



Figure S1 The distributions of potassium and sodium intake in the PLCO and WHI cohorts. Solid lines represented kernel density estimates.

Table S1 Baseline characteristics of the study population in the PLCO trial based on quintiles of sodium and potassium intake

Baseline characteristics Quintiles ^a	Sodium						Potassium					
	1 (low)	2	3	4	5 (high)	P value ^d	1 (low)	2	3	4	5 (high)	P value ^d
Total (N)	18597	18597	18597	18597	18596		18597	18597	18597	18597	18596	
No. of lung cancer (n)	299	229	238	265	247		273	243	243	247	272	
Median mineral intake (mg/d ³) ^b	2201.5	2526.2	2719.2	2932.2	3329.6	<0.001	2410.4	2878.9	3203.5	3567.7	4177.1	<0.001
Age (year) ^c	62.5±5.4	62.6±5.3	62.4±5.3	62.2±5.2	61.9±5.1	<0.001	61.8±5.2	62.3±5.2	62.5±5.3	62.6±5.3	62.5±5.3	<0.001
Gender (%)												
Female	45.8	58.6	58.5	54.6	40.7	<0.001	41.1	52.6	55.3	56.1	53.1	<0.001
Male	54.2	41.4	41.5	45.4	59.3		58.9	47.4	44.7	43.9	46.9	
Body mass index (kg/m ²) ^c	26.6±4.5	26.7±4.6	27.1±4.7	27.6±4.9	28.3±5.1	<0.001	27.7±4.9	27.4±4.8	27.2±4.8	27.0±4.7	27.0±4.7	<0.001
Education (%)												
Low	28.9	29.3	28.6	28.2	28.3	0.100	32.6	29.5	28.2	27.0	26.0	<0.001
Middle	34.8	34.5	34.4	34.7	34.0		34.5	34.9	34.7	34.3	34.0	
High	36.3	36.2	37.0	37.1	37.7		32.9	35.6	37.1	38.7	40.0	
Cigarette smoking (%)												
Never	44.9	51.2	51.1	48.5	43.6	<0.001	47.2	49.8	49.2	48.0	45.2	<0.001
Former <20 pack-years	18.6	18.6	18.9	18.4	18.5		16.7	18.2	19.0	19.4	19.7	
Former ≥20 pack-years	24.4	21.7	22.1	24.7	28.5		25.1	23.3	23.6	24.0	25.5	
Current <20 pack-years	0.9	0.8	0.7	0.8	0.8		0.9	0.8	0.7	0.8	0.8	
Current ≥20 pack-years	11.2	7.7	7.2	7.4	8.6		10.2	7.9	7.5	7.8	8.8	
Alcohol intake (g/day) ^c	23.5±50.4	7.6±12.9	6.1±11.1	5.7±10.1	5.9±10.6	<0.001	18.9±48.6	8.5±17.1	7.6±13.9	7.2±13.1	6.7±12.3	<0.001
Energy intake (kcal/day) ^c	1951±831	1506±620	1507±607	1652±618	2088±766	<0.001	1928±899	1585±678	1587±634	1664±629	1940±708	<0.001
Diabetes (%)	3.3	4.3	5.8	7.7	11.5	<0.001	5.7	6.6	6.5	6.7	7.1	<0.001
Family history of lung cancer (%)	11.0	10.6	10.3	10.6	11.1	0.090	10.4	10.5	11.0	11.0	10.6	0.153

^aQuintile boundaries were based on sub-cohort members. ^bIntake was energy-adjusted (mg/day). ^cALL values were mean ± sd. ^dP value for difference was tested using Kruskal-Wallis test (continuous) or Chi-square test (categorical).

