

TABLE 1. Distribution of baseline participant characteristics, smoking status and fruit and vegetable intake among urothelial carcinoma cases and controls, for western Washington, 2000-2007.

Characteristic	Number of controls (N = 76,720)		Number of cases of UC (N = 330)		Sex and age-adjusted ^a		
		%		%	HR	95%CI	
Demographic Variables							
Age at baseline (years)—put age first							
50- to <55	17872	23.3	25	7.6			
55 to <60	17453	22.8	42	12.7			
60 to <65	13967	18.2	48	14.6			
65 to <70	12602	16.4	79	23.9			
70 to <77	14826	19.3	136	41.2			
Sex							
Male	36,651	47.8	256	77.6	1.00	referent	
Female	40,069	52.3	74	22.4	0.26	0.20	0.34
Race/ethnicity							
White	70231	91.5	311	94.2	1.00	referent	
Black	975	1.3	4	1.2	0.95	0.35	2.55
Other	5514	7.2	15	4.6	0.67	0.40	1.12
Education							
High school or less	15216	20.2	76	23.3	1.00	referent	
Some college/technical school	28905	38.3	120	36.8	0.99	0.74	1.32
College graduate	18476	24.5	75	23.0	0.87	0.63	1.20
Advanced degree	12817	17.0	55	16.9	0.90	0.63	1.28
Family history of bladder cancer							
No	73578	95.9	316	95.8	1.00	referent	
Yes	3142	4.1	14	4.2	1.02	0.59	1.73
Smoking variables							
<i>Smoking status/recency</i>							
Never	36297	47.8	77	23.8	1.00	referent	
Former, quit > 10 years	28159	37.1	169	52.3	1.95	1.48	2.56
Former, quit < 10 years	5054	6.7	24	7.4	2.18	1.38	3.46
Current	6359	8.4	53	16.4	4.02	2.83	5.71
<i>Pack Years</i>							
Never	36297	47.9	77	23.8	1.00	referent	
0.1 – 12.5 years	14238	18.8	53	16.4	1.57	1.10	2.22
12.6 – 34.5 years	11651	15.4	64	19.8	1.99	1.42	2.78
> 34.5 years	13630	18.0	129	39.9	3.01	2.26	4.02
Fruit & Vegetable Intake							
(svg/day) ^b							
0 – 2.3	17,414	22.7	79	23.9	1.00	referent	
2.4 – 3.4	17350	22.6	86	26.0	1.09	0.80	1.48
3.5 – 5.1	17511	22.8	87	26.4	1.12	0.83	1.52
> 5.1	24445	31.9	78	23.6	0.82	0.60	1.12

Abbreviations: CI, confidence interval; HR, hazard ratio; UC urothelial carcinoma

^a Hazard Ratio (HR) and 95% Confidence Interval (95%CI) for risk of urothelial carcinoma (UC) diagnosis by categorical variable levels^b Excludes potatoes

TABLE 3 Hazard ratios of urothelial carcinoma in relation to use of mineral supplements during the 10 years before baseline, western Washington, 2000-2007.

Ten-year average daily supplement use ^b	Number of subjects (N = 76,720)		Number of UC Dx (N = 330)		Sex and age-adjusted			Multivariate-adjusted ^a		
	No.	%	No.	%	HR	95% CI		HR	95% CI	
Calcium (mg/day)										
None	20,180	26	100	31	1.00	Referent		1.00	Referent	
1.7 to 127.3	18,771	25	89	25	1.06	0.79	1.41	1.05	0.79	1.41
127.3 to 318.6	18,555	24	74	24	0.87	0.64	1.17	0.87	0.64	1.18
318.7 to 1950	18,664	25	64	25	0.98	0.71	1.37	1.00	0.71	1.40
<i>P</i> trend							0.583		0.656	
Iron (mg/day)										
None	27,174	36	130	40	1.00	Referent		1.00	Referent	
0.1 to 4.0	16,185	21	65	20	0.91	0.68	1.23	0.91	0.67	1.23
4.1 to 18.0	16,140	21	57	17	0.85	0.62	1.16	0.86	0.62	1.18
18.1 to 68.0 ^c	16,076	21	76	23	1.13	0.85	1.51	1.16	0.87	1.54
<i>P</i> trend							0.653		0.562	
Magnesium (mg/day)										
None	25,412	33	119	37	1.00	Referent		1.00	Referent	
1.1 to 50.0	20,841	27	81	27	1.00	0.76	1.33	1.01	0.76	1.35
50.1 to 100.0	23,208	30	101	30	0.95	0.73	1.24	0.94	0.71	1.23
100.1 to 500.0 ^c	6,694	9	24	9	0.94	0.61	1.47	1.03	0.66	1.60
<i>P</i> trend							0.682		0.791	
Zinc (mg/day)										
None	25,217	33	116	36	1.00	Referent		1.00	Referent	
0.32 to 7.50	20,030	26	76	23	1.01	0.75	1.35	1.01	0.75	1.36
7.51 to 15.0	20,926	28	81	25	0.89	0.67	1.18	0.90	0.68	1.21
15.1 to 130.00 ^c	9,981	13	53	16	1.14	0.82	1.58	1.17	0.84	1.63
<i>P</i> trend							0.861		0.736	
Selenium (mcg/day)										
None	26,470	35	122	37	1.00	Referent		1.00	Referent	
0.21 to 10.10	16,626	22	66	20	1.05	0.78	1.42	1.06	0.78	1.44
10.11 to 20.00	16,745	22	69	21	0.94	0.70	1.26	0.94	0.70	1.27
20.10 to 400.00 ^c	16,429	21	71	22	0.94	0.70	1.26	0.97	0.72	1.31
<i>P</i> trend							0.577		0.740	

