

eTable 1. Baseline characteristics of study population according to dietary carotene intake in men (2002-2012) and women (1997-2012)

	Men, Mean (SD) or N (%)					Women, Mean (SD) or N (%)				
	Q1 (lowest)	Q2	Q3	Q4	Q5 (highest)	Q1 (lowest)	Q2	Q3	Q4	Q5 (highest)
N	11,947	11,949	11,947	11,948	11,948	14,924	14,923	14,925	14,924	14,923
Education										
Elementary school or less	1,092 (9.14)	842 (7.05)	781 (6.54)	666 (5.57)	601 (5.03)	4,218 (28.26)	3,438 (23.04)	2,893 (19.38)	2,909 (19.49)	2,618 (17.54)
Middle school	4,479 (37.49)	4,090 (34.23)	3,961 (33.15)	3,820 (31.97)	3,646 (30.52)	5,498 (36.84)	5,395 (36.15)	5,521 (36.99)	5,633 (37.74)	5,526 (37.03)
High school	4,205 (35.2)	4,359 (36.48)	4,328 (36.23)	4,371 (36.58)	4,329 (36.23)	3,528 (23.64)	4,061 (27.21)	4,340 (29.08)	4,263 (28.56)	4,627 (31.01)
Professional education/college or higher	2,171 (18.17)	2,658 (22.24)	2,877 (24.08)	3,091 (25.87)	3,372 (28.22)	1,680 (11.26)	2,029 (13.6)	2,171 (14.55)	2,119 (14.2)	2,152 (14.42)
Income ^a										
Low	1,920 (16.07)	1,493 (12.49)	1,439 (12.04)	1,292 (10.81)	1,330 (11.13)	2,596 (17.39)	2,275 (15.24)	2,284 (15.3)	2,394 (16.04)	2,523 (16.91)
Lower middle	5,458 (45.69)	5,203 (43.54)	5,053 (42.3)	4,942 (41.36)	4,833 (40.45)	5,879 (39.39)	5,590 (37.46)	5,630 (37.72)	5,631 (37.73)	5,810 (38.93)
Upper middle	3,705 (31.01)	4,210 (35.23)	4,261 (35.67)	4,439 (37.15)	4,361 (36.5)	4,194 (28.1)	4,373 (29.3)	4,217 (28.25)	4,255 (28.51)	3,920 (26.27)
High	864 (7.23)	1,043 (8.73)	1,194 (9.99)	1,275 (10.67)	1,424 (11.92)	2,255 (15.11)	2,685 (17.99)	2,794 (18.72)	2,644 (17.72)	2,670 (17.89)
Occupation										
House wife	-	-	-	-	-	73 (0.49)	60 (0.4)	45 (0.3)	52 (0.35)	44 (0.29)
Professional, administrator	2,538 (21.24)	3,027 (25.33)	3,207 (26.84)	3,333 (27.9)	3,607 (30.19)	3,641 (24.4)	4,266 (28.59)	4,474 (29.98)	4,459 (29.88)	4,489 (30.08)
Clerical or service worker	2,470 (20.67)	2,622 (21.94)	2,637 (22.07)	2,691 (22.52)	2,699 (22.59)	3,041 (20.38)	3,000 (20.1)	3,060 (20.5)	3,106 (20.81)	3,201 (21.45)
Manual laborer	6,939 (58.08)	6,300 (52.72)	6,103 (51.08)	5,924 (49.58)	5,642 (47.22)	8,169 (54.74)	7,597 (50.91)	7,346 (49.22)	7,307 (48.96)	7,189 (48.17)
History of hypertension	3,324 (27.82)	3,528 (29.53)	3,538 (29.61)	3,646 (30.52)	3,743 (31.33)	3,561 (23.86)	3,522 (23.6)	3,421 (22.92)	3,585 (24.02)	3,656 (24.5)
History of diabetes	594 (4.97)	685 (5.73)	735 (6.15)	760 (6.36)	957 (8.01)	706 (4.73)	635 (4.26)	566 (3.79)	654 (4.38)	711 (4.76)
History of coronary heart disease	530 (4.44)	591 (4.95)	572 (4.79)	636 (5.32)	701 (5.87)	1,038 (6.96)	1,048 (7.02)	1,081 (7.24)	1,113 (7.46)	1,217 (8.16)
History of stroke	463 (3.88)	469 (3.93)	420 (3.52)	432 (3.62)	449 (3.76)	190 (1.27)	172 (1.15)	163 (1.09)	170 (1.14)	177 (1.19)
Smoke status ^b										
Never smoker	2,996 (25.08)	3,446 (28.84)	3,680 (30.8)	3,844 (32.17)	4,185 (35.03)	14,324	14,501	14,559	14,594	14,567