Table S2 Baseline characteristics of the study population in the WHI cohort based on quintiles of sodium and potassium intake

Baseline characteristics Quintiles ^a	Sodium						Potassium					
	1 (low)	2	3	4	5 (high)	P value ^d	1 (low)	2	3	4	5 (high)	P value ^d
Total (N)	14485	14485	14485	14485	14485		14485	14485	14485	14485	14485	
No. of lung cancer (n)	337	293	343	313	345		368	336	332	304	291	
Median mineral intake (mg/day) ^b	2100.8	2416.7	2620.2	2835.3	3212.1	<0.001	1914.1	2324.2	2619.5	2934.5	3450.3	<0.001
Age (year) ^c	63.1±7.4	63.5±7.3	63.5±7.3	63.4±7.3	63.3±7.2	<0.001	62.2±7.3	63.2±7.4	63.5±7.2	63.8±7.3	64.2±7.2	<0.001
Body mass index (kg/m ²) ^c	27.1±5.9	26.8±5.6	27.0±5.6	27.3±5.8	27.8±6.1	<0.001	28.9±6.7	27.3±5.8	26.8±5.5	26.6±5.4	26.3±5.2	<0.001
Education (%)												
Low	22.7	21.8	21.0	19.9	19.0	<0.001	32.1	23.3	19.1	16.4	13.5	<0.001
Middle	36.8	36.6	36.6	35.6	35.5		38.2	38.0	36.5	35.4	33.2	
High	40.5	41.6	42.4	44.5	45.5		29.7	38.7	44.4	48.2	53.3	
Cigarette smoking (%)												
Never	50.6	53.5	54.0	53.2	50.2	<0.001	51.2	52.3	52.3	52.2	53.5	<0.001
Former <20 pack-years	25.8	26.6	26.7	26.8	28.2		23.5	25.8	27.4	28.9	28.5	
Former ≥20 pack-years	14.8	13.3	13.7	15.0	16.6		14.4	14.9	15.0	14.5	14.6	
Current <20 pack-years	3.0	2.7	2.3	2.0	2.1		3.9	2.9	2.2	1.7	1.4	
Current ≥20 pack-years	5.8	3.9	3.3	3.0	2.9		7.0	4.1	3.1	2.7	2.0	
Alcohol intake (g/day) ^c	9.50±17.9	5.72±10.0	4.68±8.3	4.14±7.6	3.82±7.3	<0.001	5.24±12.7	5.75±11.2	5.91±11.0	5.80±10.5	5.17±10.2	<0.001
Energy intake (kcal/day) ^c	1762±651	1449±524	1420±525	1478±539	1742±631	<0.001	1722±751	1437±563	1452±526	1520±503	1718±534	<0.001
Diabetes (%)	3.3	4.0	4.8	5.8	8.2	<0.001	6.4	5.7	4.7	4.7	4.7	<0.001
Family history of cancer (%)	63.4	64.0	64.7	64.0	64.4	0.171	62.3	63.6	64.5	64.4	65.6	<0.001

^aQuintile boundaries were based on sub-cohort members. ^bIntake was energy-adjusted (mg/day). ^cALL values were mean ± sd. ^dP value for difference was tested using Kruskal-Wallis test (continuous) or Chi-square test (categorical).

Table S3 Correlation coefficients between dietary mineral intake and dietary food sources

Meals and Nutrients	WHI cohort		PLCO trial	
	Potassium	Sodium	Potassium	Sodium
Fruit	0.574	0.162	0.511	0.178
Vegetable	0.549	0.347	0.663	0.604
Meat or Protein	0.799	0.888	0.515	0.731
Fish and seafood	0.304	0.331	0.292	0.330
Carbohydrate	0.811	0.788	0.814	0.776
Fiber	0.782	0.663	0.791	0.701
Milk	0.605	0.303	0.412	0.207
Yogurt	0.349	0.174	0.163	0.034

All Pearson's correlation coefficients were significantly different from zero (P<0.05).

