Plant-Based Dietary Patterns and Lung Cancer Mortality: A Perspective Cohort Study

Supplemental material

Table S1 Scoring methods and examples of food items comprising the 18 food groups that contribute to PDI, hPDI, and uPDI scores *.

Food Groups	Example food descriptions	Scoring Method		
		PDI	hPDI	uPDI
Healthful Plant Foods				
Whole grains	Whole grains such as breakfast cereal, brown rice, and oatmeal	Positive	Positive	Reverse
Fruits	Whole fruits such as bananas, apples, oranges, and blueberries	Positive	Positive	Reverse
Vegetables	Dark green, red-orange, and starchy vegetables such as tomatoes, broccoli, carrots, and yams	Positive	Positive	Reverse
Nuts	Peanuts, tree nuts, and seeds	Positive	Positive	Reverse
Legumes	Legumes such as beans, lentils, and peas	Positive	Positive	Reverse
Vegetable oils	Salad dressing: oil and vinegar, canola oil, olive oil, and Crisco	Positive	Positive	Reverse
Tea & Coffee	Regular coffee, decaf coffee; green, black, and herbal teas	Positive	Positive	Reverse
Unhealthful Plant Foods				
Fruit juices	Citrus and non-citrus fruit juices such as orange juice and apple juice	Positive	Reverse	Positive
Refined grains	Refined grains such as bagels, muffins, white rice, and white bread	Positive	Reverse	Positive
Potatoes	White potatoes in forms such as french fries, baked potatoes, etc.	Positive	Reverse	Positive
Sugar-sweetened beverages	Sodas, carbonated beverages with sugar, etc.	Positive	Reverse	Positive
Sweets and desserts	Sweet beverages (excl. juice), pancakes, pastries, and desserts	Positive	Reverse	Positive
Animal Foods				

Animal fat	Products such as butter, ghee, margarine, and bacon fat	Reverse	Reverse	Reverse
Dairy	Yogurt, ice cream, whole milk, cheese, etc.	Reverse	Reverse	Reverse
Egg	Eggs and egg substitutes	Reverse	Reverse	Reverse
Fish or Seafood	Finfish, shellfish, shrimp, and other seafood	Reverse	Reverse	Reverse
Meat	Chicken, turkey, Cornish hens, duck, goose, processed meats, etc.	Reverse	Reverse	Reverse
Misc. animal-based foods	Pizza, cream soups like chowders, mayonnaise, and sandwich spreads	Reverse	Reverse	Reverse

*: Satija, A., Bhupathiraju, S.N., Rimm, E.B., Spiegelman, D., Chiuve, S.E., Borgi, L., Willett, W.C., Manson, J.E., Sun, Q., Hu, F.B. Plant-Based Dietary Patterns and Incidence of Type 2 Diabetes in US Men and Women: Results from Three Prospective Cohort Studies. PLoS medicine 2016, 13, e1002039, doi:10.1371/journal.pmed.1002039.

Table S2. Baseline Characteristics of 408 Participants in the lung cancer follow-up study to Quintiles of PDI Score

