

Supplemental Table 1. Baseline characteristics of study participants according to quintile of red and processed meat intake among women from the Nurses' Health Study (NHS) and men from the Health Professional Follow-up Study (HPFS)*

	Red and processed meat intake quintile				
	1	2	3	4	5
Women in NHS (1984)					
Age (years)	52.0 (7.0)	50.7 (7.2)	50.1 (7.2)	49.7 (7.2)	49.4 (7.1)
Red and processed meat (servings/day)	0.29 (0.13)	0.60 (0.08)	0.86 (0.08)	1.17 (0.11)	1.83 (0.51)
Red meat (servings/day)	0.22 (0.11)	0.42 (0.12)	0.60 (0.16)	0.81 (0.23)	1.14 (0.41)
Processed meat (servings/day)	0.07 (0.08)	0.18 (0.11)	0.25 (0.16)	0.35 (0.23)	0.69 (0.48)
Family history of melanoma (%)	2.6	2.7	2.8	2.7	3.0
Red or blonde hair (%)	15.4	16.1	16.1	15.2	15.8
Number of arm moles ≥ 6 (%)	4.2	4.7	4.7	4.7	4.9
Painful burn or blistering sun reaction as child or adolescent (%)	33.8	34.3	34.1	34.8	34.9
Lifetime blistering sunburns ≥ 6 (%)	7.4	7.1	7.7	6.9	7.6
Annual UV flux at residence ($\times 10^{-4}$ Robertson-Berger units)†	123 (25)	121 (24)	121 (24)	122 (25)	122 (25)
Deep tan after sun exposure as child or adolescent (%)	25.3	24.0	22.9	23.0	22.3
Body mass index (kg/m^2)	24.2 (4.2)	24.8 (4.4)	25.0 (4.7)	25.2 (4.9)	25.8 (5.4)
Physical activity level (metabolic-equivalents hours/week)	17.8 (25.6)	15.1 (24.1)	13.4 (17.4)	12.7 (17.9)	11.7 (17.2)
Current smoker (%)	20.2	23.6	24.5	26.0	27.6
Caloric intake (kcal/day)	1404 (450)	1558 (431)	1710 (441)	1872 (460)	2180 (501)
Alcohol intake (grams/day)	6.2 (10.4)	6.9 (10.9)	7.1 (11.3)	7.1 (11.5)	7.3 (12.2)
Coffee intake (cups/day)	1.5 (1.7)	1.7 (1.7)	1.8 (1.7)	1.9 (1.8)	2.0 (1.8)
Total citrus intake (servings/day)	0.9 (0.8)	0.9 (0.7)	0.9 (0.7)	0.9 (0.7)	0.9 (0.8)
Men in HPFS (1986)					
Age (years)	55.9 (10.0)	54.6 (10.0)	54.0 (9.9)	53.8 (9.7)	53.1 (9.5)
Red and processed meat (servings/day)	0.18 (0.12)	0.51 (0.09)	0.84 (0.10)	1.23 (0.14)	2.08 (0.68)

Red meat (servings/day)	0.13 (0.09)	0.35 (0.12)	0.56 (0.18)	0.80 (0.26)	1.20 (0.51)
Processed meat (servings/day)	0.05 (0.06)	0.16 (0.11)	0.28 (0.17)	0.43 (0.26)	0.88 (0.61)
Family history of melanoma (%)	3.1	2.9	3.4	2.9	3.1
Red or blonde hair (%)	12.2	13.2	14.7	14.5	15.2
Number of arm moles ≥ 6 (%)	5.2	5.4	5.8	5.5	5.1
Painful burn or blistering sun reaction as child or adolescent (%)	53.3	55.0	55.2	55.5	55.1
Lifetime blistering sunburns ≥ 6 (%)	13.2	13.2	13.9	14.2	14.1
Annual UV flux at residence ($\times 10^{-4}$ Robertson-Berger units) [†]	130 (28)	129 (27)	130 (28)	130 (27)	132 (27)
Body mass index (kg/m ²)	24.3 (4.8)	24.7 (5.0)	25.0 (5.0)	25.2 (5.2)	25.5 (5.2)
Physical activity level (metabolic-equivalents hours/week)	27.0 (34.8)	22.1 (28.6)	19.9 (29.5)	18.6 (28.3)	17.3 (24.2)
Current smoker (%)	4.8	7.8	10.6	11.6	15.0
Caloric intake (kcal/day)	1679 (535)	1760 (510)	1905 (518)	2112 (549)	2489 (606)
Alcohol intake (grams/day)	8.8 (13.0)	11.1 (15.0)	12.3 (16.2)	13.1 (17.0)	14.5 (19.1)
Coffee intake (cups/day)	0.9 (1.3)	1.1 (1.4)	1.3 (1.6)	1.5 (1.6)	1.7 (1.8)
Total citrus intake (servings/day)	1.1 (1.0)	1.0 (0.9)	0.9 (0.9)	0.9 (0.8)	0.9 (0.8)