Table S4 Sensitivity analysis of yogurt intake based on categories of dietary potassium intake in the PLCO trial

	Continuous	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
Male (N=44,959)						
Dietary potassium intake ^a	3489.9	<2935.9	2935.9-3319.7	3319.7-3670.0	3670.0-4142.0	≥4142.0
Cases/person-years	735/343836	152/68795	127/68496	145/68642	159/68905	152/68998
Multivariable model HR ^b	1.06 (0.97, 1.17)	1.00	0.93 (0.73, 1.18)	1.05 (0.83, 1.33)	1.12 (0.89, 1.41)	1.05 (0.83, 1.33)
P value	0.191			P _{trend} ^c =0.354		
Female (N=48,025)						
Dietary potassium intake ^a	2943.8	<2463.4	2463.4-2797.0	2797.0-3096.8	3096.8-3487.7	≥3487.7
Cases/person-years	543/390992	123/77876	106/77994	87/77975	103/78589	124/78558
Multivariable model HR ^b	0.97 (0.86, 1.10)	1.00	0.90 (0.69, 1.18)	0.73 (0.55, 0.96)	0.84 (0.64, 1.10)	0.94 (0.72, 1.22)
P value	0.629			P _{trend} ^c =0.633		
ALL (N=92,984)						
Dietary potassium intake ^a	3203.4	<2689.6	2689.6-3044.9	3044.9-3371.5	3371.5-3808.0	≥3808.0
Cases/person-years	1278/734829	273/145886	243/146337	243/146963	247/147928	272/147715
Multivariable model HR ^b	1.03 (0.96, 1.11)	1.00	1.01 (0.85, 1.21)	1.01 (0.85, 1.21)	1.01 (0.84, 1.20)	1.05 (0.88, 1.25)
P value	0.437			P _{trend} ^c =0.607		

^aPotassium intake was energy-adjusted (mg/day), median intake for continuous and range for quintiles. ^bCox proportional hazard models were used to adjust age, gender (only in ALL), body mass index (kg/m²), energy intake (kcal/day), educational level (3 categories), alcohol consumption (g/day), yogurt consumption (g/day), smoking status (never smokers, former smokers <20 pack-years, former smokers ≥20 pack-years, current smokers <20 pack-years, current smokers ≥20 pack-years), history of diabetes (yes or no), and family history of lung cancer (yes or no). ^cTest for linear trend was estimated by assigning the median value of potassium intake in each quintile.

Table S5 Sensitivity analysis of race based on categories of dietary mineral intake

