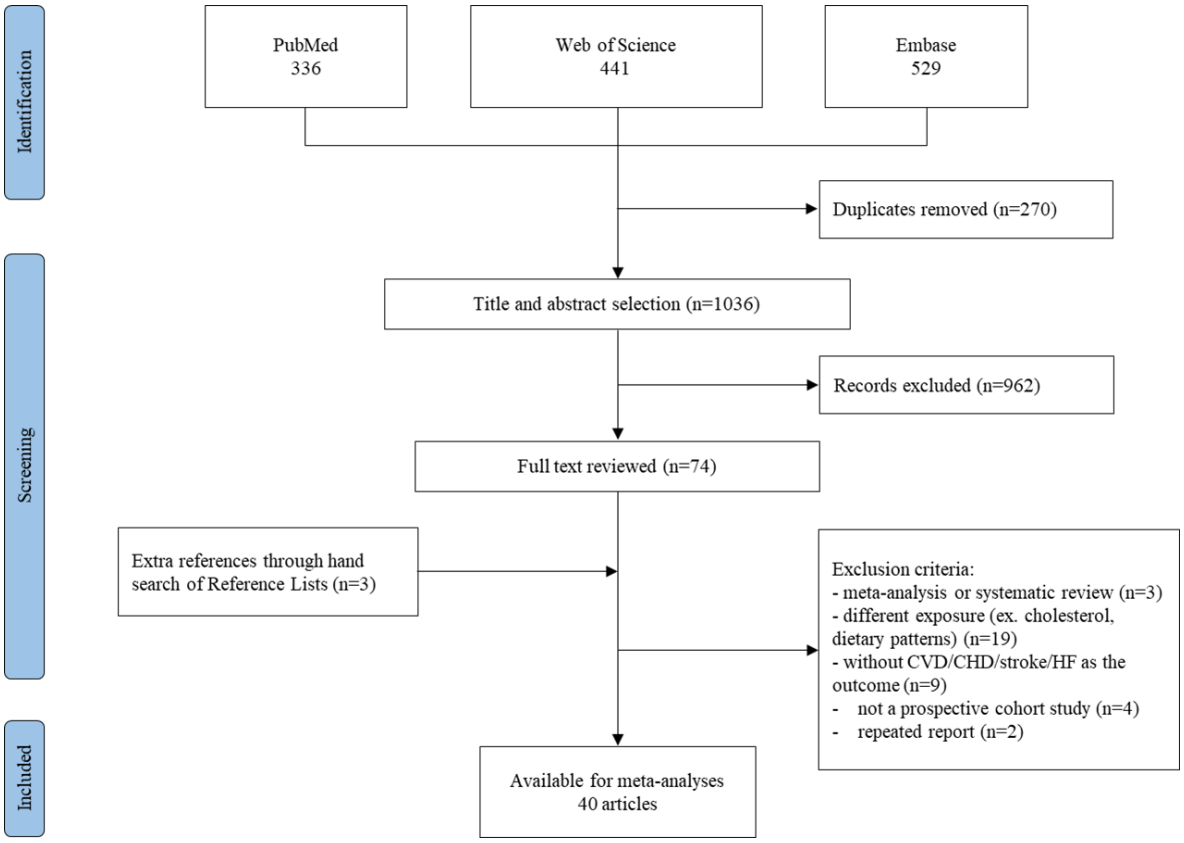
†† If cohort follow-up ≥ 10 years;

‡‡ If lost to cohort follow-up <20%.