*All variables other than age have been standardized to age distribution of the study population; values are means (SD) or percentages.

[†]Estimate of amount of UV radiation reaching Earth's surface within 1 year.

Supplemental Table II. Hazard ratios (HRs) and 95% confidence intervals of melanoma risk according to intake quintiles of red and processed meat, red meat, and processed meat intake in Nurses' Health Study (NHS, 1984 – 2010) and Health Professionals Follow-Up Study (HPFS, 1986 – 2010)

	Intake quintile					<i>P</i> for trend*
	1	2	3	4	5	
Red and processed meat						
NHS						
Median (servings/day)	0.33	0.57	0.85	1.14	1.64	
No. of cases	147	146	138	130	118	
Age-adjusted HR	1.00	1.00 (0.80-1.26)	0.96 (0.76-1.21)	0.91 (0.71-1.15)	0.83 (0.65-1.05)	0.10
Multivariable HR†	1.00	0.99 (0.78-1.25)	0.94 (0.74-1.19)	0.88 (0.69-1.13)	0.81 (0.62-1.06)	0.10
HPFS						
Median (servings/day)	0.20	0.50	0.85	1.21	1.91	
No. of cases	133	140	145	122	99	
Age-adjusted HR	1.00	1.07 (0.85-1.36)	1.13 (0.89-1.43)	0.95 (0.74-1.21)	0.78 (0.60-1.01)	0.02
Multivariable HR†	1.00	1.07 (0.84-1.36)	1.13 (0.89-1.43)	0.94 (0.73-1.22)	0.82 (0.63-1.07)	0.05
Pooled						
Multivariable HR†	1.00	1.00 (0.87-1.14)	0.98 (0.86-1.13)	0.89 (0.77-1.02)	0.81 (0.70-0.95)	0.002
Red meat						
NHS						
Median (servings/day)	0.20	0.43	0.57	0.71	1.07	
No. of cases	153	135	140	132	119	
Age-adjusted HR	1.00	0.88 (0.70-1.11)	0.94 (0.75-1.18)	0.88 (0.69-1.11)	0.79 (0.62-1.01)	0.08
Multivariable HR†	1.00	0.86 (0.68-1.09)	0.90 (0.71-1.13)	0.84 (0.66-1.07)	0.76 (0.59-0.98)	0.04
HPFS						
Median (servings/day)	0.13	0.29	0.56	0.71	1.28	
No. of cases	124	148	140	113	114	
Age-adjusted HR	1.00	1.22 (0.96-1.54)	1.12 (0.88-1.43)	0.97 (0.75-1.25)	0.96 (0.75-1.24)	0.20
Multivariable HR†	1.00	1.23 (0.96-1.56)	1.10 (0.86-1.41)	0.96 (0.74-1.25)	0.99 (0.76-1.29)	0.29
Pooled						
Multivariable HR†	1.00	1.02 (0.70-1.47)	0.98 (0.78-1.23)	0.89 (0.74-1.06)	0.86 (0.65-1.14)	0.04
Processed meat						
NHS						
Median (servings/day)	0.00	0.13	0.21	0.35	0.71	
No. of cases	151	134	138	139	117	
Age-adjusted HR	1.00	0.92 (0.73-1.16)	0.94 (0.75-1.19)	0.96 (0.76-1.21)	0.81 (0.64-1.03)	0.24
Multivariable HR†	1.00	0.92 (0.73-1.16)	0.95 (0.75-1.20)	0.97 (0.76-1.23)	0.84 (0.65-1.08)	0.41

HPFS						
Median (servings/day)	0.00	0.13	0.21	0.43	0.92	
No. of cases	124	148	134	130	103	
Age-adjusted HR	1.00	1.05 (0.83-1.34)	1.03 (0.81-1.32)	1.00 (0.78-1.28)	0.79 (0.61-1.03)	0.02
Multivariable HR†	1.00	1.06 (0.83-1.35)	1.05 (0.82-1.34)	1.02 (0.79-1.31)	0.84 (0.64-1.09)	0.07
Pooled						
Multivariable HR†	1.00	0.97 (0.82-1.15)	0.99 (0.83-1.17)	0.98 (0.83-1.17)	0.83 (0.69-1.00)	0.05

**P* for trend calculated using median intake of each quintile of red meat and processed meat intake as a continuous variable.