	Continuous	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
Potassium						
WHI (female only)						
Dietary intake ^a	2619.5	<2153.6	2153.6-2473.8	2473.8-2768.2	2768.2-3139.5	≥3139.5
Cases/person-years	1631/1123470	368/207916	336/220409	332/228708	304/231972	291/234465
Multivariable model HR ^b	0.94 (0.86, 1.02)	1.00	0.93 (0.80, 1.09)	0.92 (0.78, 1.07)	0.84 (0.72, 0.99)	0.82 (0.69, 0.96)
P value	0.112			P _{trend} ^c =0.007		
Female in the PLCO						
Dietary intake ^a	2943.8	<2463.4	2463.4-2797.0	2797.0-3096.8	3096.8-3487.7	≥3487.7
Cases/person-years	543/390992	123/77876	106/77994	87/77975	103/78589	124/78558
Multivariable model HR ^b	0.98 (0.87, 1.11)	1.00	0.92 (0.70, 1.20)	0.73 (0.55, 0.98)	0.85 (0.65, 1.12)	0.95 (0.74, 1.23)
P value	0.725			P _{trend} ^c =0.715		
Male in the PLCO						
Dietary intake ^a	3489.9	<2935.9	2935.9-3319.7	3319.7-3670.0	3670.0-4142.0	≥4142.0
Cases/person-years	735/343836	152/68795	127/68496	145/68642	159/68905	152/68998
Multivariable model HR ^b	1.05 (0.95, 1.15)	1.00	0.90 (0.71, 1.15)	1.01 (0.80, 1.29)	1.07 (0.85, 1.35)	1.01 (0.80, 1.28)
P value	0.346			P _{trend} ^c =0.569		
Sodium						
WHI (female only)						
Dietary intake ^a	2620.2	<2291.5	2291.5-2522.5	2522.5-2722.4	2722.4-2980.3	≥2980.3
Cases/person-years	1631/1123470	337/221914	293/224463	343/224825	313/226959	345/225309
Multivariable model HR ^b	1.09 (0.99, 1.21)	1.00	0.94 (0.80, 1.11)	1.14 (0.98, 1.34)	1.04 (0.89, 1.22)	1.11 (0.95, 1.30)
P value	0.084			P _{trend} ^c =0.093		
Female in the PLCO						
Dietary intake ^a	2361.2	<2083.6	2083.6-2280.3	2280.3-2442.9	2442.9-2656.4	≥2656.4
Cases/person-years	543/390992	143/77508	101/78109	106/78154	100/78802	93/78418
Multivariable model HR ^b	0.86 (0.71, 1.04)	1.00	0.82 (0.63, 1.07)	0.93 (0.72, 1.21)	0.84 (0.65, 1.10)	0.74 (0.56, 0.97)
P value	0.114			P _{trend} ^c =0.043		
Male in the PLCO						
Dietary intake ^a	3108.9	<2732.1	2732.1-2996.7	2996.7-3229.6	3229.6-3551.6	≥3551.6
Cases/person-years	735/343836	155/68264	127/68502	149/68646	159/69025	145/69399
Multivariable model HR ^b	1.18 (1.04, 1.34)	1.00	1.00 (0.78, 1.28)	1.23 (0.97, 1.56)	1.31 (1.04, 1.66)	1.18 (0.92, 1.51)
P value	0.011			P _{trend} ^c =0.055		

^aMineral intake was energy-adjusted (mg/day), median intake for continuous and range for quintiles. ^bCox proportional hazard models were used to adjust age, body mass index (kg/m²), race (white, black, Hispanic, Asian or pacific islander, others), energy intake (kcal/day), educational level (3 categories), alcohol consumption (g/day), smoking status (never smokers, former smokers <20 pack-years, former smokers ≥20 pack-years, current smokers <20 pack-years, current smokers ≥20 pack-years), history of diabetes (yes or no), and family history of lung cancer (yes or no) for the PLCO trial or family history of cancer (yes or no) for the WHI cohort. ^cTest for linear trend was estimated by assigning the median value of sodium or potassium intake in each quintile.

Table S6 Smoking-status-specific hazard ratios and 95% confidence intervals of lung cancer based on categories of dietary sodium intake