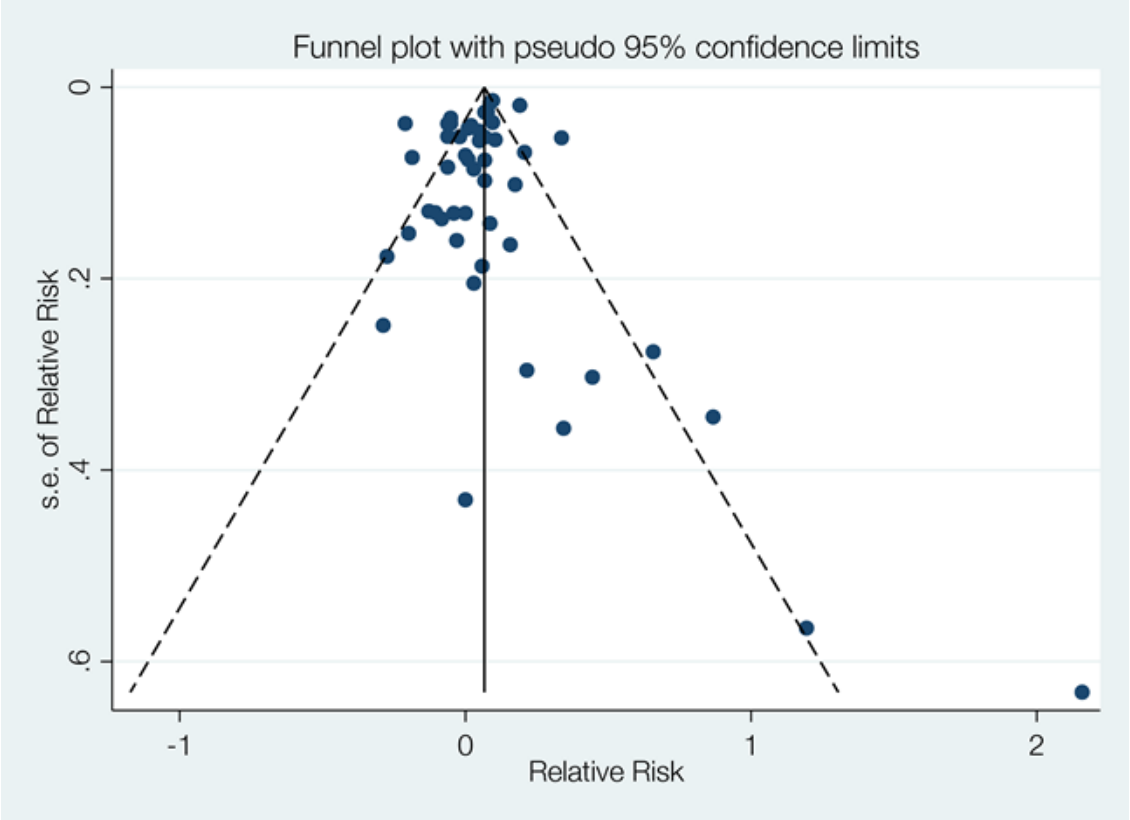
Supplemental Table XVIII. Subgroup meta-analysis using random effects models for the associations between cardiovascular disease risk and egg consumption

Categories	Number of risk estimates	Number of participants	Number of events	Pooled RR (95% CI)	I^2(%)	*P* for interaction
Sex						
Both	32	3,034,637	197,046	1.03 (0.98, 1.09)	83.8	0.47
Men	9	185,141	36,786	1.02 (0.95, 1.09)	59.5	
Women	8	381,623	21,647	1.09 (0.98, 1.20)	75.2	
No of participants						
<10000	17	77,934	5,674	1.08 (0.96, 1.21)	50.9	0.59
≥10000	32	3,523,467	249,805	1.03 (0.99, 1.07)	85	
Follow-up duration						
<10 years	16	1,031,897	116,375	1.04 (0.94, 1.14)	83.9	0.66
≥10 years	33	2,569,504	139,104	1.04 (1.00, 1.09)	77.8	
No of events						
<1000	22	229,073	7,551	1.05 (0.97, 1.15)	52.2	0.89
≥1000	27	3,372,328	247,928	1.04 (1.00, 1.08)	86	
Region						
US	20	1,388,758	95,768	1.08 (1.02, 1.14)	81.2	0.02
Europe	15	1,145,055	46,469	1.05 (0.98, 1.14)	67.8	
Asia	12	921,563	99,584	0.96 (0.87, 1.06)	85.3	
Risk of bias						
Low (≥7)	20	1,596,439	76,452	1.04 (1.01, 1.08)	54.3	0.77
Moderate (≤6)	29	2,00,4962	179,027	1.05 (0.98, 1.12)	85.8	
Dietary assessment						
Baseline only	36	2,524,266	127,381	1.04 (1.00, 1.09)	77.7	0.69
Repeated measurements	13	1,077,135	128,098	1.03 (0.96, 1.09)	84.8	