Abbreviations: CI, confidence interval; HR, hazard ratio; UC urothelial carcinoma

^aAdjusted for the following variables: sex; age; race/ethnicity; education; family history of bladder cancer; smoking status/recency of smoking, pack-years of smoking; servings per day of fruits; and servings per day of vegetables (excluding potatoes).

^bFrom single supplements (and mixtures other than multivitamins) plus multivitamins.

^cGreater than amount of that nutrient that could be obtained from 10-year daily use of the multivitamin Centrum Silver (Wyeth; Madison NJ, USA).

TABLE 4. Hazard ratios of urothelial carcinoma in relation to use of anti-inflammatory supplements during the 10 years before baseline, western Washington, 2000-2007.

Ten-year average supplement use ^b	Number of controls (N = 76,720)		Number of cases of TCC (N = 330)		Sex and age-adjusted			Multivariate-adjusted ^a		
	No.	%	No.	%	HR	95% CI		HR	95% CI	
Glucosamine^c										
None	60,968	80	277	85	1.00	Referent		1.00	Referent	
Low	9,907	13	27	8	0.67	0.45	0.99	0.72	0.48	1.07
High	5,574	7	24	7	0.92	0.60	1.39	0.99	0.65	1.50
<i>P</i> trend								0.209	0.432	
Chondroitin^c										
None	66,128	87	294	89	1.00	Referent		1.00	Referent	
Low	6,717	9	18	6	0.66	0.41	1.06	0.71	0.44	1.14
High	3,660	5	17	5	0.99	0.61	1.62	1.06	0.65	1.73
<i>P</i> trend								0.388	0.622	
Saw Palmetto^{cd}										
None	32,533	89	221	87	1.00	Referent		1.00	Referent	
Low	2,062	6	21	8	1.41	0.90	2.21	1.44	0.91	2.28
High	1,961	5	13	5	0.79	0.45	1.38	0.84	0.48	1.48
<i>P</i> trend								0.310	0.949	
Ginko Biloba^c										
None	65,981	86	291	86	1.00	Referent		1.00	Referent	
Low	6,216	8	19	8	0.82	0.52	1.31	0.86	0.54	1.37
High	4,233	6	20	6	1.08	0.69	1.70	1.10	0.69	1.75
<i>P</i> trend								0.581	0.950	
Garlic^c										
None	67,415	88	294	89	1.00	Referent		1.00	Referent	
Low	4,639	6	16	5	0.26	0.20	0.34	0.87	0.52	1.47
High	4,353	6	20	6	0.87	0.52	1.44	0.95	0.61	1.50
<i>P</i> trend								0.364	0.714	
Fish oil^c										
None	68,991	90	305	90	1.00	Referent		1.00	Referent	
Low	4,047	5	12	5	0.79	0.45	1.41	0.85	0.47	1.51
High	3,433	5	13	5	0.80	0.46	1.40	0.87	0.50	1.51
<i>P</i> trend								0.310	0.497	

Abbreviations: CI, confidence interval; HR, hazard ratio; UC urothelial carcinoma

^aAdjusted for the following variables: sex; age; race/ethnicity; education; family history of bladder cancer; recency of smoking/dose of smoking; servings per day of fruits; and servings per day of vegetables (excluding potatoes).

^bFrom single supplements (and mixtures other than multivitamins) plus multivitamins.

^cThe low-use category included those with a duration of less than 3 years or a frequency of less than 4 days per week; the high-use category that included those with a duration of at least 3 years and a frequency during that time of at least 4 days per week.

^dMen only