	Continuous	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
PLCO (male, N=44,959)						
Non-smoker						
Dietary sodium intake ^a	3083.1	<2728.9	2728.9-2982.2	2982.2-3193.7	3193.7-3486.5	≥3486.5
Cases/person-years	38/132602	7/26494	8/26247	10/26296	10/26764	3/26801
Multivariable model HR ^b	1.00 (0.52, 1.94)	1.00	1.05 (0.37, 2.99)	1.35 (0.49, 3.69)	1.36 (0.50, 3.70)	0.45 (0.11, 1.81)
Smoker						
Dietary sodium intake ^a	3124.7	<2733.5	2733.5-3006.1	3006.1-3251.2	3251.2-3588.8	≥3588.8
Cases/person-years	697/211235	144/41856	125/42163	135/42288	153/42286	140/42642
Multivariable model HR ^b	1.15 (1.01, 1.31)	1.00	0.95 (0.74, 1.22)	1.06 (0.83, 1.36)	1.23 (0.97, 1.57)	1.13 (0.88, 1.46)
PLCO (female, N=48,025)						
Non-smoker						
Dietary sodium intake ^a	2346.0	<2075.4	2075.4-2267.9	2267.9-2423.1	2423.1-2627.2	≥2627.2
Cases/person-years	67/226058	16/45162	12/45091	11/45054	14/45381	14/45370
Multivariable model HR ^b	1.34 (0.77, 2.35)	1.00	0.77 (0.36, 1.65)	0.74 (0.34, 1.62)	0.98 (0.47, 2.05)	1.04 (0.50, 2.16)
Smoker						
Dietary sodium intake ^a	2381.4	<2093.0	2093.0-2297.8	2297.8-2469.7	2469.7-2698.1	≥2698.1
Cases/person-years	476/164935	128/32360	88/33054	97/33042	90/33430	73/33049
Multivariable model HR ^b	0.75 (0.61, 0.93)	1.00	0.7 (0.53, 0.93)	0.8 (0.61, 1.05)	0.77 (0.58, 1.02)	0.63 (0.47, 0.85)
WHI (N=72,425)						
Non-smoker						
Dietary sodium intake ^a	2606.6	<2288.0	2288.0-2512.8	2512.8-2706.5	2706.5-2955.8	≥2955.8
Cases/person-years	299/591252	47/117619	59/118170	75/117939	50/119520	68/118004
Multivariable model HR ^b	1.06 (0.83, 1.36)	1.00	1.18 (0.80, 1.74)	1.48 (1.02, 2.15)	0.96 (0.64, 1.44)	1.31 (0.90, 1.90)
Smoker						
Dietary sodium intake ^a	2635.4	<2294.5	2294.5-2532.3	2532.3-2739.6	2739.6-3008.8	≥3008.8
Cases/person-years	1332/532218	274/104588	247/106122	275/106719	262/107372	274/107417
Multivariable model HR ^b	1.02 (0.91, 1.15)	1.00	0.89 (0.74, 1.06)	1.01 (0.85, 1.19)	0.97 (0.81, 1.15)	1.02 (0.86, 1.21)

^aMineral intake was energy-adjusted (mg/day), median intake for continuous and range for quintiles. ^bCox proportional hazard models were used to adjust age, body mass index (kg/m²), energy intake (kcal/day), educational level (3 categories), alcohol consumption (g/day), history of diabetes (yes or no), and family history of cancer (yes or no).