†Age, family history of melanoma (yes vs. no), natural hair color (red, blonde, light brown, or dark brown/black), number of arm moles (0, 1-2, 3-5, or ≥ 6), sunburn susceptibility as child or adolescent (none or some redness, burn, or painful burn/blisters), number of lifetime blistering sunburns (0, 1-2, 3-5, or ≥ 6), cumulative UV flux since baseline (quintiles), type of tan after repeated sun exposure as a child or adolescent (none, light, average, or deep), body mass index (<18.5, 18.5-24.9, 25.0-29.9, 30.0-34.9, or ≥ 35.0 kg/m²), physical activity (quintiles), smoking status (never; past with <10, 10-19, 20-39, >40 pack years; current <25, 25-44, >45 pack years), intake of total energy (quintiles), alcohol intake (0, 0.1-4.9, 5.0-9.9, 10.0-19.9, or ≥ 20.0 grams per day), coffee intake (quintiles), and citrus consumption (quintiles). Analysis of men did not adjust for type of tan after repeated sun exposure as child or adolescent (data not available), and used a different categorization for smoking status (never; past with <10, 10-19, 20-39, >40 pack years; current).

Supplemental Table III. Hazard ratios (HRs) and 95% confidence intervals of melanoma risk according to intake quintiles of specific red and processed meat items in Nurses' Health Study (NHS, 1984 – 2010) and Health Professionals Follow-Up Study (HPFS, 1986 – 2010)

	Intake quintile					<i>P</i> for trend*
	1	2	3	4	5	
Hot dogs						
NHS						
Median (servings/d)	0.00	0.03	0.07	0.07	0.14	
No. of cases	184	110	150	133	102	
Age-adjusted HR	1.00	0.92 (0.73-1.17)	0.83 (0.66-1.02)	1.09 (0.87-1.37)	0.77 (0.60-0.98)	0.24
Multivariable HR†	1.00	0.91 (0.72-1.16)	0.82 (0.66-1.03)	1.11 (0.88-1.40)	0.77 (0.60-0.99)	0.30
HPFS						
Median (servings/d)	0.00	0.00	0.03	0.07	0.14	
No. of cases	144	116	120	144	115	
Age-adjusted HR	1.00	1.23 (0.95-1.60)	1.25 (0.98-1.59)	1.09 (0.86-1.38)	0.99 (0.78-1.27)	0.41
Multivariable HR†	1.00	1.19 (0.91-1.55)	1.22 (0.95-1.56)	1.11 (0.87-1.41)	1.02 (0.79-1.31)	0.66
Pooled						
Multivariable HR	1.00	1.04 (0.81-1.33)	1.00 (0.69-1.46)	1.10 (0.93-1.31)	0.88 (0.66-1.18)	0.29
Bacon						
NHS						
Median (servings/d)	0.00	0.02	0.06	0.09	0.17	
No. of cases	162	125	129	119	144	
Age-adjusted HR	1.00	0.97 (0.76-1.23)	0.87 (0.69-1.10)	0.93 (0.73-1.18)	0.94 (0.75-1.18)	0.60
Multivariable HR†	1.00	0.94 (0.74-1.20)	0.86 (0.68-1.09)	0.91 (0.72-1.16)	0.93 (0.74-1.18)	0.62
HPFS						
Median (servings/d)	0.00	0.02	0.07	0.10	0.27	
No. of cases	198	72	137	116	116	
Age-adjusted HR	1.00	1.07 (0.81-1.41)	0.85 (0.68-1.06)	0.99 (0.78-1.24)	0.81 (0.64-1.02)	0.09
Multivariable HR†	1.00	1.00 (0.75-1.32)	0.83 (0.67-1.04)	0.95 (0.75-1.20)	0.81 (0.64-1.03)	0.14
Pooled						
Multivariable HR	1.00	0.97 (0.81-1.17)	0.85 (0.72-0.99)	0.94 (0.79-1.11)	0.88 (0.75-1.04)	0.16
Hamburger						
NHS						
Median (servings/d)	0.05	0.09	0.14	0.16	0.29	
No. of cases	150	146	136	117	130	
Age-adjusted HR	1.00	1.00 (0.79-1.25)	0.87 (0.68-1.09)	0.91 (0.72-1.17)	0.88 (0.70-1.12)	0.28
Multivariable HR†	1.00	0.97 (0.77-1.22)	0.83 (0.65-1.05)	0.89 (0.69-1.14)	0.85 (0.67-1.09)	0.21