Abbreviations: CI = confidence interval; RR = relative risk

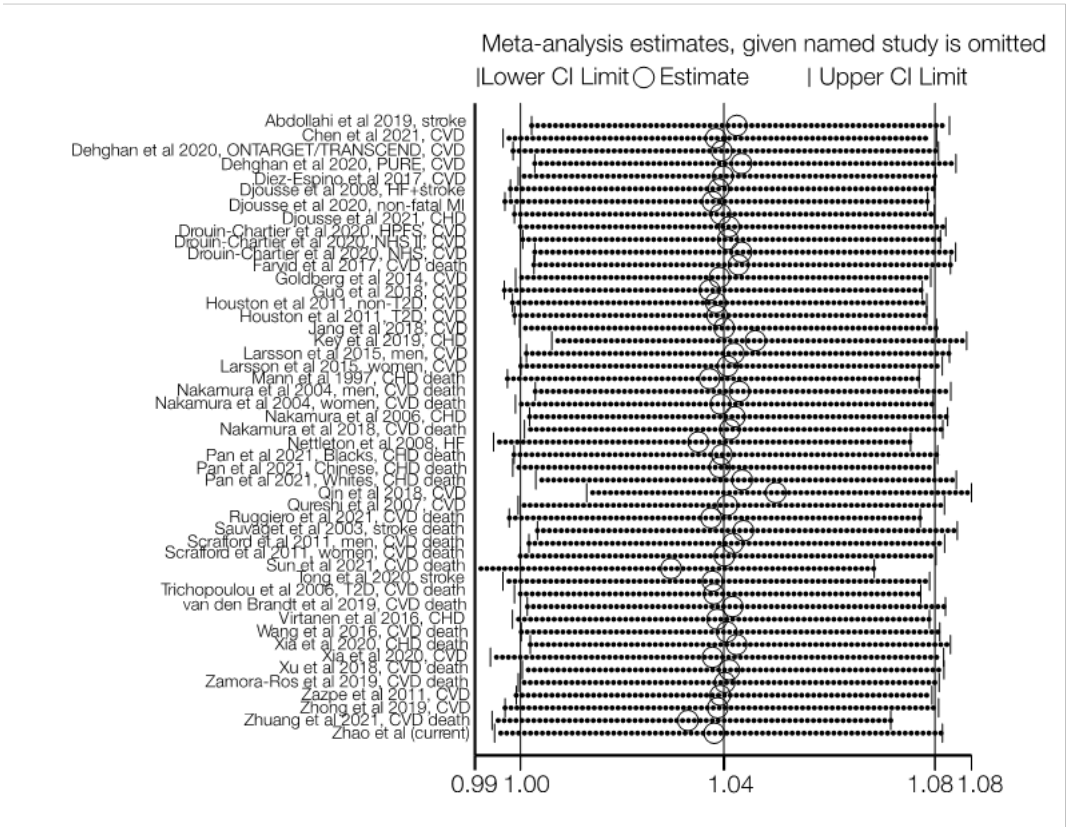


Supplemental Figure I. Flow chart for participated study selection in the meta-analysis