							(95.98)	(97.17)	(97.55)	(97.79)	(97.61)
Pack-years <20	3,425 (28.67)	3,769 (31.54)	3,697 (30.95)	3,771 (31.56)	3,600 (30.13)	600 (4.02)	422 (2.83)	366 (2.45)	330 (2.21)	356 (2.39)	
Pack-years ≥20	5,526 (46.25)	4,734 (39.62)	4,570 (38.25)	4,333 (36.27)	4,163 (34.84)	-	-	-	-	-	
Alcohol intake											
Never drinker	7,914 (66.24)	7,899 (66.11)	8,056 (67.43)	7,957 (66.6)	7,984 (66.82)	14,631 (98.04)	14,655 (98.2)	14,644 (98.12)	14,635 (98.06)	14,614 (97.93)	
<2 drinks/day	2,273 (19.03)	2,419 (20.24)	2,401 (20.1)	2,498 (20.91)	2,386 (19.97)	269 (1.8)	250 (1.68)	272 (1.82)	277 (1.86)	284 (1.9)	
≥2 drinks/day	1,760 (14.73)	1,631 (13.65)	1,490 (12.47)	1,493 (12.5)	1,578 (13.21)	24 (0.16)	18 (0.12)	9 (0.06)	12 (0.08)	25 (0.17)	
Supplemental vitamins users ^c	1,308 (10.95)	1,668 (13.96)	1,836 (15.37)	1,916 (16.04)	2,275 (19.04)	2,307 (15.46)	2,824 (18.92)	3,032 (20.31)	3,082 (20.65)	3,462 (23.2)	
Menopause status	-	-	-	-	-	8,086 (54.18)	7,533 (50.48)	7,180 (48.11)	7,108 (47.63)	7,072 (47.39)	
Hormone replacement therapy	-	-	-	-	-	225 (1.51)	305 (2.04)	312 (2.09)	335 (2.24)	387 (2.59)	
Age at baseline, years	55.14 (9.83)	55.38 (9.83)	55.37 (9.72)	55.4 (9.67)	55.42 (9.63)	53.77 (9.34)	52.9 (9.19)	52.31 (8.98)	52.18 (8.93)	51.95 (8.82)	
Body mass index, kg/m ²	23.53 (3.09)	23.55 (3.08)	23.71 (3.05)	23.83 (3.07)	23.97 (3.07)	24.05 (3.59)	23.86 (3.41)	23.86 (3.39)	24.04 (3.38)	24.29 (3.37)	
Waist-hip ratio	0.9 (0.06)	0.9 (0.06)	0.9 (0.06)	0.9 (0.06)	0.9 (0.06)	0.82 (0.06)	0.81 (0.05)	0.81 (0.05)	0.81 (0.05)	0.81 (0.05)	
Physical activity, MET-h/week	56.52 (33.27)	57.19 (32.98)	59.16 (33.47)	60.7 (33.57)	64.68 (36.71)	103.57 (44.12)	103.87 (44.17)	105.35 (44.44)	107.3 (45.02)	112.15 (47.31)	
Dietary intake ^d											
Total energy, kcal/d	2,026.16 (500.61)	1,850.19 (456.85)	1,837.73 (444.35)	1,866.77 (450.84)	1,963.69 (478.25)	1,772.05 (413.08)	1,627.83 (371.35)	1,616.76 (370.04)	1,635.58 (370.86)	1,721.75 (409.63)	
Carbohydrate, g/d	323.97 (40.35)	316.94 (33.39)	312.76 (32.59)	309.25 (33.58)	302.39 (36.98)	288.33 (32.17)	281.15 (27.14)	277.83 (26.7)	276.02 (26.89)	272.04 (29.81)	
Protein, g/d	69.84 (13.22)	73.94 (11.39)	76.28 (11.43)	78.5 (12.3)	82.96 (14.4)	60.26 (11.3)	63.83 (9.92)	65.57 (10.04)	66.97 (10.41)	70.02 (12.16)	
Saturated fat, g/d	9.48 (4.77)	9.81 (3.82)	10.02 (3.7)	10.16 (3.72)	10.38 (4.08)	7.83 (3.75)	8.28 (3.07)	8.46 (3.01)	8.46 (3)	8.48 (3.23)	
Monounsaturated fat, g/d	14.3 (7.55)	14.7 (6.06)	14.91 (5.83)	14.98 (5.86)	14.98 (6.39)	11.94 (5.72)	12.56 (4.78)	12.73 (4.6)	12.68 (4.65)	12.43 (4.98)	
Polyunsaturated fat,	7.48 (3.19)	8.07 (2.73)	8.38 (2.71)	8.65 (2.86)	9.21 (3.23)	6.56 (2.71)	7.2 (2.35)	7.54 (2.41)	7.73 (2.48)	8.22 (3)	

g/d										
Fiber, g/d	8.32 (2.26)	9.93 (2.07)	10.98 (2.17)	12.1 (2.46)	14.71 (4.08)	7.8 (2.2)	9.46 (2.09)	10.54 (2.19)	11.63 (2.4)	14.16 (3.48)
Vegetables, g/d	166.19 (82.29)	254.5 (78.26)	315.76 (88.02)	387.32 (103.99)	556.98 (196.8)	147.18 (72.84)	219.34 (69.98)	269.67 (79.09)	330.4 (93.11)	479.27 (175.2)
Fruits, g/d	71.99 (72.36)	119.93 (83.87)	148.81 (96.4)	174.3 (114.21)	222.2 (156.71)	130.74 (98.87)	208.37 (109.36)	259.22 (129.57)	302.48 (154.04)	392.17 (206.39)
Red meat, g/d	60.75 (43.66)	61.09 (35.34)	62.11 (35.42)	61.54 (36.13)	59.41 (39.84)	49.29 (34.68)	50.63 (30.07)	50.32 (29.16)	49.12 (29.76)	45.52 (32.5)
Poultry, g/d	13.54 (18.71)	15.13 (16.96)	15.49 (16.3)	16.12 (18.26)	17.14 (20.97)	12.74 (17.05)	14.59 (15.87)	15.31 (16.54)	15.33 (16.48)	15.67 (18.67)
Fish, g/d	37.66 (40.35)	45.9 (37.73)	50.62 (39.8)	54.79 (43.53)	62.62 (53.4)	37.61 (38.41)	45.76 (36.89)	49.59 (38.09)	53.26 (42.34)	59.6 (49.98)

Q, quintile; SD, standard deviation.

^a Income level, four categories: Low: less than ¥10,000 CNY per family per year for women and less than ¥500 CNY per person per month for men; lower middle: ¥10,000-19,999 CNY per family per year for women and ¥500-999 CNY per person per month for men; Upper middle: ¥20,000-29,999 CNY per family per year for women and ¥1,000-1,999 CNY per person per month for men; high: greater than ¥30,000 CNY per family per year for women and more than ¥2,000 CNY per person per month for men.

^b Smoking status was collapsed into two groups in SWHS.

^c Use of any vitamin supplement.

^d Dietary nutrients intake (except for energy) was energy-adjusted by residual methods.

eTable 2. Baseline characteristics of study population according to dietary vitamin C intake in men (2002-2012) and women (1997-2012)

	Men, Mean (SD) or N (%)					Women, Mean (SD) or N (%)				
	Q1 (lowest)	Q2	Q3	Q4	Q5 (highest)	Q1 (lowest)	Q2	Q3	Q4	Q5 (highest)
N	11,947	11,949	11,947	11,949	11,947	14,924	14,923	14,925	14,923	14,924
Education										
Elementary school or less	1,175 (9.84)	876 (7.33)	774 (6.48)	675 (5.65)	482 (4.03)	4,640 (31.09)	3,652 (24.47)	3,064 (20.53)	2,601 (17.43)	2,119 (14.2)
Middle school	4,539 (37.99)	4,051 (33.9)	3,991 (33.41)	3,778 (31.62)	3,637 (30.44)	5,435 (36.42)	5,553 (37.21)	5,445 (36.48)	5,541 (37.13)	5,599 (37.52)
High school	4,161 (34.83)	4,419 (36.98)	4,300 (35.99)	4,293 (35.93)	4,419 (36.99)	3,351 (22.45)	3,780 (25.33)	4,311 (28.88)	4,542 (30.44)	4,835 (32.4)
Professional education/college or higher	2,072 (17.34)	2,603 (21.78)	2,882 (24.12)	3,203 (26.81)	3,409 (28.53)	1,498 (10.04)	1,938 (12.99)	2,105 (14.1)	2,239 (15)	2,371 (15.89)
Income ^a										
Low	1,912 (16)	1,529 (12.8)	1,397 (11.69)	1,278 (10.7)	1,358 (11.37)	2,744 (18.39)	2,463 (16.5)	2,292 (15.36)	2,255 (15.11)	2,318 (15.53)
Lower middle	5,553 (46.48)	5,316 (44.49)	5,125 (42.9)	4,927 (41.23)	4,568 (38.24)	6,007 (40.25)	5,820 (39)	5,610 (37.59)	5,584 (37.42)	5,519 (36.98)
Upper middle	3,672 (30.74)	4,078 (34.13)	4,251 (35.58)	4,474 (37.44)	4,501 (37.67)	4,045 (27.1)	4,228 (28.33)	4,320 (28.94)	4,214 (28.24)	4,152 (27.82)
High	810 (6.78)	1026 (8.59)	1,174 (9.83)	1,270 (10.63)	1,520 (12.72)	2,128 (14.26)	2,412 (16.16)	2,703 (18.11)	2,870 (19.23)	2,935 (19.67)
Occupation										
House wife	-	-	-	-	-	77 (0.52)	63 (0.42)	46 (0.31)	49 (0.33)	39 (0.26)
Professional, administrator	2,475 (20.72)	3,055 (25.57)	3,197 (26.76)	3,433 (28.73)	3,552 (29.73)	3,374 (22.61)	4,147 (27.79)	4,407 (29.53)	4,654 (31.19)	4,747 (31.81)
Clerical or service worker	2,475 (20.72)	2,548 (21.32)	2,635 (22.06)	2,697 (22.57)	2,764 (23.14)	3,042 (20.38)	2,983 (19.99)	3,077 (20.62)	3,077 (20.62)	3,229 (21.64)
Manual laborer	6,997 (58.57)	6,346 (53.11)	6,115 (51.18)	5,819 (48.7)	5,631 (47.13)	8,431 (56.49)	7,730 (51.8)	7,395 (49.55)	7,143 (47.87)	6,909 (46.29)
History of hypertension	3,340 (27.96)	3,513 (29.4)	3,633 (30.41)	3,659 (30.62)	3,634 (30.42)	3,702 (24.81)	3,554 (23.82)	3,602 (24.13)	3,492 (23.4)	3,395 (22.75)
History of diabetes	535 (4.48)	701 (5.87)	797 (6.67)	818 (6.85)	880 (7.37)	790 (5.29)	763 (5.11)	607 (4.07)	586 (3.93)	526 (3.52)