Table S7 Smoking-status-specific hazard ratios and 95% confidence intervals of lung cancer based on categories of dietary potassium intake

	Continuous	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
PLCO (male, N=44,959)						
Non-smoker						
Dietary potassium intake ^a	3437.7	<2897.7	2897.7-3270.6	3270.6-3601.0	3601.0-4064.8	≥4064.8
Cases/person-years	38/132602	6/26769	9/26261	8/26410	7/26640	8/26522
Multivariable model HR ^b	1.05 (0.67, 1.64)	1.00	1.35 (0.47, 3.85)	1.18 (0.40, 3.47)	1.06 (0.35, 3.20)	1.35 (0.46, 3.96)
Smoker						
Dietary potassium intake ^a	3524.1	<2959.1	2959.1-3350.0	3350.0-3707.1	3707.1-4190.8	≥4190.8
Cases/person-years	697/211235	146/42028	121/42262	141/42213	151/42261	138/42471
Multivariable model HR ^b	1.05 (0.96, 1.16)	1.00	0.87 (0.68, 1.12)	1.01 (0.79, 1.28)	1.09 (0.86, 1.38)	1.01 (0.79, 1.29)
PLCO (female, N=48,025)						
Non-smoker						
Dietary potassium intake ^a	2911.6	<2439.0	2439.0-2767.7	2767.7-3061.8	3061.8-3442.9	≥3442.9
Cases/person-years	67/226058	13/45159	12/45148	8/45041	16/45279	18/45431
Multivariable model HR ^b	1.08 (0.75, 1.55)	1.00	0.84 (0.38, 1.87)	0.54 (0.22, 1.32)	1.06 (0.50, 2.23)	1.18 (0.57, 2.43)
Smoker						
Dietary potassium intake ^a	2987.3	<2497.0	2497.0-2838.6	2838.6-3145.3	3145.3-3547.2	≥3547.2
Cases/person-years	476/164935	113/32702	98/32878	80/32926	86/33252	99/33177
Multivariable model HR ^b	0.89 (0.78, 1.02)	1.00	0.85 (0.64, 1.11)	0.68 (0.51, 0.92)	0.72 (0.54, 0.96)	0.82 (0.63, 1.08)
WHI (N=72,425)						
Non-smoker						
Dietary potassium intake ^a	2620.1	<2155.4	2155.4-2475.3	2475.3-2768.3	2768.3-3141.0	≥3141.0
Cases/person-years	299/591252	49/109249	61/116531	58/120013	56/122309	75/123150
Multivariable model HR ^b	1.02 (0.85, 1.23)	1.00	1.04 (0.71, 1.52)	0.91 (0.61, 1.34)	0.82 (0.55, 1.21)	1.05 (0.72, 1.51)
Smoker						
Dietary potassium intake ^a	2618.2	<2153.2	2153.2-2473.5	2473.5-2768.1	2768.1-3138.1	≥3138.1
Cases/person-years	1332/532218	317/98557	270/103957	278/108909	243/109755	224/111040
Multivariable model HR ^b	0.77 (0.7, 0.85)	1.00	0.77 (0.65, 0.90)	0.74 (0.63, 0.87)	0.63 (0.53, 0.75)	0.57 (0.48, 0.68)