Characteristics	Overall	Q1	Q2	Q3	Q4	P value*
No. of patients/deaths	408/240	119/68	101/58	92/52	96/62	□
hPDI score (mean±SD)	49.98±5.95	43.02±2.84	48.41±1.15	52.42±1.06	57.91±2.65	<0.001
Age at diagnosis (mean±SD)	61.1±8.3	61.3±8.48	60.13±8.07	61.7±8.8	61.82±7.92	0.471
Sex, n (%)						<0.001
Male	283(69.36%)	71(17.4%)	58(14.22%)	71(17.4%)	83(20.34%)	
Female	125(30.64%)	48(11.76%)	43(10.54%)	21(5.15%)	13(3.19%)	
Education level, n (%)						0.034
Junior secondary or below	273(66.91%)	90(22.06%)	65(15.93%)	61(14.95%)	57(13.97%)	□
Senior high school/technical secondary school	80(19.61%)	18(4.41%)	24(5.88%)	21(5.15%)	17(4.17%)	□
Junior college/university or above	55(13.48%)	11(2.7%)	12(2.94%)	10(2.45%)	22(5.39%)	□
Region, n (%)						0.283
City	287(70.34%)	80(19.61%)	68(16.67%)	64(15.69%)	75(18.38%)	□
Rural	121(29.66%)	39(9.56%)	33(8.09%)	28(6.86%)	21(5.15%)	□
Race, n (%)						0.612
Han	349(85.54%)	101(24.75%)	84(20.59%)	78(19.12%)	86(21.08%)	□
Other	59(14.46%)	18(4.41%)	17(4.17%)	14(3.43%)	10(2.45%)	□
Income per month, RMB, n (%)						0.497
＜5000	182(44.61%)	62(15.2%)	39(9.56%)	43(10.54%)	38(9.31%)	□
5000-10000	60(14.71%)	15(3.68%)	17(4.17%)	13(3.19%)	15(3.68%)	□
≥10000	166(40.69%)	42(10.29%)	45(11.03%)	36(8.82%)	43(10.54%)	□
Marital status, n (%)						0.239
Married	365(89.46%)	103(25.25%)	94(23.04%)	85(20.83%)	83(20.34%)	□

Unmarried/divorced/widowed	43(10.54%)	16(3.92%)	7(1.72%)	7(1.72%)	13(3.19%)	□
Smoke, n (%)						0.001
No	111(27.21%)	37(9.07%)	39(9.56%)	21(5.15%)	14(3.43%)	□
Yes	297(72.79%)	82(20.1%)	62(15.2%)	71(17.4%)	82(20.1%)	□
Alcohol drinking, n (%)						0.018
No	178(43.63%)	55(13.48%)	55(13.48%)	36(8.82%)	32(7.84%)	□
Yes	230(56.37%)	64(15.69%)	46(11.27%)	56(13.73%)	64(15.69%)	□
Dietary change, n (%)						0.529
No	389(95.34%)	113(27.7%)	96(23.53%)	86(21.08%)	94(23.04%)	□
Yes	19(4.66%)	6(1.47%)	5(1.23%)	6(1.47%)	2(0.49%)	□
AJCC stage at diagnosis, n (%)						0.734
I-II	49(12.01%)	16(3.92%)	10(2.45%)	13(3.19%)	10(2.45%)	□
III-IV	359(87.99%)	103(25.25%)	91(22.3%)	79(19.36%)	86(21.08%)	□
Histological type, n (%)						0.069
Small cell lung cancer	310(75.98%)	98(24.02%)	68(16.67%)	69(16.91%)	75(18.38%)	□
Non-small lung cancer	98(24.02%)	21(5.15%)	33(8.09%)	23(5.64%)	21(5.15%)	□
Comorbidities, n (%)						0.556
No	170(41.67%)	53(12.99%)	39(9.56%)	42(10.29%)	36(8.82%)	□
Yes	238(58.33%)	66(16.18%)	62(15.2%)	50(12.25%)	60(14.71%)	□
Physical activity level, MET-hours/week, (mean±SD)	17.4±9.8	101.38±100.07	91.04±89.93	77.97±80.09	80.79±69.89	0.186
Energy intake, kcal/day, (mean±SD)	1643.4±465.4	1483.96±402.52	1559.32±368.01	1637.96±428.75	1929.16±542.77	<0.001
BMI at diagnosis, kg/m^2	22.7±3.5	23.27±2.8	23.47±2.56	22.35±2.9	22.45±3.67	0.672
Surgury, n (%)						0.518
No	332(81.37%)	96(28.92%)	87(26.2%)	74(22.29%)	75(22.59%)	