History of coronary heart disease	519 (4.34)	590 (4.94)	620 (5.19)	654 (5.47)	647 (5.42)	1,072 (7.18)	1,098 (7.36)	1,166 (7.81)	1,069 (7.16)	1,092 (7.32)
History of stroke	474 (3.97)	493 (4.13)	413 (3.46)	456 (3.82)	397 (3.32)	193 (1.29)	197 (1.32)	173 (1.16)	153 (1.03)	156 (1.05)
Smoke status ^b										
Never smoker	3,011 (25.2)	3,430 (28.71)	3,803 (31.83)	3,886 (32.52)	4,021 (33.66)	14,315 (95.92)	14,500 (97.17)	14,568 (97.61)	14,596 (97.81)	14,566 (97.6)
Pack-years <20	3,508 (29.36)	3,706 (31.02)	3,722 (31.15)	3,709 (31.04)	3,617 (30.28)	609 (4.08)	423 (2.83)	357 (2.39)	327 (2.19)	358 (2.4)
Pack-years ≥20	5,428 (45.43)	4,813 (40.28)	4,422 (37.01)	4,354 (36.44)	4,309 (36.07)	-	-	-	-	-
Alcohol intake										
Never drinker	8,188 (68.54)	8,035 (67.24)	7,995 (66.92)	7,882 (65.96)	7,710 (64.54)	14,642 (98.11)	14,667 (98.28)	14,656 (98.2)	14,644 (98.13)	14,570 (97.63)
<2 drinks/day	2,132 (17.85)	2,410 (20.17)	2,419 (20.25)	2,526 (21.14)	2,490 (20.84)	263 (1.76)	240 (1.61)	258 (1.73)	264 (1.77)	327 (2.19)
≥2 drinks/day	1,627 (13.62)	1,504 (12.59)	1,533 (12.83)	1,541 (12.9)	1,747 (14.62)	19 (0.13)	16 (0.11)	11 (0.07)	15 (0.1)	27 (0.18)
Supplemental vitamins users ^c	1,281 (10.72)	1,627 (13.62)	1,845 (15.44)	2,014 (16.85)	2,236 (18.72)	2,270 (15.21)	2,754 (18.45)	3,013 (20.19)	3,222 (21.59)	3,448 (23.1)
Menopause status	-	-	-	-	-	8,389 (56.21)	7,745 (51.9)	7,353 (49.27)	6,974 (46.73)	6,518 (43.67)
Hormone replacement therapy	-	-	-	-	-	210 (1.41)	292 (1.96)	309 (2.07)	371 (2.49)	382 (2.56)
Age at baseline, years	55.3 (9.87)	55.58 (9.88)	55.59 (9.86)	55.49 (9.66)	54.74 (9.38)	54.25 (9.4)	53.28 (9.21)	52.54 (9.07)	51.9 (8.86)	51.13 (8.5)
Body mass index, kg/m ²	23.55 (3.08)	23.5 (3.09)	23.69 (3.07)	23.83 (3.03)	24.01 (3.09)	24.17 (3.6)	23.83 (3.42)	23.89 (3.4)	23.99 (3.37)	24.21 (3.36)
Waist-hip ratio	0.9 (0.06)	0.9 (0.06)	0.9 (0.06)	0.9 (0.06)	0.9 (0.06)	0.82 (0.06)	0.81 (0.05)	0.81 (0.05)	0.81 (0.05)	0.81 (0.05)
Physical activity, MET-h/week	57.25 (33.48)	57.25 (32.8)	58.79 (33.03)	61.08 (34.14)	63.87 (36.69)	104.89 (44.6)	104.09 (44.03)	104.75 (44.08)	107 (45.09)	111.52 (47.39)
Dietary intake ^d										
Total energy, kcal/d	2,058.92 (494.38)	1,846.82 (452.2)	1,816.46 (435.96)	1,848.74 (443.99)	1,973.61 (486.81)	1,808.34 (405.64)	1,610.85 (362.69)	1,589.4 (358.52)	1,626.88 (374.87)	1,738.48 (410.93)
Carbohydrate,	327.14	318.15	313.32	307.6 (32.52)	299.08	290.67	281.79	277.61	274.28	271.03