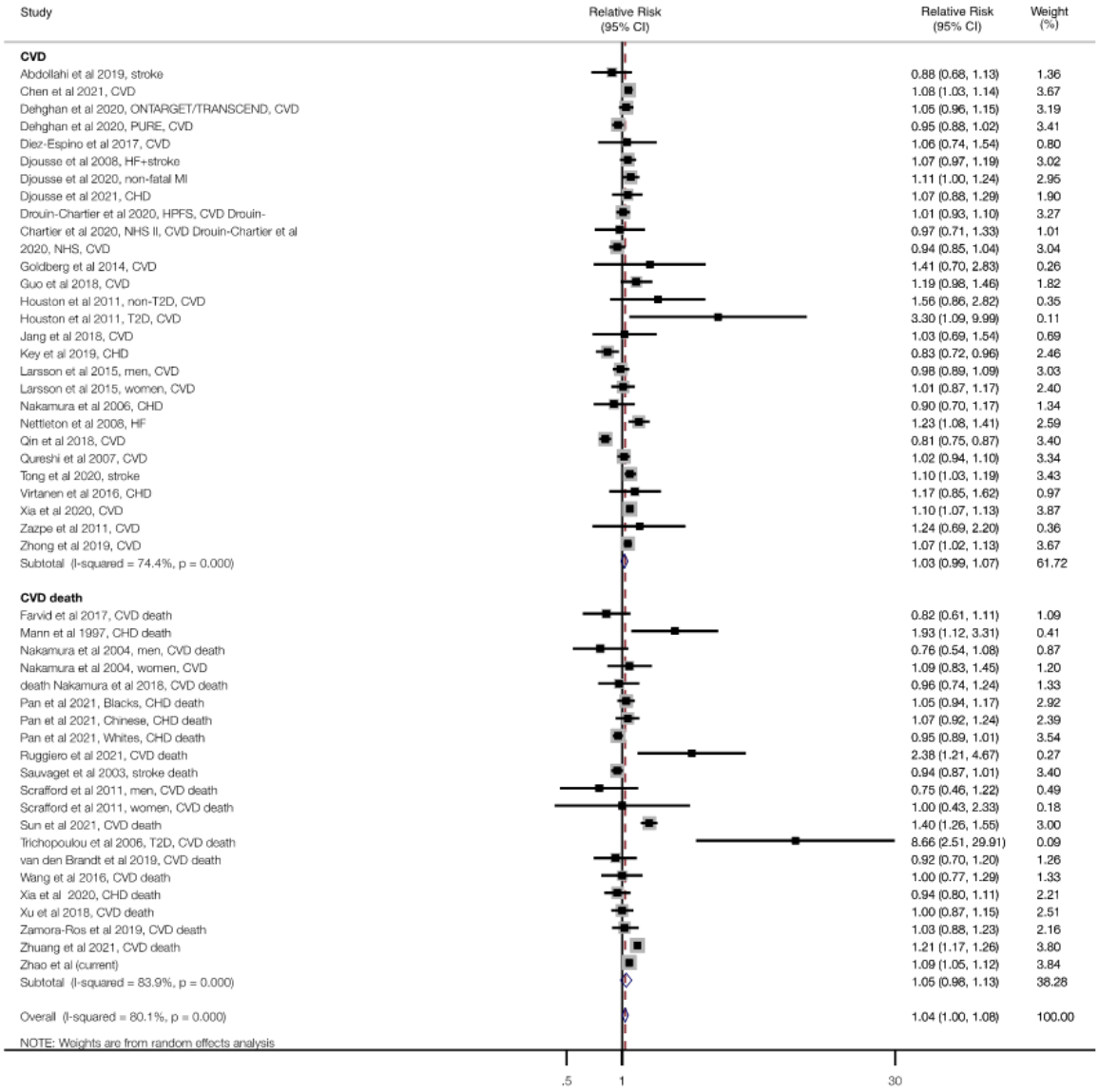
Supplemental Figure II. Funnel plot for evaluation of publication bias for the associations between egg consumption and risk of cardiovascular disease (including death from cardiovascular disease)

P value for Egger's test=0.35; P value for Begg's test =0.16



Supplemental Figure III. Influence analysis using forest plot for the meta-analysis on associations between egg consumption and risk of cardiovascular disease (including death from cardiovascular disease). Each dot reflects the pooled relative risk (95% confidence interval) following the exclusion of the given study using random-effects meta-analysis.