						P
Yes	76(18.63%)	23(30.26%)	14(18.42%)	18(23.68%)	21(27.63%)	
Chemotherapy, n (%)						0.041
No	38(9.31%)	12(31.58%)	9(23.68%)	14(36.84%)	3(7.89%)	
Yes	370(90.69%)	107(28.92%)	92(24.86%)	78(21.08%)	93(25.14%)	
Radiotherapy, n (%)						0.423
No	333(81.62%)	96(28.83%)	83(24.92%)	71(21.32%)	83(24.92%)	
Yes	75(18.38%)	5.64(19.33%)	4.41(17.82%)	5.15(22.83%)	3.19(13.54%)	
Targeted therapy, n (%)						0.165
No	276(67.65%)	82(29.71%)	63(22.83%)	70(25.36%)	61(22.1%)	
Yes	132(32.35%)	37(28.03%)	38(28.79%)	22(16.67%)	35(26.52%)	
Immunotherapy, n (%)						0.386
No	326(79.9%)	99(30.37%)	82(25.15%)	74(22.7%)	71(21.78%)	
Yes	82(20.1%)	20(24.39%)	19(23.17%)	18(21.95%)	25(30.49%)	

PDI, plant-based diet index; Q, quartile; SD, standard deviation; MET, metabolic equivalents of task; BMI, body mass index.

*P values were determined with one-way ANOVA for continuous variables, and the chi-square test for categorical variables.

Table S3. Baseline Characteristics of 408 Participants in the lung cancer follow-up study to Quintiles of uPDI Score

Characteristics	Overall	Q1	Q2	Q3	Q4	P value*
No. of patients/deaths	408/240	112/68	97/50	97/54	102/68	
hPDI score (mean±SD)	52.21±6.71	43.84±2.80	50.21±1.38	54.80±1.50	60.82±2.52	<0.001
Age at diagnosis (mean±SD)	61.10±8.30	61.46±8.39	61.02±8.26	60.28±8.22	62.05±8.44	0.495
Sex, n (%)						0.070
Male	283(69.36%)	84(20.59%)	72(17.65%)	58(14.22%)	69(16.91%)	
Female	125(30.64%)	28(6.86%)	25(6.13%)	39(9.56%)	33(8.09%)	
Education level, n (%)						<0.001
Junior secondary or below	273(66.91%)	55(13.48%)	62(15.20%)	67(16.42%)	89(21.81%)	
Senior high school/technical secondary school	80(19.61%)	31(7.60%)	21(5.15%)	20(4.90%)	8(1.96%)	
Junior college/university or above	55(13.48%)	26(6.37%)	14(3.43%)	10(2.45%)	5(1.23%)	
Region, n (%)						<0.001
City	287(70.34%)	95(23.28%)	72(17.65%)	68(16.67%)	52(12.75%)	
Rural	121(29.66%)	17(4.17%)	25(6.13%)	29(7.11%)	50(12.25%)	
Race, n (%)						0.720
Han	349(85.54%)	96(23.53%)	80(19.61%)	83(20.34%)	90(22.06%)	
Other	59(14.46%)	16(3.92%)	17(4.17%)	14(3.43%)	12(2.94%)	
Income per month, RMB, n (%)						0.017
＜5000	182(44.61%)	39(9.56%)	41(10.05%)	49(12.01%)	53(12.99%)	
5000-10000	60(14.71%)	26(6.37%)	16(3.92%)	11(2.70%)	7(1.72%)	
≥10000	166(40.69%)	47(11.52%)	40(9.80%)	37(9.07%)	42(10.29%)	
Marital status, n (%)						0.070
Married	365(89.46%)	93(22.79%)	89(21.81%)	88(21.57%)	95(23.28%)	