g/d	(40.24)	(32.21)	(31.44)		(37.55)	(32.96)	(25.97)	(25.69)	(26.76)	(29.63)
Protein, g/d	68.63 (12.72)	73.48 (11.04)	76.03 (11.01)	78.95 (11.75)	84.43 (14.4)	59.38 (11.3)	63.58 (9.47)	65.66 (9.57)	67.61 (10.41)	70.43 (12.19)
Saturated fat, g/d	9.17 (4.83)	9.7 (3.68)	10 (3.59)	10.34 (3.67)	10.64 (4.18)	7.55 (3.83)	8.19 (2.97)	8.48 (2.91)	8.66 (3.01)	8.63 (3.24)
Monounsaturated fat, g/d	13.88 (7.67)	14.52 (5.81)	14.85 (5.65)	15.24 (5.84)	15.36 (6.56)	11.6 (5.91)	12.43 (4.57)	12.78 (4.47)	12.89 (4.63)	12.63 (5.02)
Polyunsaturated fat, g/d	7.21 (3.12)	7.93 (2.63)	8.31 (2.56)	8.79 (2.8)	9.55 (3.32)	6.39 (2.77)	7.18 (2.29)	7.54 (2.31)	7.85 (2.46)	8.3 (2.99)
Fiber, g/d	8.11 (2.19)	9.77 (1.86)	10.88 (1.94)	12.14 (2.12)	15.14 (3.9)	7.58 (2.21)	9.3 (1.89)	10.44 (1.91)	11.73 (2.11)	14.53 (3.26)
Vegetables, g/d	148.02 (61.37)	243.37 (45.64)	311.18 (54.41)	392.07 (68.48)	586.14 (183.85)	134.16 (58.78)	214.69 (50.24)	269.72 (60.14)	336.62 (77.94)	490.67 (174.92)
Fruits, g/d	75 (77.13)	118.95 (84.76)	147.1 (97.11)	172.64 (111.69)	223.54 (156.22)	120.77 (96.12)	195.98 (99.82)	248.91 (114.68)	304.4 (132.75)	422.92 (203.45)
Red meat, g/d	59 (43.85)	60.56 (34.45)	61.59 (34.45)	62.44 (36.51)	61.31 (40.86)	48.12 (35.63)	50.07 (28.7)	50.42 (28.39)	49.76 (29.99)	46.51 (33.26)
Poultry, g/d	12.87 (18.45)	14.73 (16.17)	15.53 (16.58)	16.47 (18)	17.82 (21.66)	11.83 (17.06)	14.13 (15.12)	15.37 (15.7)	16.01 (17.05)	16.31 (19.29)
Fish, g/d	35.1 (39.07)	45.33 (36.35)	50.03 (39.02)	55.75 (43.27)	65.38 (54.57)	34.36 (37.07)	44.54 (35.38)	49.83 (36.83)	54.99 (42.27)	62.1 (51.35)

Q, quintile; SD, standard deviation.

^a Income level, four categories: Low: less than ¥10,000 CNY per family per year for women and less than ¥500 CNY per person per month for men; lower middle: ¥10,000-19,999 CNY per family per year for women and ¥500-999 CNY per person per month for men; Upper middle: ¥20,000-29,999 CNY per family per year for women and ¥1,000-1,999 CNY per person per month for men; high: greater than ¥30,000 CNY per family per year for women and more than ¥2,000 CNY per person per month for men.

^b Smoking status was collapsed into two groups in SWHS.

^c Use of any vitamin supplement.

^d Dietary nutrients intake (except for energy) was energy-adjusted by residual methods.

eTable 3. Baseline characteristics of study population according to dietary vitamin E intake in men (2002-2012) and women (1997-2012)

	Men, Mean (SD) or N (%)					Women, Mean (SD) or N (%)				
	Q1 (lowest)	Q2	Q3	Q4	Q5 (highest)	Q1 (lowest)	Q2	Q3	Q4	Q5 (highest)
N	11,948	11,947	11,948	11,948	11,948	14,924	14,923	14,924	14,925	14,923
Education										
Elementary school or less	1,139 (9.53)	926 (7.75)	728 (6.09)	637 (5.33)	552 (4.62)	4,459 (29.88)	3,335 (22.35)	2,938 (19.69)	2,706 (18.13)	2,638 (17.68)
Middle school	4,645 (38.88)	4,136 (34.62)	3,870 (32.39)	3,702 (30.98)	3,643 (30.49)	5,766 (38.64)	5,629 (37.72)	5,514 (36.95)	5,339 (35.77)	5,325 (35.68)
High school	4,193 (35.09)	4,244 (35.52)	4,345 (36.37)	4,392 (36.76)	4,418 (36.98)	3,307 (22.16)	4,011 (26.88)	4,333 (29.03)	4,530 (30.35)	4,638 (31.08)
Professional education/college or higher	1,971 (16.5)	2,641 (22.11)	3,005 (25.15)	3,217 (26.93)	3,335 (27.91)	1,392 (9.33)	1,948 (13.05)	2,139 (14.33)	2,350 (15.75)	2,322 (15.56)
Income ^a										
Low	2,042 (17.09)	1,449 (12.13)	1,327 (11.11)	1,242 (10.4)	1,414 (11.83)	2,798 (18.75)	2,423 (16.24)	2,235 (14.98)	2,201 (14.75)	2,415 (16.18)
Lower middle	5,601 (46.88)	5,229 (43.77)	5,024 (42.05)	4,926 (41.23)	4,709 (39.41)	6,151 (41.22)	5,717 (38.31)	5,650 (37.86)	5,539 (37.11)	5,483 (36.74)
Upper middle	3,584 (30)	4,195 (35.11)	4,370 (36.58)	4,481 (37.5)	4,346 (36.37)	3,991 (26.74)	4,299 (28.81)	4,246 (28.45)	4,298 (28.8)	4,125 (27.64)
High	721 (6.03)	1,074 (8.99)	1,227 (10.27)	1,299 (10.87)	1,479 (12.38)	1,984 (13.29)	2,484 (16.65)	2,793 (18.71)	2,887 (19.34)	2,900 (19.43)
Occupation										
House wife	-	-	-	-	-	60 (0.4)	60 (0.4)	60 (0.4)	51 (0.34)	43 (0.29)
Professional, administrator	2,380 (19.92)	2,962 (24.79)	3,312 (27.72)	3,476 (29.09)	3,582 (29.98)	3,174 (21.27)	4,104 (27.5)	4,558 (30.54)	4,723 (31.64)	4,770 (31.96)
Clerical or service worker	2,443 (20.45)	2,594 (21.71)	2,617 (21.9)	2,702 (22.61)	2,763 (23.13)	3,168 (21.23)	3,019 (20.23)	3,051 (20.44)	3,016 (20.21)	3,154 (21.14)
Manual laborer	7,125 (59.63)	6,391 (53.49)	6,019 (50.38)	5,770 (48.29)	5,603 (46.89)	8,522 (57.1)	7,740 (51.87)	7,255 (48.61)	7,135 (47.81)	6,956 (46.61)
History of	3,360 (28.12)	3,414 (28.58)	3,568	3,674 (30.75)	3,763 (31.49)	3,418 (22.9)	3,374 (22.61)	3,502 (23.47)	3,507 (23.5)	3,944 (26.43)

