Variables	Q1 (n=20160)	Q2 (n=18273)	Q3	Q4 (n=16852)	Q5 (n=15780)	P value
			(n=20349)			
Age (y), mean (SD)	61.2 (5.0)	61.9 (5.2)	62.4 (5.2)	62.7 (5.3)	63.0 (5.3)	< 0.001
Sex (n, %)						
Male	12861	9253	8946	6202	4926	
	(63.8%)	(50.6%)	(44.0%)	(36.8%)	(31.2%)	< 0.001
Female	7299	9020	11403	10650	10854	
	(36.2%)	(49.4%)	(56.0%)	(63.2%)	(68.8%)	
Arm (n, %)						
Screen	10238	9225	10331	8565	8285	
	(50.8%)	(50.5%)	(50.8%)	(50.8%)	(52.5%)	0.002
Control	9922	9048	10018	8287	7495	
	(49.2%)	(49.5%)	(49.2%)	(49.2%)	(47.5%)	
Smoking status (n, %)						
Never	9391	8766	10035	8560	8135	
	(46.6%)	(48.0%)	(49.3%)	(50.8%)	(51.6%)	< 0.001
Current	2499	1833	1794	1244	1029	
	(12.4%)	(10.0%)	(8.8%)	(7.4%)	(6.5%)	
Former	8267	7666	8517	7046	6612	
	(41.0%)	(42.0%)	(41.9%)	(41.8%)	(41.9%)	
Drinking status (n, %)						
Never	1784	1742	2006	1808	1871	
	(8.8%)	(9.5%)	(9.9%)	(10.7%)	(11.9%)	< 0.001
Current	2763	2434	2736	2308	2480	
	(13.7%)	(13.3%)	(13.4%)	(13.7%)	(15.7%)	
Former	15178	13639	15097	12224	10841	
	(75.3%)	(74.6%)	(74.2%)	(72.5%)	(68.7%)	
Education (n, %)						
High school and	6138	5261	5788	4803	4406	
below	(30.4%)	(28.8%)	(28.4%)	(28.5%)	(27.9%)	< 0.001
Undergraduate	6970	6226	6991	5739	5377	
	(34.6%)	(34.1%)	(34.4%)	(34.1%)	(34.1%)	
Graduate and above	7019	6756	7528	6269	5963	
	(34.8%)	(37.0%)	(37.0%)	(37.2%)	(37.8%)	
BMI (n, %)						
$< 25.0 \text{ kg/m}^2$	5075	5637	7166	6616	7245	
	(25.2%)	(30.8%)	(35.2%)	(39.3%)	(45.9%)	< 0.001
\geq 25.0 kg/m ²	14826	12399	12904	10004	8336	
	(73.5%)	(67.9%)	(63.4%)	(59.4%)	(52.8%)	
Race (n, %)						
White, Non-Hispanic	18963	17022	18599	15043	13517	
	(94.1%)	(93.2%)	(91.4%)	(89.3%)	(85.7%)	< 0.001

Supplementary Table 2 Main characteristics of participants included in this study by hPDI in Prostate, Lung, Colorectal and Ovarian (PLCO) Screening Trial.

Other	1193	1243	1744	1800	2257	
	(5.9%)	(6.8%)	(8.6%)	(10.7%)	(14.3%)	
Marital status (n, %)						
Married	16417	14636	15916	12902	11600	
	(81.4%)	(80.1%)	(78.2%)	(76.6%)	(73.5%)	< 0.001
Not married	3715	3604	4393	3915	4146	
	(18.4%)	(19.7%)	(21.6%)	(23.2%)	(26.3%)	
Total energy intake	2221.1	1847.9	1636.2	1467.3	1337.1	
(kcal/d), mean \pm SD	(741.6)	(666.0)	(611.4)	(571.8)	(508.1)	< 0.001

hPDI, healthy plant-based diet index; y, year; SD, standard deviation; BMI, body mass index