Unmarried/divorced/widowed	43(10.54%)	19(4.66%)	8(1.96%)	9(2.21%)	7(1.72%)	
Smoke, n (%)						0.007
No	111(27.21%)	22(5.39%)	26(6.37%)	39(9.56%)	24(5.88%)	
Yes	297(72.79%)	90(22.06%)	71(17.40%)	58(14.22%)	78(19.12%)	
Alcohol drinking, n (%)						0.169
No	178(43.63%)	43(10.54%)	37(9.07%)	47(11.52%)	51(12.50%)	
Yes	230(56.37%)	69(16.91%)	60(14.71%)	50(12.25%)	51(12.50%)	
Dietary change, n (%)						0.516
No	389(95.34%)	104(25.49%)	93(22.79%)	94(23.04%)	98(24.02%)	
Yes	19(4.66%)	8(1.96%)	4(0.98%)	3(0.74%)	4(0.98%)	
AJCC stage at diagnosis, n (%)						0.064
I-II	49(12.01%)	10(2.45%)	16(3.92%)	16(3.92%)	7(1.72%)	
III-IV	359(87.99%)	102(25%)	81(19.85%)	81(19.85%)	95(23.28%)	
Histological type, n (%)						0.788
Small cell lung cancer	310(75.98%)	89(21.81%)	73(17.89%)	72(17.65%)	76(18.63%)	
Non-small lung cancer	98(24.02%)	23(5.64%)	24(5.88%)	25(6.13%)	26(6.37%)	
Comorbidities, n (%)						0.422
No	170(41.67%)	54(13.24%)	37(9.07%)	38(9.31%)	41(10.05%)	
Yes	238(58.33%)	58(14.22%)	60(14.71%)	59(14.46%)	61(14.95%)	
Physical activity level, MET-hours/week, (mean±SD)	89.20±86.6	82.04±74.03	76.68±70.31	100.34±98.7	96.37±100.41	0.169
Energy intake, kcal/day, (mean±SD)	1643.40±465.40	1936.61±527.02	1696.15±370.89	1532.86±381.85	1371.17±348.69	<0.001
BMI at diagnosis, kg/m²	22.70±3.50	22.89±3.21	23.08±2.83	23.35±2.32	22.50±3.41	0.620
Surgury, n (%)						0.076
No	332(81.37%)	92(27.71%)	75(22.59%)	74(22.29%)	91(27.41%)	
Yes	76(18.63%)	20(26.32%)	22(28.95%)	23(30.26%)	11(14.47%)	

Chemotherapy, n (%)					0.3614
No	38(9.31%)	9(23.68%)	7(18.42%)	8(21.05%)	14(36.84%)
Yes	370(90.69%)	103(27.84%)	90(24.32%)	89(24.05%)	88(23.78%)
Radiotherapy, n (%)					0.4442
No	333(81.62%)	89(26.73%)	84(25.23%)	76(22.82%)	84(25.23%)
Yes	75(18.38%)	5.64(20.54%)	3.19(13.4%)	5.15(21.65%)	4.41(17.65%)
Targeted therapy, n (%)					0.7406
No	276(67.65%)	72(26.09%)	69(25%)	67(24.28%)	68(24.64%)
Yes	132(32.35%)	40(30.3%)	28(21.21%)	30(22.73%)	34(25.76%)
Immunotherapy, n (%)					0.9567
No	326(79.9%)	89(27.3%)	76(23.31%)	79(24.23%)	82(25.15%)
Yes	82(20.1%)	23(28.05%)	21(25.61%)	18(21.95%)	20(24.39%)

uPDI, unhealthful plant-based diet index; Q, quartile; SD, standard deviation; IQR, interquartile; MET, metabolic equivalents of task; BMI, body mass index.

*P values were determined with one-way ANOVA for continuous variables, and the chi-square test for categorical variables.