HPFS						
Median (servings/d)	0.02	0.07	0.14	0.23	0.43	
No. of cases	132	142	134	125	106	
Age-adjusted HR	1.00	0.99 (0.78-1.26)	0.82 (0.64-1.04)	1.07 (0.84-1.37)	0.82 (0.63-1.06)	0.18
Multivariable HR†	1.00	0.99 (0.78-1.25)	0.82 (0.64-1.05)	1.04 (0.81-1.34)	0.85 (0.65-1.10)	0.29
Pooled						
Multivariable HR	1.00	0.97 (0.82-1.15)	0.82 (0.69-0.97)	0.97 (0.81-1.16)	0.85 (0.71-1.01)	0.11
Beef, pork, or lamb as a sandwich or mixed dish						
NHS						
Median (servings/d)	0.03	0.08	0.14	0.19	0.33	
No. of cases	146	155	136	125	117	
Age-adjusted HR	1.00	0.88 (0.70-1.11)	0.80 (0.64-1.02)	1.02 (0.80-1.30)	0.74 (0.58-0.95)	0.12
Multivariable HR†	1.00	0.85 (0.67-1.06)	0.76 (0.60-0.97)	0.95 (0.75-1.22)	0.69 (0.53-0.89)	0.06
HPFS						
Median (servings/d)	0.00	0.07	0.12	0.15	0.43	
No. of cases	125	142	110	143	119	
Age-adjusted HR	1.00	1.15 (0.90-1.47)	0.99 (0.77-1.29)	1.17 (0.92-1.50)	0.97 (0.75-1.25)	0.66
Multivariable HR†	1.00	1.14 (0.89-1.45)	0.96 (0.74-1.25)	1.13 (0.88-1.44)	0.96 (0.74-1.24)	0.58
Pooled						
Multivariable HR	1.00	0.99 (0.75-1.30)	0.85 (0.67-1.07)	1.05 (0.88-1.25)	0.82 (0.60-1.12)	0.26
Beef, pork, or lamb as a main dish						
NHS						
Median (servings/d)	0.07	0.14	0.23	0.33	0.46	
No. of cases	135	154	135	145	110	
Age-adjusted HR	1.00	1.12 (0.89-1.41)	1.10 (0.87-1.40)	1.01 (0.80-1.28)	0.94 (0.73-1.21)	0.38
Multivariable HR†	1.00	1.11 (0.88-1.41)	1.07 (0.84-1.36)	0.99 (0.77-1.26)	0.94 (0.72-1.22)	0.36
HPFS						
Median (servings/d)	0.07	0.14	0.18	0.34	0.48	
No. of cases	125	113	163	140	98	
Age-adjusted HR	1.00	1.11 (0.86-1.44)	1.28 (1.02-1.62)	1.13 (0.89-1.44)	0.91 (0.69-1.19)	0.23
Multivariable HR†	1.00	1.11 (0.86-1.44)	1.26 (0.99-1.60)	1.12 (0.87-1.43)	0.95 (0.72-1.24)	0.36
Pooled						
Multivariable HR	1.00	1.11 (0.93-1.32)	1.16 (0.98-1.38)	1.05 (0.88-1.24)	0.94 (0.78-1.13)	0.19
Other processed meats (sausage, salami, bologna, etc.)						
NHS						
Median (servings/d)	0.03	0.12	0.20	0.31	0.56	
No. of cases	151	134	138	139	117	