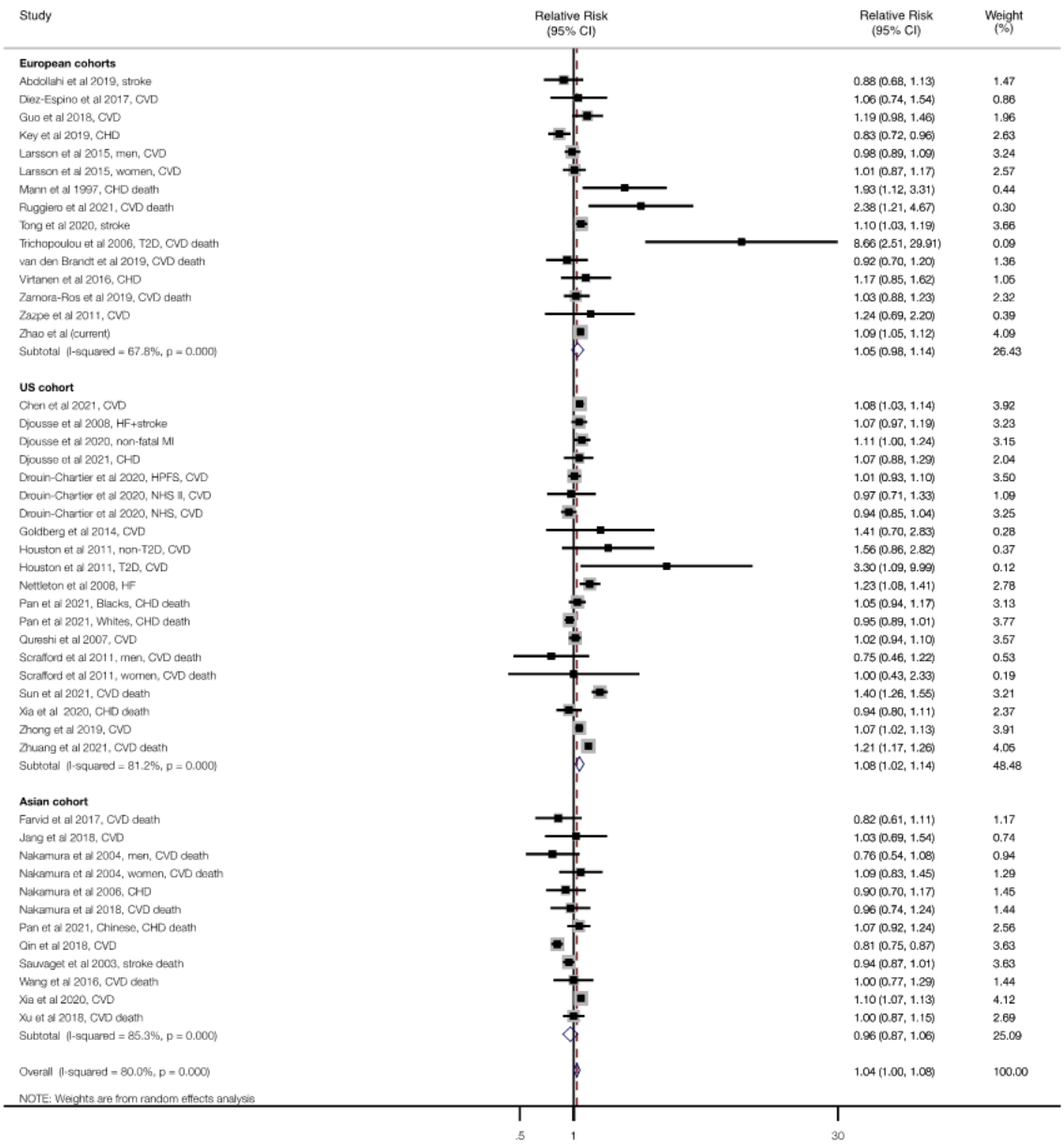
CHD=coronary heart disease; CVD=cardiovascular disease; HF=heart failure; i-stroke=ischemic stroke; MI: myocardial infarction; T2D=type 2 diabetes; RR= relative risk



Supplemental Figure IV. Associations between egg consumption and cardiovascular disease risk for a one egg (50 grams) per day increase using random effects meta-analysis, stratified by incidence of incident CVD and CVD mortality. (P for interaction=0.58)

Squares reflect study-specific relative risks. Grey square areas are proportional to the individual study weight for the overall meta-analysis. Horizontal lines denote 95% CIs. I-squared refers to proportion of heterogeneity among studies.

Abbreviations: CHD=coronary heart disease; CVD=cardiovascular disease; HF=heart failure; MI: myocardial infarction; T2D=type 2 diabetes



Supplemental Figure V. Associations between egg consumption and cardiovascular disease risk for one egg (50 grams) per day increase using random effects meta-analysis, stratified by geographical location. (P for interaction=0.02)

Squares reflect study-specific relative risk. Grey square areas are proportional to the individual study weight for the overall meta-analysis. Horizontal lines denote 95% CIs. I-squared refers to proportion of heterogeneity among studies. Abbreviations: CHD=coronary heart disease; CI=confidence interval; CVD=cardiovascular disease; HF=heart failure; i-stroke=ischemic stroke; MI: myocardial infarction; T2D=type 2 diabetes; US=United States