Table S4. Nutrition intakes by quartiles of hPDI score

	hPDI score				
	Q1	Q2	Q3	Q4	P value*
Carbohydrate (g/d)	245.56±66.36	234.76±52.61	241.99±63.62	225.79±54.48	0.101
Dietary fiber (g/d)	14.81±6.59	15.54±4.62	16.25±5.71	17.19±4.96	0.019
Dietary cholesterol (mg/d)	442.01±192.79	380.72±186.68	308.56±171.61	300.05±185.62	<0.001
Soy isoflavone (mg/d)	19.95±14.01	22.65±11.81	20.68±10.84	25.34±10.21	0.009
Saturated fatty acid (g/d)	11.69±6.51	10.68±5.22	9.04±5.74	8.07±3.76	<0.001
Monounsaturated fatty acid (g/d)	11.03±6.24	10.46±4.99	9.27±5.14	8.99±3.93	0.017
Polyunsaturated fatty acid (g/d)	6.42±2.78	6.71±2.73	6.49±2.61	7.06±2.19	0.326
Total carotene (ug/d)	1530.94±837.27	1543.78±481.98	1665.78±572.82	1899.52±565.72	<0.001
α-carotene (ug/d)	120.39±109.46	109.87±65.49	129.94±117.94	130.31±87.47	0.336
β-carotene (ug/d)	998.16±780.37	909.44±406.11	975.14±436.95	1213.24±556.11	0.001
Folic acid (ug/d)	189.33±103.19	185.83±58.34	191.92±59.31	207.87±56.77	0.145
Vitamin C (mg/d)	90.58±59.93	102.57±64.01	103.49±62.59	107.73±59.57	0.235
Vitamin E (mg/d)	15.86±7.47	16.94±6.21	16.69±7.01	18.39±5.29	0.060
Magnesium (mg/d)	293.57±96.01	288.09±78.81	295.11±87.04	297.39±76.11	0.865
Zinc (mg/d)	10.78±3.19	10.48±3.13	9.99±2.81	9.74±2.56	0.060
Selenium (ug/d)	40.17±19.18	37.39±19.34	36.82±18.75	34.29±12.14	0.147
Glycemic Index	68.81±5.17	68.43±4.72	68.59±4.91	67.29±5.35	0.161
Glycemic Load	167.51±39.01	159.83±32.56	164.51±37.19	151.76±36.13	0.017

hPDI, healthful plant-based diet index; Q, quartile.

*P values were determined with one-way ANOVA.

Table S5. Adjusted hazard ratio (HR) and 95% confidence intervals (CIs) for the association between Overall Plant-based Diet Index (after energy adjusting) and total mortality of lung cancer (n = 408).

	Quartiles of Scores*				P for Trend**	Per 10 unit[†]
	Q1	Q2	Q3	Q4		
PDI						
Score, range	36-50	50-54	54-58	58-69		1.04 (0.84-1.29)
Numbers (deaths)	106 (63)	115 (69)	103 (58)	84 (50)		
Model 1, HR (95% CI) [a]	1.00	1.01 (0.72-1.42)	0.92 (0.65-1.32)	0.98 (0.68-1.42)	0.792	
Model 2, HR (95% CI) [b]	1.00	1.00 (0.70-1.41)	0.99 (0.69-1.43)	1.02(0.70-1.48)	0.927	
Model 3, HR (95% CI) [c]	1.00	0.97 (0.66-1.41)	0.91 (0.62-1.35)	1.04 (0.70-1.55)	0.979	
hPDI						0.83 (0.69-0.99)
Score, range	40-49	49-53	53-58	58-74		
Numbers (deaths)	110 (67)	106 (59)	100 (62)	92 (52)		
Model 1, HR (95% CI) [a]	1.00	0.81 (0.57-1.15)	1.01 (0.71-1.42)	0.78 (0.54-1.12)	0.471	
Model 2, HR (95% CI) [b]	1.00	0.83 (0.59-1.19)	0.93 (0.65-1.32)	0.70 (0.48-1.02)	0.148	
Model 3, HR (95% CI) [c]	1.00	0.81 (0.56-1.17)	1.02 (0.69-1.49)	0.65 (0.43-0.98)	0.173	
uPDI						1.18 (0.91-1.52)
Score, range	36-49	49-54	54-58	58-74		
Numbers (deaths)	108 (59)	107 (59)	114 (71)	79 (51)		
Model 1, HR (95% CI) [a]	1.00	1.05 (0.73-1.51)	1.27 (0.90-1.79)	1.47 (1.01-2.14)	0.029	
Model 2, HR (95% CI) [b]	1.00	1.08 (0.75-1.55)	1.30 (0.92-1.84)	1.43 (0.98-2.10)	0.039	
Model 3, HR (95% CI) [c]	1.00	1.14 (0.77-1.69)	1.33 (0.92-1.93)	1.30 (0.86-1.96)	0.128	