^aMineral intake was energy-adjusted (mg/day), median intake for continuous and range for quintiles. ^bCox proportional hazard models were used to adjust age, body mass index (kg/m²), energy intake (kcal/day), educational level (3 categories), alcohol consumption (g/day), history of diabetes (yes or no), and family history of cancer (yes or no).

Table S8 Hazard ratios and 95% confidence intervals of NSCLC based on categories of dietary mineral intake

	Continuous	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
Potassium						
WHI (female only)						
Dietary intake ^a	2620.0	<2154.1	2154.1-2474.5	2474.5-2768.9	2768.9-3139.7	>3139.7
Cases/person-years	1258/1119323	272/207260	248/219708	258/227841	252/231049	228/233465
Multivariable model HR ^b	0.95 (0.87, 1.04)	1.00	0.90 (0.76, 1.08)	0.92 (0.78, 1.10)	0.90 (0.75, 1.07)	0.82 (0.68, 0.98)
P value	0.296	0.044				
Female in the PLCO						
Dietary intake ^a	2943.6	<2463.5	2463.5-2796.9	2796.9-3096.6	3096.6-3487.5	>3487.5
Cases/person-years	466/390602	103/77807	91/77910	76/77886	90/78513	106/78485
Multivariable model HR ^b	0.96 (0.84, 1.09)	1.00	0.90 (0.67, 1.20)	0.73 (0.54, 0.98)	0.84 (0.63, 1.12)	0.92 (0.70, 1.21)
P value	0.504	0.572				
Male in the PLCO						
Dietary intake ^a	3489.3	<2935.4	2935.4-3318.9	3318.9-3669.3	3669.3-4141.1	>4141.1
Cases/person-years	626/343406	129/68713	109/68395	121/68569	138/68812	129/68917
Multivariable model HR ^b	1.06 (0.96, 1.17)	1.00	0.92 (0.71, 1.19)	1.02 (0.79, 1.31)	1.12 (0.88, 1.44)	1.05 (0.81, 1.35)
P value	0.248	0.380				
Female in two cohorts						
Dietary intake ^a	2750.1	<2254.2	2254.2-2598.0	2598.0-2907.1	2907.1-3298.1	>3298.1
Cases/person-years	1724/1509925	401/313186	360/316330	370/306196	276/296119	317/278094
Multivariable model HR ^b	0.95 (0.88, 1.03)	1.00	0.94 (0.82, 1.09)	1.00 (0.87, 1.16)	0.77 (0.66, 0.91)	0.91 (0.78, 1.06)
P value	0.201	0.079				
Sodium						
WHI (female only)						
Dietary intake ^a	2620.1	<2291.5	2291.5-2522.3	2522.3-2722.2	2722.2-2980.2	>2980.2
Cases/person-years	1258/1119323	254/221225	237/223500	264/224031	237/226100	266/224467
Multivariable model HR ^b	1.10 (0.98, 1.23)	1.00	1.00 (0.84, 1.20)	1.16 (0.97, 1.39)	1.04 (0.87, 1.25)	1.13 (0.95, 1.35)
P value	0.114	0.168				
Female in the PLCO						
Dietary intake ^a	2361	<2083.7	2083.7-2280.1	2280.1-2442.7	2442.7-2656.3	>2656.3
Cases/person-years	466/390602	116/77472	95/78008	95/78058	83/78741	77/78322
Multivariable model HR ^b	0.82 (0.66, 1.01)	1.00	0.91 (0.69, 1.21)	0.98 (0.74, 1.31)	0.83 (0.62, 1.11)	0.73 (0.54, 0.98)
P value	0.058	0.03				
Male in the PLCO						
Dietary intake ^a	3108.5	<2731.7	2731.7-2996.2	2996.2-3228.9	3228.9-3551.0	>3551.0
Cases/person-years	626/343406	128/68174	110/68399	133/68534	132/68979	123/69321
Multivariable model HR ^b	1.22 (1.06, 1.40)	1.00	1.02 (0.78, 1.33)	1.31 (1.01, 1.69)	1.32 (1.02, 1.71)	1.23 (0.94, 1.61)
P value	0.004			0.044		
Female in two cohorts						
Dietary intake ^a	2507.6	<2186.2	2186.2-2409.2	2409.2-2610.3	2610.3-2871.3	>2871.3
Cases/person-years	1724/1509925	328/265041	294/278409	355/300244	366/324259	381/341972
Multivariable model HR ^b	1.02 (0.93, 1.13)	1.00	0.95 (0.81, 1.11)	1.10 (0.94, 1.28)	1.06 (0.90, 1.24)	1.04 (0.89, 1.21)
P value	0.651			0.590		