Total energy, kcal/d	2,081.3 (473.02)	1,834.25 (451.88)	1,811.21 (441.14)	1,832.31 (434.02)	1,985.46 (498.27)	1,818.54 (407.63)	1,614.75 (357.13)	1,597.38 (356.42)	1,605.72 (366.27)	1,737.58 (419.18)
Carbohydrate, g/d	341.1 (34.8)	323.33 (27.01)	313.34 (26.69)	302.83 (27.98)	284.7 (36.41)	299.99 (30.81)	286.18 (22.82)	278.88 (22.78)	272.21 (22.58)	258.11 (27.82)
Protein, g/d	63.55 (9.27)	71.36 (8.06)	75.92 (8.57)	80.73 (9.21)	89.95 (13.71)	55.58 (9.3)	61.87 (7.81)	65.18 (8)	68.5 (8.48)	75.53 (11.45)
Saturated fat, g/d	8.21 (4.62)	9.46 (3.51)	10.08 (3.42)	10.71 (3.56)	11.39 (4.25)	7.07 (3.94)	7.99 (2.86)	8.45 (2.86)	8.75 (2.79)	9.25 (3.15)
Monounsaturated fat, g/d	12.59 (7.38)	14.2 (5.6)	14.98 (5.5)	15.78 (5.74)	16.32 (6.75)	11.04 (6.14)	12.17 (4.47)	12.73 (4.46)	13.03 (4.35)	13.37 (4.86)
Polyunsaturated fat, g/d	5.52 (2.02)	7.14 (1.64)	8.13 (1.69)	9.25 (1.85)	11.76 (3.2)	5.09 (1.99)	6.5 (1.57)	7.28 (1.63)	8.13 (1.71)	10.27 (2.91)
Fiber, g/d	8.23 (2)	10.07 (1.96)	11.16 (2.25)	12.26 (2.6)	14.31 (4.39)	7.63 (1.98)	9.55 (1.85)	10.71 (2.12)	11.88 (2.47)	13.82 (3.85)
Vegetables, g/d	218.85 (118.13)	288.86 (121.28)	330.08 (135.97)	376.07 (154.21)	466.9 (227.79)	186.89 (105.89)	248.42 (106.57)	286.38 (119.61)	325.76 (136.73)	398.41 (195.21)
Fruits, g/d	99.59 (98.79)	134.91 (101.27)	153.13 (109.11)	168.76 (119.89)	180.83 (146.91)	161.77 (131.11)	231.54 (134.3)	266.58 (146.33)	300.86 (162.05)	332.22 (207.87)
Red meat, g/d	56.19 (41.82)	60.3 (34.28)	62.36 (34.79)	64.04 (36.33)	62.01 (42.62)	48.61 (36.94)	50.42 (29.54)	50.73 (29.11)	49.32 (27.89)	45.79 (32.2)
Poultry, g/d	11.26 (16.5)	14.56 (16.38)	15.97 (17)	17.41 (18.02)	18.22 (22.35)	11.73 (17.18)	14.35 (15.39)	15.39 (15.87)	15.98 (16.26)	16.2 (19.5)
Fish, g/d	28.85 (30.29)	41.89 (32.04)	49.68 (36.38)	58.11 (41.33)	73.05 (60.4)	29 (31.13)	42.88 (32.24)	49.66 (35.7)	56.71 (40.67)	67.55 (55.41)

Q, quintile; SD, standard deviation.

^a Income level, four categories: Low: less than ¥10,000 CNY per family per year for women and less than ¥500 CNY per person per month for men; lower middle: ¥10,000-19,999 CNY per family per year for women and ¥500-999 CNY per person per month for men; Upper middle: ¥20,000-29,999 CNY per family per year for women and ¥1,000-1,999 CNY per person per month for men; high: greater than ¥30,000 CNY per family per year for women and more than ¥2,000 CNY per person per month for men.

^b Smoking status was collapsed into two groups in SWHS.

^c Use of any vitamin supplement.

^d Dietary nutrients intake (except for energy) was energy-adjusted by residual methods.

eTable 4. Results of sensitivity analysis between dietary antioxidant vitamins intake with all-cause mortality in men (2002-2012) and women (1997-2012)^a

Men						Women					
Vitamins	Median	Cases	Model 1 ^b	Model 2 ^c	Model 3 ^d	Vitamins	Median	Cases	Model 1 ^b	Model 2 ^c	Model 3 ^d
Non-supplement users						Non-supplement users					
Carotene	1,387.86	915	1.00 (reference)	1.00 (reference)	1.00 (reference)	Carotene	1,327.29	1,201	1.00 (reference)	1.00 (reference)	1.00 (reference)
	2,174.07	693	0.75 (0.68-0.83)	0.82 (0.75-0.91)	0.82 (0.74-0.91)		2,042.15	989	0.90 (0.83-0.98)	0.94 (0.86-1.02)	0.94 (0.86-1.02)
	2,832.69	632	0.71 (0.64-0.78)	0.82 (0.74-0.91)	0.82 (0.73-0.92)		2,630.01	876	0.89 (0.81-0.97)	0.94 (0.86-1.03)	0.94 (0.86-1.04)
	3,611.56	580	0.66 (0.59-0.73)	0.77 (0.69-0.85)	0.77 (0.68-0.88)		3,333.08	864	0.91 (0.83-0.99)	0.95 (0.87-1.03)	0.95 (0.85-1.06)
	5,097.97	563	0.68 (0.61-0.76)	0.80 (0.72-0.89)	0.8 (0.69-0.93)		4,594.06	772	0.88 (0.80-0.96)	0.92 (0.84-1.00)	0.92 (0.81-1.04)
	P for trend		<0.001	<0.001	0.006		P for trend		0.010	0.100	0.214
	P for nonlinear		<0.001	<0.001	<0.001		P for nonlinear		<0.001	0.05	0.055
Vitamin C	44.29	913	1.00 (reference)	1.00 (reference)	1.00 (reference)	Vitamin C	42.24	1,291	1.00 (reference)	1.00 (reference)	1.00 (reference)
	67.84	736	0.79 (0.72-0.87)	0.86 (0.78-0.95)	0.85 (0.77-0.94)		64.34	994	0.84 (0.77-0.92)	0.87 (0.80-0.94)	0.87 (0.80-0.94)
	86.69	651	0.71 (0.64-0.79)	0.82 (0.74-0.90)	0.81 (0.72-0.92)		81.88	926	0.88 (0.81-0.96)	0.94 (0.86-1.02)	0.94 (0.85-1.04)
	108.69	564	0.65 (0.58-0.72)	0.75 (0.68-0.84)	0.75 (0.65-0.86)		102.88	810	0.86 (0.78-0.94)	0.93 (0.85-1.02)	0.93 (0.83-1.05)
	151.71	519	0.68 (0.61-0.76)	0.81 (0.72-0.90)	0.79 (0.68-0.93)		142.55	681	0.83 (0.76-0.92)	0.89 (0.81-0.98)	0.89 (0.78-1.02)
	P for trend		<0.001	<0.001	0.008		P for trend		0.001	0.093	0.151
	P for nonlinear		<0.001	<0.001	0.001		P for nonlinear		0.095	0.94	0.876
Vitamin E	8.81	732	1.00 (reference)	1.00 (reference)	1.00 (reference)	Vitamin E	8.15	1,110	1.00 (reference)	1.00 (reference)	1.00 (reference)
	11.70	706	0.89 (0.80-0.99)	0.95 (0.85-1.05)	0.98 (0.88-1.09)		10.68	998	0.99 (0.91-1.08)	1.02 (0.94-1.12)	1.03 (0.94-1.12)
	13.85	643	0.84 (0.75-0.94)	0.93 (0.83-1.03)	0.97 (0.87-1.09)		12.53	918	0.99 (0.91-1.09)	1.03 (0.94-1.12)	1.04 (0.95-1.14)
	16.28	680	0.89 (0.80-0.99)	0.97 (0.87-1.08)	1.04 (0.93-1.16)		14.58	847	0.95 (0.87-1.04)	0.98 (0.90-1.08)	1.00 (0.90-1.10)
	20.95	622	0.93 (0.83-1.03)	1.00 (0.89-1.11)	1.08 (0.96-1.22)		18.43	829	1.00 (0.91-1.10)	0.97 (0.89-1.07)	0.99 (0.90-1.09)
	P for trend		0.284	0.848	0.09		P for trend		0.797	0.398	0.679
	P for nonlinear		<0.001	0.003	0.027		P for nonlinear		0.078	0.796	0.649
Follow-up years ≥3						Follow-up years ≥3					
Carotene	1,392.91	751	1.00 (reference)	1.00 (reference)	1.00 (reference)	Carotene	1,333.55	1,281	1.00 (reference)	1.00 (reference)	1.00 (reference)
	2,175.91	637	0.80 (0.72-0.89)	0.87 (0.78-0.96)	0.87 (0.79-0.97)		2,042.90	1,065	0.87 (0.80-0.95)	0.91 (0.84-0.99)	0.92 (0.85-1.00)
	2,832.69	587	0.74 (0.67-0.83)	0.85 (0.76-0.95)	0.89 (0.79-1.00)		2,631.89	1,000	0.88 (0.81-0.96)	0.95 (0.88-1.04)	0.98 (0.89-1.07)
	3,615.80	559	0.70 (0.63-0.78)	0.81 (0.72-0.90)	0.88 (0.77-1.02)		3,330.16	959	0.87 (0.80-0.95)	0.91 (0.84-0.99)	0.95 (0.86-1.06)
	5,101.73	590	0.74 (0.66-0.82)	0.85 (0.76-0.95)	0.95 (0.81-1.10)		4,601.27	873	0.83 (0.76-0.90)	0.87 (0.80-0.95)	0.92 (0.82-1.04)
	P for trend		<0.001	0.005	0.705		P for trend		<0.001	0.005	0.249