PDI, plant-based diet index; hPDI, healthful plant-based diet index; uPDI, unhealthful plant-based diet index; HR, hazard ratio; CI, confidence interval; Q, quartile.

* HR and 95% CI were calculated through the Cox proportional hazards regression model.

** P-value for trend based on variables containing the median value for each group.

† Continuous intakes were calculated by per 10 unit increase.

[a] Crude model.

[b] Adjusted for age at diagnosis (≥60, ＜60 years) and sex (male, female).

[c] Additionally Adjusted for race (Han, others), region (city, rural), education (junior secondary or below, senior high school/technical secondary school, junior college/university or above), income per month (＜5000, 5000-10000, ≥10000 RMB), marital status (married, unmarried/divorced/widowed), smoking status (yes, no), alcohol intake (continuous, g/d), diet change (yes, no), BMI (continuous, kg/m2), physical activity (MET-hours/week), histological type (small cell lung cancer, non-small lung cancer), AJCC stage (I-II, III-IV), and comorbidities (yes, no), surgery (yes, no), chemotherapy (yes, no), radiotherapy (yes, no), targeted treatment (yes, no), and immunotherapy (yes, no).

[d] P-value for linear trend calculated from category median values.

Table S6. Adjusted hazard ratio (HR) and 95% confidence interval (CI) of lung cancer mortality by the quintiles of Overall Plant-based Diet Indices (n = 408).

	Q1	Q2	Q3	Q4	Q5	P for Trend**	Per 10 unit†
Quartiles of Scores*							
PDI							1.03 (0.80-1.31)
Score, range	31-45	45-48	48-52	52-55	55-67		
Numbers (deaths)	99 (57)	71 (39)	105 (59)	61 (35)	76 (50)		
Model 1, HR (95% CI) [a]	1.00	0.94 (0.62-1.41)	1.02 (0.71-1.46)	0.99 (0.65-1.50)	1.16 (0.79-1.70)	0.430	
Model 2, HR (95% CI) [b]	1.00	1.00 (0.66-1.51)	1.05 (0.70-1.45)	1.00 (0.65-1.54)	1.12 (0.74-1.70)	0.615	
Model 3, HR (95% CI) [c]	1.00	0.93 (0.61-1.43)	1.08 (0.73-1.60)	1.12 (0.71-1.77)	1.04 (0.67-1.62)	0.795	
hPDI							0.76 (0.58-0.99)
Score, range	42-55	55-58	58-61	61-64	64-74		
Numbers (deaths)	85 (53)	80 (50)	98 (50)	68 (39)	81 (48)		
Model 1, HR (95% CI) [a]	1.00	0.83 (0.56-1.22)	0.64 (0.43-0.94)	0.75 (0.49-1.13)	0.72 (0.48-1.06)	0.076	
Model 2, HR (95% CI) [b]	1.00	0.87 (0.59-1.28)	0.65 (0.44-0.96)	0.75 (0.49-1.13)	0.70 (0.47-1.05)	0.052	
Model 3, HR (95% CI) [c]	1.00	0.69 (0.46-1.06)	0.51 (0.34-0.78)	0.73 (0.47-1.13)	0.64 (0.43-0.97)	0.046	
uPDI							1.28 (0.99-1.66)
Score, range	35-46	46-50	50-54	54-59	59-69		
Numbers (deaths)	97 (59)	74 (34)	89 (47)	91 (55)	61 (45)		
Model 1, HR (95% CI) [a]	1.00	0.61 (0.40-0.94)	0.78 (0.53-1.15)	0.94 (0.65-1.36)	1.52 (1.03-2.24)	0.053	
Model 2, HR (95% CI) [b]	1.00	0.62 (0.41-0.96)	0.87 (0.59-1.29)	1.08 (0.71-1.62)	1.68 (1.07-2.63)	0.026	
Model 3, HR (95% CI) [c]	1.00	0.70 (0.44-1.10)	0.88 (0.58-1.34)	1.01 (0.65-1.57)	1.53 (0.93-2.49)	0.089	