Age-adjusted HR	1.00	0.92 (0.73-1.16)	0.94 (0.75-1.19)	0.96 (0.76-1.21)	0.81 (0.64-1.03)	0.24
Multivariable HR†	1.00	0.92 (0.73-1.16)	0.94 (0.75-1.19)	0.96 (0.76-1.22)	0.83 (0.65-1.08)	0.38
HPFS						
Median (servings/d)	0.00	0.03	0.07	0.14	0.43	
No. of cases	122	91	125	112	87	
Age-adjusted HR	1.00	1.09 (0.83-1.44)	0.98 (0.77-1.26)	1.07 (0.83-1.39)	0.80 (0.60-1.05)	0.04
Multivariable HR†	1.00	1.10 (0.83-1.45)	1.00 (0.78-1.29)	1.11 (0.86-1.45)	0.84 (0.63-1.12)	0.09
Pooled						
Multivariable HR	1.00	0.98 (0.81-1.19)	0.97 (0.81-1.15)	1.03 (0.86-1.23)	0.84 (0.69-1.01)	0.11

**P* for trend calculated using median intake of each quintile of specific red meat and processed meat intake as a continuous variable.

†Age, family history of melanoma (yes vs. no), natural hair color (red, blonde, light brown, or dark brown/black), number of arm moles (0, 1-2, 3-5, or ≥ 6), sunburn susceptibility as child or adolescent (none or some redness, burn, or painful burn/blisters), number of lifetime blistering sunburns (0, 1-2, 3-5, or ≥ 6), cumulative UV flux since baseline (quintiles), type of tan after repeated sun exposure as a child or adolescent (none, light, average, or deep), body mass index (<18.5, 18.5-24.9, 25.0-29.9, 30.0-34.9, or ≥ 35.0 kg/m²), physical activity (quintiles), smoking status (never; past with <10, 10-19, 20-39, >40 pack years; current <25, 25-44, >45 pack years), intake of total energy (quintiles), alcohol intake (0, 0.1-4.9, 5.0-9.9, 10.0-19.9, or ≥ 20.0 grams per day), coffee intake (quintiles), and citrus consumption (quintiles). Analysis of men did not adjust for type of tan after repeated sun exposure as child or adolescent (data not available), and used a different categorization for smoking status (never; past with <10, 10-19, 20-39, >40 pack years; current).

Supplemental Table IV. Hazard ratios (HRs) and 95% confidence intervals of melanoma risk by tumor location according to red and processed meat intake quintiles in Nurses' Health Study (NHS, 1984 – 2010) and Health Professionals Follow-Up Study (HPFS, 1986 – 2010)

	Intake quintile					<i>P</i> for trend*
	1	2	3	4	5	
NHS						
High sun exposure sites (head, neck, and extremities)						
No. of cases	102	94	102	80	85	
Multivariable HR†	1.00	0.93 (0.70-1.24)	1.03 (0.78-1.37)	0.83 (0.61-1.13)	0.94 (0.69-1.28)	0.60
Low sun exposure sites (truncal, shoulder, back, hip, abdomen, and chest)						
No. of cases	44	46	34	47	29	
Multivariable HR†	1.00	0.96 (0.63-1.46)	0.68 (0.43-1.08)	0.89 (0.58-1.38)	0.50 (0.30-0.84)	0.01
HPFS						
High sun exposure sites (head, neck, and extremities)						
No. of cases	60	63	72	52	52	
Multivariable HR†	1.00	1.09 (0.77-1.56)	1.28 (0.90-1.81)	0.91 (0.62-1.33)	1.01 (0.68-1.48)	0.60
Low sun exposure sites (truncal, shoulder, back, hip, abdomen, and chest)						
No. of cases	54	59	58	49	40	
Multivariable HR†	1.00	1.06 (0.73-1.54)	1.04 (0.71-1.51)	0.87 (0.58-1.29)	0.74 (0.48-1.13)	0.07
Pooled						
High sun exposure sites (head, neck, and extremities)						
No. of cases	162	157	174	132	137	
Multivariable HR†	1.00	0.99 (0.80-1.24)	1.12 (0.90-1.40)	0.86 (0.68-1.09)	0.96 (0.76-1.23)	0.46
Low sun exposure sites (truncal, shoulder, back, hip, abdomen, and chest)						
No. of cases	98	105	92	96	69	
Multivariable HR†	1.00	1.02 (0.77-1.34)	0.86 (0.57-1.29)	0.88 (0.65-1.18)	0.63 (0.43-0.91)	0.02

**P* for trend calculated using median intake of each quintile of red meat and processed meat intake as a continuous variable.