NSCLC, non-small cell lung cancer. ^aMineral intake was energy-adjusted (mg/day), median intake for continuous and range for quintiles. ^bCox proportional hazard models were used to adjust age, body mass index (kg/m²), energy intake (kcal/day), educational level (3 categories), alcohol consumption (g/day), smoking status (never smokers, former smokers <20 pack-years, former smokers ≥20 pack-years, current smokers <20 pack-years, current smokers ≥20 pack-years), history of diabetes (yes or no), and family history of lung cancer (yes or no) for the PLCO trial or family history of cancer (yes or no) for the WHI cohort. ^cTest for linear trend was estimated by assigning the median value of sodium or potassium intake in each quintile.

Table S9 Hazard ratios and 95% confidence intervals of SCLC based on categories of dietary mineral intake

	Continuous	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
Potassium						
WHI (female only)						
Dietary intake ^a	2620.1	<2154.6	2154.6-2474.5	2474.5-2769.1	2769.1-3140.5	>3140.5
Cases/person-years	104/1107063	25/204969	28/217172	22/225340	13/228607	16/230975
Multivariable model HR ^b	1.01 (0.74, 1.38)	1.00	1.48 (0.85, 2.57)	1.29 (0.72, 2.34)	0.85 (0.43, 1.69)	1.14 (0.60, 2.19)
P value	0.934	0.874				
Female in the PLCO						
Dietary intake ^a	2944.1	<2464.1	2464.1-2797.8	2797.8-3096.9	3096.9-3486.9	>3486.9
Cases/person-years	77/388847	20/77436	15/77545	11/77490	13/78192	18/78183
Multivariable model HR ^b	1.01 (0.74, 1.37)	1.00	0.89 (0.45, 1.76)	0.67 (0.32, 1.44)	0.76 (0.37, 1.56)	0.96 (0.50, 1.84)
P value	0.967			0.839		
Male in the PLCO						
Dietary intake ^a	3489.2	<2936.0	2936.0-3319.1	3319.1-3669.2	3669.2-4141.2	>4141.2
Cases/person-years	109/340959	23/68263	19/67890	23/68001	21/68349	23/68456
Multivariable model HR ^b	1.09 (0.87, 1.37)	1.00	1.04 (0.55, 1.96)	1.26 (0.68, 2.32)	1.09 (0.58, 2.04)	1.11 (0.60, 2.06)
P value	0.474			0.740		
Female in two cohorts						
Dietary intake ^a	2751.2	<2255.2	2255.2-2598.8	2598.8-2908.6	2908.6-3299.1	>3299.1
Cases/person-years	181/1495909	49/310423	37/313390	32/303463	26/293127	37/275507
Multivariable model HR ^b	1.02 (0.82, 1.27)	1.00	1.01 (0.65, 1.56)	0.91 (0.57, 1.44)	0.76 (0.46, 1.25)	1.02 (0.64, 1.61)
P value	0.845			0.916		
Sodium						
WHI (female only)						
Dietary intake ^a	2620.2	<2291.7	2291.7-2522.3	2522.3-2722.4	2722.4-2980.1	>2980.1
Cases/person-years	104/1107063	24/218814	11/220929	23/221658	21/223590	25/222071
Multivariable model HR ^b	1.23 (0.84, 1.80)	1.00	0.57 (0.27, 1.17)	1.31 (0.72, 2.38)	1.22 (0.66, 2.24)	1.37 (0.76, 2.46)
P value	0.289			0.101		
Female in the PLCO						
Dietary intake ^a	2361.8	<2084.4	2084.4-2280.8	2280.8-2443.7	2443.7-2656.9	>2656.9
Cases/person-years	77/388847	27/77185	6/77711	11/77733	17/78303	16/77915
Multivariable model HR ^b	0.90 (0.56, 1.43)	1.00	0.27 (0.11, 0.67)	0.57 (0.27, 1.18)	0.80 (0.43, 1.52)	0.63 (0.33, 1.20)
P value	0.642			0.437		
Male in the PLCO						
Dietary intake ^a	3108.5	<2731.9	2731.9-2996.2	2996.2-3229.2	3229.2-3551.6	>3551.6
Cases/person-years	109/340959	28/67692	16/67906	16/68081	27/68453	22/68828
Multivariable model HR ^b	1.03 (0.75, 1.41)	1.00	0.80 (0.42, 1.52)	0.83 (0.43, 1.59)	1.31 (0.74, 2.33)	0.95 (0.51, 1.75)
P value	0.872			0.729		
Female in two cohorts						
Dietary intake ^a	2507.3	<2186.2	2186.2-2408.9	2408.9-2609.9	2609.9-2871.0	>2871.0
Cases/person-years	181/1495909	47/262551	24/275882	34/297246	36/321279	40/338951
Multivariable model HR ^b	1.07 (0.80, 1.44)	1.00	0.64 (0.38, 1.05)	0.95 (0.60, 1.51)	1.00 (0.63, 1.58)	1.11 (0.70, 1.74)
P value	0.652			0.164		

SCLC, small cell lung cancer. ^aMineral intake was energy-adjusted (mg/day), median intake for continuous and range for quintiles. ^bCox proportional hazard models were used to adjust age, body mass index (kg/m²), energy intake (kcal/day), educational level (3 categories), alcohol consumption (g/day), smoking status (never smokers, former smokers <20 pack-years, former smokers ≥20 pack-years, current smokers <20 pack-years, current smokers ≥20 pack-years), history of diabetes (yes or no), and family history of lung cancer (yes or no) for the PLCO trial or family history of cancer (yes or no) for the WHI cohort. ^cTest for linear trend was estimated by assigning the median value of sodium or potassium intake in each quintile.