PDI, plant-based diet index; hPDI, healthful plant-based diet index; uPDI, unhealthful plant-based diet index; HR, hazard ratio; CI, confidence interval; Q, quartile.

* HR and 95% CI were calculated through the Cox proportional hazards regression model.

** P-value for trend based on variables containing the median value for each group.

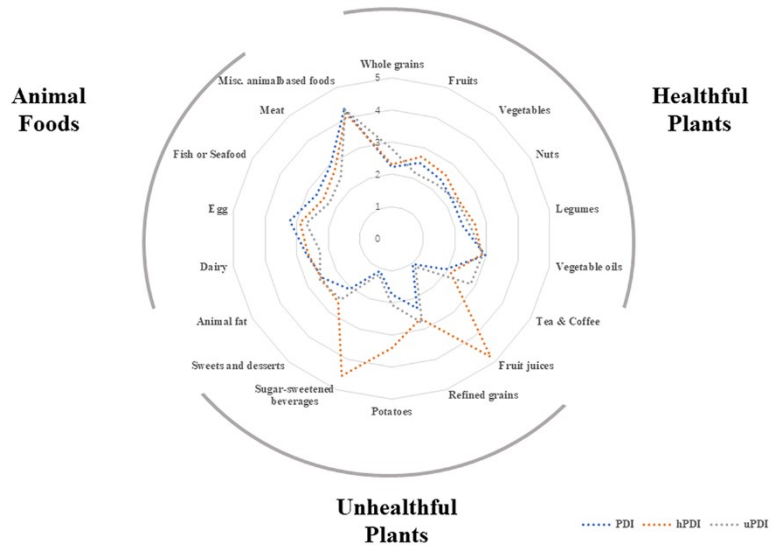† Continuous intakes were calculated by per 10 unit increase.

Table S7. Plant-based diet indices and risk of lung cancer mortality per 10-point increase in three scores with positive coding for milk, egg, fish, and poultry (n = 408).

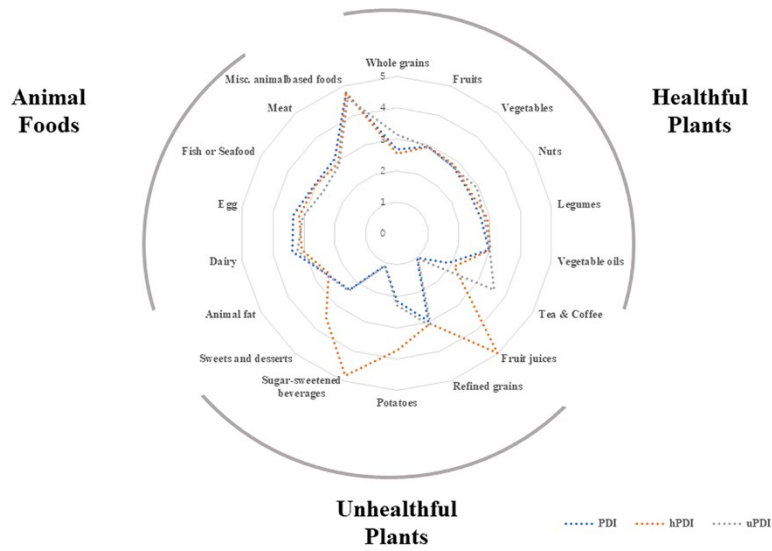|	Hazard ratio (HR) and 95% Confidence intervals (CIs)*		
	PDI	**hPDI**	**uPDI**
positive for milk	0.88 (0.68-1.14)	0.65 (0.50-0.84)	1.13 (0.87-1.47)
positive for egg	1.22 (0.95-1.58)	0.71 (0.50-0.92)	0.96 (0.75-1.23)
positive for fish	1.05 (0.81-1.35)	0.76 (0.59-0.98)	1.34 (0.99-1.81)
positive for poultry	1.25 (0.98-1.59)	0.75 (0.57-0.97)	1.01 (0.78-1.30)
positive for milk, egg, fish, poultry	0.80 (0.61-1.05)	0.75 (0.57-0.97)	1.25 (0.98-1.59)