	P for nonlinear		<0.001	0.002	0.024		P for nonlinear		<0.001	0.041	0.092
Vitamin C	44.53	770	1.00 (reference)	1.00 (reference)	1.00 (reference)	Vitamin C	42.47	1,377	1.00 (reference)	1.00 (reference)	1.00 (reference)
	67.95	670	0.81 (0.73-0.90)	0.88 (0.79-0.98)	0.88 (0.79-0.98)		64.40	1,104	0.83 (0.77-0.90)	0.87 (0.80-0.94)	0.87 (0.80-0.94)
	86.71	598	0.71 (0.64-0.80)	0.81 (0.73-0.91)	0.81 (0.71-0.92)		81.95	1,032	0.85 (0.78-0.92)	0.91 (0.84-0.99)	0.91 (0.82-1.00)
	108.70	543	0.66 (0.59-0.74)	0.76 (0.68-0.85)	0.75 (0.64-0.87)		102.85	902	0.81 (0.74-0.88)	0.89 (0.82-0.97)	0.88 (0.79-0.99)
	151.75	543	0.71 (0.64-0.79)	0.83 (0.74-0.93)	0.81 (0.70-0.96)		142.73	763	0.77 (0.70-0.84)	0.84 (0.77-0.92)	0.83 (0.73-0.94)
	P for trend		<0.001	<0.001	0.038		P for trend		<0.001	0.001	0.009
	P for nonlinear		<0.001	<0.001	0.001		P for nonlinear		0.005	0.402	0.308
Vitamin E	8.85	627	1.00 (reference)	1.00 (reference)	1.00 (reference)	Vitamin E	8.19	1,156	1.00 (reference)	1.00 (reference)	1.00 (reference)
	11.72	640	0.91 (0.81-1.01)	0.96 (0.86-1.07)	0.98 (0.88-1.10)		10.70	1,071	0.96 (0.88-1.04)	1.00 (0.92-1.09)	1.01 (0.92-1.10)
	13.86	584	0.81 (0.72-0.91)	0.89 (0.79-0.99)	0.93 (0.82-1.04)		12.54	1,030	0.94 (0.87-1.03)	0.99 (0.91-1.08)	1.01 (0.92-1.10)
	16.28	638	0.85 (0.76-0.96)	0.93 (0.83-1.04)	0.99 (0.88-1.12)		14.59	949	0.88 (0.81-0.96)	0.93 (0.85-1.01)	0.95 (0.86-1.04)
	20.90	635	0.91 (0.82-1.02)	0.97 (0.87-1.09)	1.06 (0.94-1.19)		18.47	972	0.92 (0.85-1.00)	0.91 (0.83-0.99)	0.93 (0.85-1.02)
			0.135	0.715	0.282		P for trend		0.019	0.008	0.07
			<0.001	0.005	0.049		P for nonlinear		<0.001	0.098	0.203
Excluded diabetes, CHD, stroke						Excluded diabetes, CHD, stroke, cancer					
Carotene	1,386.66	718	1.00 (reference)	1.00 (reference)	1.00 (reference)	Carotene	1,332.27	973	1.00 (reference)	1.00 (reference)	1.00 (reference)
	2,174.69	574	0.78 (0.70-0.88)	0.86 (0.77-0.96)	0.85 (0.76-0.95)		2,042.19	814	0.9 (0.82-0.99)	0.96 (0.87-1.05)	0.96 (0.87-1.06)
	2,831.15	511	0.70 (0.62-0.78)	0.80 (0.71-0.90)	0.80 (0.71-0.91)		2,631.54	717	0.86 (0.78-0.95)	0.93 (0.84-1.02)	0.93 (0.83-1.03)
	3,614.13	467	0.65 (0.58-0.73)	0.76 (0.68-0.86)	0.78 (0.67-0.90)		3,330.69	691	0.86 (0.78-0.95)	0.93 (0.84-1.03)	0.92 (0.81-1.04)
	5,085.49	482	0.68 (0.61-0.77)	0.82 (0.73-0.93)	0.83 (0.71-0.98)		4,588.46	620	0.82 (0.74-0.91)	0.9 (0.81-1.00)	0.89 (0.78-1.03)
	P for trend		<0.001	0.001	0.052		P for trend		<0.001	0.043	0.124
	P for nonlinear		<0.001	0.001	0.003		P for nonlinear		<0.001	0.019	0.023
Vitamin C	44.31	726	1.00 (reference)	1.00 (reference)	1.00 (reference)	Vitamin C	42.36	1,039	1.00 (reference)	1.00 (reference)	1.00 (reference)
	67.92	598	0.80 (0.72-0.89)	0.87 (0.78-0.98)	0.86 (0.77-0.97)		64.40	758	0.79 (0.71-0.86)	0.83 (0.76-0.92)	0.84 (0.76-0.93)
	86.73	526	0.70 (0.63-0.79)	0.80 (0.71-0.89)	0.78 (0.68-0.89)		81.99	780	0.88 (0.80-0.97)	0.95 (0.86-1.04)	0.95 (0.85-1.06)
	108.73	450	0.62 (0.55-0.70)	0.74 (0.66-0.84)	0.71 (0.61-0.84)		102.87	681	0.83 (0.75-0.92)	0.92 (0.83-1.01)	0.92 (0.81-1.05)
	151.63	452	0.67 (0.60-0.75)	0.8 (0.71-0.91)	0.76 (0.64-0.90)		142.63	557	0.75 (0.68-0.83)	0.84 (0.75-0.93)	0.85 (0.73-0.98)
			<0.001	<0.001	0.005		P for trend		<0.001	0.012	0.043
			<0.001	0.003	0.005		P for nonlinear		0.066	0.909	0.87
Vitamin E	8.83	589	1.00 (reference)	1.00 (reference)	1.00 (reference)	Vitamin E	8.18	952	1.00 (reference)	1.00 (reference)	1.00 (reference)
	11.71	559	0.88 (0.78-0.99)	0.93 (0.83-1.05)	0.96 (0.85-1.08)		10.69	818	0.94 (0.86-1.03)	0.99 (0.90-1.09)	0.99 (0.90-1.09)
	13.86	518	0.83 (0.73-0.93)	0.91 (0.80-1.02)	0.95 (0.84-1.07)		12.53	791	0.94 (0.85-1.04)	1.03 (0.94-1.14)	1.03 (0.93-1.14)