†Age, family history of melanoma (yes vs. no), natural hair color (red, blonde, light brown, or dark brown/black), number of arm moles (0, 1-2, 3-5, or ≥6), sunburn susceptibility as child or adolescent (none or some redness, burn, or painful burn/blisters), number of lifetime blistering sunburns (0, 1-2, 3-5, or ≥6), cumulative UV flux since baseline (quintiles), type of tan after repeated sun exposure as a child or adolescent (none, light, average, or deep), body mass index (<18.5, 18.5-24.9, 25.0-29.9, 30.0-34.9, or ≥35.0 kg/m²), physical activity (quintiles), smoking status (never; past with <10, 10-19, 20-39, >40 pack years; current <25, 25-44, >45 pack years), intake of total energy (quintiles), alcohol intake (0, 0.1-4.9, 5.0-9.9, 10.0-19.9, or ≥20.0 grams per day), coffee intake (quintiles), and citrus consumption (quintiles). Analysis of men did not adjust for type of tan after repeated sun exposure as child or

adolescent (data not available), and used a different categorization for smoking status (never; past with <10, 10-19, 20-39, >40 pack years; current).

Supplemental Table V. Pooled multivariable hazard ratios (HRs) and 95% confidence intervals of melanoma risk according to intake quintiles of red and processed meat intake by melanoma risk factors and Breslow thickness of melanoma in Nurses' Health Study (NHS, 1984 – 2010) and Health Professionals Follow-Up Study (HPFS, 1986 – 2010)

	Intake quintile					<i>P</i> for trend*
	1	2	3	4	5	
Sunburn susceptibility as a child or adolescent						
None or only redness or tan only						
No. of cases	79	79	90	74	89	
Multivariable HR†	1.00	0.83 (0.39-1.76)	1.16 (0.85-1.58)	0.93 (0.67-1.30)	1.21 (0.87-1.68)	0.18
Burning or blisters or peeling						
No. of cases	164	183	165	149	107	
Multivariable HR†	1.00	1.07 (0.69-1.64)	0.96 (0.58-1.59)	0.87(0.69-1.10)	0.65 (0.43-0.96)	0.01
Personal history of non-melanoma skin cancer						
None						
No. of cases	223	220	222	200	166	
Multivariable HR†	1.00	0.97 (0.81-1.17)	0.99 (0.82-1.20)	0.87 (0.71-1.06)	0.74 (0.58-0.95)	0.002
Present						
No. of cases	57	66	61	52	51	
Multivariable HR†	1.00	1.20 (0.83-1.72)	1.13 (0.78-1.64)	1.06 (0.59-1.91)	1.16 (0.47-2.86)	0.94
Breslow thickness (NHS median = 0.60 mm; HPFS median = 0.67 mm)						
Below median						
No. of cases	124	125	117	98	95	
Multivariable HR†	1.00	0.98 (0.76-1.25)	0.92 (0.71-1.18)	0.74 (0.56-0.98)	0.74 (0.56-0.99)	0.009
Above median						
No. of cases	101	110	113	101	80	
Multivariable HR†	1.00	1.08 (0.82-1.41)	1.13 (0.86-1.48)	1.01 (0.76-1.34)	0.88 (0.65-1.20)	0.25

**P* for trend calculated using median intake of each quintile of red meat and processed meat intake as a continuous variable.

†Age, family history of melanoma (yes vs. no), natural hair color (red, blonde, light brown, or dark brown/black), number of arm

moles (0, 1-2, 3-5, or ≥ 6), sunburn susceptibility as child or adolescent (none or some redness, burn, or painful burn/blisters), number of lifetime blistering sunburns (0, 1-2, 3-5, or ≥ 6), cumulative UV flux since baseline (quintiles), type of tan after repeated sun exposure as a child or adolescent (none, light, average, or deep), body mass index (<18.5, 18.5-24.9, 25.0-29.9, 30.0-34.9, or ≥ 35.0 kg/m²), physical activity (quintiles), smoking status (never; past with <10, 10-19, 20-39, >40 pack years; current <25, 25-44, >45 pack years), intake of total energy (quintiles), alcohol intake (0, 0.1-4.9, 5.0-9.9, 10.0-19.9, or ≥ 20.0 grams per day), coffee intake (quintiles), and citrus consumption (quintiles). Analysis of men did not adjust for type of tan after repeated sun exposure as child or adolescent (data not available), and used a different categorization for smoking status (never; past with <10, 10-19, 20-39, >40 pack years; current). For each stratified analysis, the stratifying variable was omitted from the model.