* HR and 95% CI were calculated through the Cox proportional hazards regression model, continuous intakes were calculated by per 10 unit increase.

The values are hazard ratios calculated with multivariable adjustment for age at diagnosis (≥60, ＜ 60 years), sex (male, female), total energy intake (continuous, kcal/d), race (Han, others), region (city, rural), education (junior secondary or below, senior high school/technical secondary school, junior college/university or above), income per month (＜5000, 5000-10000, ≥10000 RMB), marital status (married, unmarried/divorced/widowed), smoking status (yes, no), alcohol intake (continuous, g/d), diet change (yes, no), BMI (continuous, kg/m2), physical activity (MET-hours/week), histological type (small cell lung cancer, non-small lung cancer), AJCC stage (I-II, III-IV), and comorbidities (yes, no), surgery (yes, no), chemotherapy (yes, no), radiotherapy (yes, no), targeted treatment (yes, no), and immunotherapy (yes, no).

a

Animal Foods

Healthful Plants

Unhealthful Plants

PDI ····· hPDI ····· uPDI

b

Animal Foods

Healthful Plants

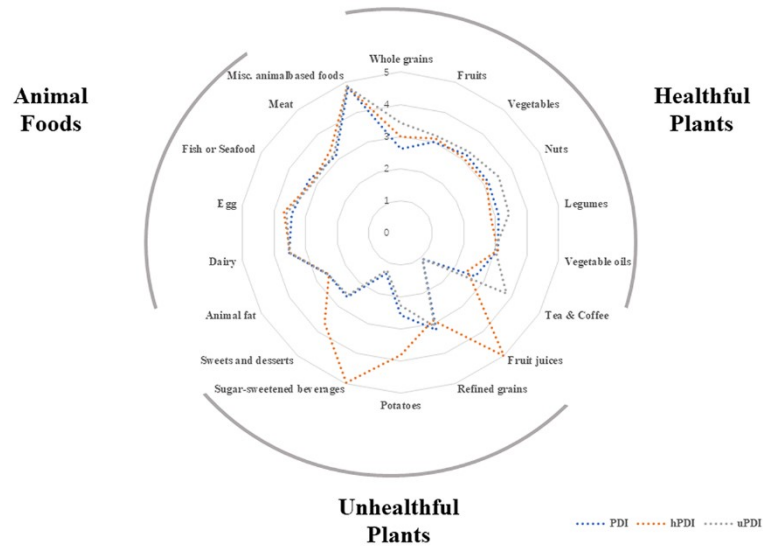Unhealthful Plants

PDI ····· hPDI ····· uPDI

c

Fig S1. Radar plot for food groups contributing to three plant-based diet indices among lung cancer survivors. The blue line for PDI score, the orange line for hPDI score, the gray line for uPDI score. If the line is pulled toward the outside of the circle, the median score is higher, indicating greater consumption of that food group. **a:** The grid line represents the median score assigned for each food group for the Q1. **b:** The grid line represents the median score assigned for each food group for the Q2. **c:** The grid line represents the median score assigned for each food group for the Q3.