	16.27	564	0.88 (0.78-0.98)	0.98 (0.87-1.10)	1.05 (0.93-1.19)		14.59	673	0.83 (0.76-0.92)	0.92 (0.83-1.02)	0.92 (0.83-1.03)
	20.90	522	0.89 (0.79-1.00)	0.99 (0.88-1.12)	1.08 (0.95-1.23)		18.40	581	0.79 (0.72-0.88)	0.88 (0.80-0.98)	0.89 (0.79-0.99)
	P for trend		0.123	0.774	0.091		P for trend		<0.001	0.009	0.017
	P for nonlinear		<0.001	0.025	0.131		P for nonlinear		0.01	0.359	0.398
Additionally adjusted other nutrients^e						Additionally adjusted other nutrients^e					
Carotene	1,392.62	1040	1.00 (reference)	1.00 (reference)	1.00 (reference)	Carotene	1,333.63	1,465	1.00 (reference)	1.00 (reference)	1.00 (reference)
	2,175.57	850	0.77 (0.70-0.84)	0.84 (0.77-0.93)	0.85 (0.77-0.93)		2,042.42	1,235	0.88 (0.82-0.95)	0.93 (0.86-1.01)	0.93 (0.86-1.01)
	2,831.91	782	0.71 (0.65-0.78)	0.84 (0.76-0.93)	0.86 (0.77-0.95)		2,632.21	1,128	0.87 (0.81-0.94)	0.94 (0.86-1.03)	0.95 (0.87-1.04)
	3,615.24	727	0.66 (0.60-0.72)	0.78 (0.70-0.87)	0.82 (0.72-0.93)		3,330.21	1,087	0.86 (0.80-0.93)	0.90 (0.82-0.99)	0.92 (0.83-1.02)
	5,099.66	771	0.71 (0.64-0.78)	0.84 (0.75-0.95)	0.89 (0.78-1.03)		4,602.66	994	0.82 (0.76-0.89)	0.85 (0.77-0.94)	0.87 (0.77-0.98)
	P for trend		<0.001	0.012	0.243		P for trend		<0.001	0.003	0.027
	P for nonlinear		<0.001	<0.001	0.001		P for nonlinear		<0.001	0.012	0.022
Vitamin C	44.55	1044	1.00 (reference)	1.00 (reference)	1.00 (reference)	Vitamin C	42.51	1,575	1.00 (reference)	1.00 (reference)	1.00 (reference)
	67.95	905	0.80 (0.73-0.88)	0.88 (0.80-0.96)	0.88 (0.80-0.97)		64.40	1,257	0.83 (0.77-0.89)	0.86 (0.80-0.93)	0.86 (0.80-0.93)
	86.73	791	0.69 (0.63-0.76)	0.80 (0.72-0.88)	0.81 (0.72-0.91)		81.95	1,172	0.84 (0.78-0.91)	0.90 (0.82-0.98)	0.90 (0.81-0.99)
	108.70	725	0.65 (0.59-0.71)	0.75 (0.67-0.84)	0.77 (0.67-0.88)		102.86	1,040	0.81 (0.75-0.88)	0.87 (0.79-0.96)	0.87 (0.78-0.98)
	151.69	705	0.69 (0.63-0.76)	0.80 (0.71-0.92)	0.82 (0.70-0.96)		142.72	865	0.76 (0.70-0.83)	0.79 (0.70-0.88)	0.79 (0.69-0.90)
	P for trend		<0.001	0.001	0.053		P for trend		<0.001	<0.001	0.001
	P for nonlinear		<0.001	<0.001	0.003		P for nonlinear		0.003	0.612	0.585
Vitamin E	8.85	842	1.00 (reference)	1.00 (reference)	1.00 (reference)	Vitamin E	8.19	1,302	1.00 (reference)	1.00 (reference)	1.00 (reference)
	11.72	861	0.90 (0.82-0.99)	1.01 (0.90-1.12)	1.01 (0.91-1.13)		10.70	1,210	0.96 (0.89-1.04)	1.02 (0.93-1.11)	1.02 (0.93-1.11)
	13.86	802	0.83 (0.75-0.91)	0.99 (0.88-1.13)	1.00 (0.89-1.14)		12.54	1,190	0.96 (0.89-1.04)	1.03 (0.93-1.14)	1.04 (0.94-1.15)
	16.28	858	0.86 (0.78-0.94)	1.05 (0.91-1.20)	1.07 (0.93-1.22)		14.59	1,099	0.90 (0.83-0.98)	0.96 (0.86-1.07)	0.97 (0.86-1.08)
	20.91	807	0.88 (0.80-0.97)	1.06 (0.90-1.24)	1.09 (0.93-1.28)		18.48	1,108	0.93 (0.86-1.01)	0.90 (0.79-1.02)	0.91 (0.80-1.03)
	P for trend		0.014	0.411	0.233		P for trend		0.036	0.04	0.065
	P for nonlinear		<0.001	0.174	0.247		P for nonlinear		<0.001	0.7	0.766

Q, quintile; CHD, coronary artery heart disease.

^a Dietary antioxidant vitamins and the intakes of all nutrients and foods were adjusted for total energy using the density method.

^b Model 1 adjusted for age (per 5-y) and energy (quartiles).

^c Model 2 adjusted for age (per 5-y intervals), energy (quartiles), birth cohort (per 10-y intervals), education (4 categories), income (4 categories), occupation (3 categories for men, 4 for women), smoking status (3 categories for men, 2 for women), alcohol intake (3 categories), body mass index (4 categories), waist-hip ratio (3 categories), physical activity (quartiles), history of hypertension (yes/no), diabetes (yes/no), coronary heart disease (yes/no), stroke(yes/no), vitamin supplements use (yes/no), menopause status (yes/no, women only), hormone replacement therapy (yes/no, women only).

^d Model 3 additionally mutually adjusted for other two vitamins.

^e In this section, we additionally adjusted other nutrients (dietary fiber, monounsaturated fatty acid, polyunsaturated fatty acid) in model 2 and 3.

eTable 5. Association of energy-adjusted (density method) dietary antioxidant vitamins intake with all-cause mortality in men (2002-2012) and women (1997-2012)

Variable		Intake of energy-adjusted dietary antioxidant vitamins ^a					P for trend
		Q1 (lowest)	Q2	Q3	Q4	Q5 (highest)	
Men							
Total carotene	Median intake, µg/1,000 kcal·d	755.05	1,168.93	1,527.56	1,957.92	2,767.35	
	Person-years	98,462	98,841	98,649	99,064	100,314	
	Number of deaths	1,081	801	749	742	797	
	Model 1 ^b	1.00	0.77 (0.70-0.84)	0.72 (0.65-0.79)	0.68 (0.62-0.75)	0.69 (0.63-0.75)	<0.001
	Model 2 ^c	1.00	0.84 (0.77-0.92)	0.83 (0.75-0.91)	0.81 (0.73-0.89)	0.81 (0.74-0.89)	<0.001
	Model 3 ^d	1.00	0.84 (0.77-0.92)	0.84 (0.76-0.93)	0.83 (0.74-0.94)	0.84 (0.74-0.96)	0.032
Vitamin C	Median intake, mg/1,000 kcal·d	24.31	36.45	46.71	58.78	82.10	
	Person-years	98086	98,491	98,676	99,144	100,933	
	Number of deaths	1114	842	756	730	728	
	Model 1 ^b	1.00	0.79 (0.72-0.86)	0.69 (0.63-0.76)	0.67 (0.61-0.73)	0.68 (0.62-0.74)	<0.001
	Model 2 ^c	1.00	0.87 (0.80-0.96)	0.81 (0.73-0.89)	0.79 (0.72-0.87)	0.81 (0.73-0.89)	<0.001
	Model 3 ^d	1.00	0.87 (0.80-0.96)	0.81 (0.73-0.90)	0.80 (0.70-0.90)	0.81 (0.71-0.93)	0.015
Vitamin E	Median intake, mg/1,000 kcal·d	4.83	6.27	7.45	8.78	11.23	
	Person-years	97670	98,149	99,052	99,333	101,126	
	Number of deaths	955	786	758	832	839	
	Model 1 ^b	1.00	0.85 (0.78-0.94)	0.81 (0.73-0.89)	0.83 (0.76-0.91)	0.86 (0.78-0.94)	0.005
	Model 2 ^c	1.00	0.92 (0.84-1.01)	0.89 (0.81-0.98)	0.93 (0.85-1.03)	0.93 (0.84-1.02)	0.232
	Model 3 ^d	1.00	0.95 (0.86-1.04)	0.93 (0.84-1.03)	0.99 (0.89-1.09)	1.00 (0.90-1.10)	0.728
Women							
Total carotene	Median intake, µg/1,000 kcal·d	824.81	1,248.38	1,613.72	2,043.94	2,829.34	
	Person-years	204,884	206,864	206,378	205,935	205,135	
	Number of deaths	1,559	1,151	1,077	1,076	1,046	
	Model 1 ^b	1.00	0.85 (0.79-0.92)	0.85 (0.78-0.92)	0.86 (0.80-0.93)	0.81 (0.75-0.87)	<0.001
	Model 2 ^c	1.00	0.9 (0.83-0.97)	0.91 (0.84-0.99)	0.92 (0.85-0.99)	0.85 (0.78-0.92)	<0.001
	Model 3 ^d	1.00	0.9 (0.84-0.98)	0.93 (0.85-1.01)	0.95 (0.86-1.04)	0.88 (0.79-0.98)	0.047
Vitamin C	Median intake, mg/1,000 kcal·d	26.35	39.06	49.99	63.05	86.99	.

	Person-years	203,467	206,444	206,247	206,320	206,718	.
	Number of deaths	1,738	1,165	1,104	1,011	891	.
	Model 1 ^b	1.00	0.82 (0.76-0.88)	0.83 (0.77-0.90)	0.81 (0.75-0.87)	0.76 (0.70-0.82)	<0.001
	Model 2 ^c	1.00	0.87 (0.80-0.93)	0.9 (0.84-0.97)	0.89 (0.83-0.97)	0.84 (0.77-0.91)	<0.001
	Model 3 ^d	1.00	0.86 (0.80-0.93)	0.89 (0.82-0.98)	0.88 (0.79-0.98)	0.83 (0.74-0.93)	0.006
Vitamin E	Median intake, mg/1,000 kcal·d	5.02	6.48	7.64	8.92	11.30	
	Person-years	204,990	206,511	206,456	206,082	205,156	
	Number of deaths	1,484	1,176	1,067	1,072	1,110	
	Model 1 ^b	1.00	0.96 (0.89-1.03)	0.9 (0.83-0.97)	0.91 (0.84-0.99)	0.91 (0.84-0.98)	0.009
	Model 2 ^c	1.00	0.99 (0.91-1.07)	0.95 (0.87-1.03)	0.96 (0.88-1.04)	0.89 (0.82-0.96)	0.003
	Model 3 ^d	1.00	1 (0.92-1.08)	0.96 (0.89-1.05)	0.98 (0.90-1.07)	0.92 (0.84-1.00)	0.053

Q, quintile.

^a Dietary antioxidant vitamins and the intakes of all nutrients and foods were adjusted for total energy using the density method.

^b Model 1 adjusted for age (per 5-y) and energy (quartiles).

^c Model 2 adjusted for age (per 5-y intervals), energy (quartiles), birth cohort (per 10-y intervals), education (4 categories), income (4 categories), occupation (3 categories for men, 4 for women), smoking status (3 categories for men, 2 for women), alcohol intake (3 categories), body mass index (4 categories), waist-hip ratio (3 categories), physical activity (quartiles), history of hypertension (yes/no), diabetes (yes/no), coronary heart disease (yes/no), stroke (yes/no), vitamin supplements use (yes/no), menopause status (yes/no, women only), hormone replacement therapy (yes/no, women only).

^d Model 3 additionally mutually adjusted for other two vitamins.