

Variable	PRAL				NEAP			
	Tertile 1	Tertile 2	Tertile 3	P trend <sup>b</sup>	Tertile 1	Tertile 2	Tertile 3	P trend
Age (y)	55.77 ± 9.26	65.17 ± 9.03	66.12 ± 10.14	0.003	60.25 ± 9.12	65.05 ± 9.60	65.77 ± 10.01	0.01
BMI (kg/m <sup>2</sup> )	26.69 ± 3.46	24.37 ± 3.32	24.99 ± 3.61	0.03	26.53 ± 3.39	24.23 ± 3.45	25.28 ± 3.59	0.11
Energy intake (Kcal/day)	2827.76 ± 687.41	2521.78 ± 639.24	2612.98 ± 616.46	0.14	2765.64 ± 668.65	2674.07 ± 704.71	2522.82 ± 580.74	0.10
Ethnicity				0.71				0.95
Fars	31(77.5)	33(82.5)	30(75.0)		31(77.5)	32(80.0)	31(77.5)	
Non Fars	9(22.5)	7(17.5)	10(25.0)		9(22.5)	8(20.0)	9(22.5)	
Job				0.96				0.52
Employment	24(60)	23(57.5)	24(60.0)		24(60.0)	21(52.5)	26(65.0)	
Unemployment **	16(40.0)	17(42.5)	16(40.0)		16(40.0)	19(47.5)	14(35.0)	
Education				0.07				0.04
Illiterate & primary	19(47.5)	25(62.5)	29(72.5)		19(47.5)	24(60.0)	30(75.0)	
Diploma & academic	21(52.5)	15(37.5)	11(27.5)		21(52.5)	16(40.0)	10(25.0)	
Smokers (%)	11(27.5)	12(30.0)	7(17.5)	0.39	11(27.5)	13(32.5)	6(15.0)	0.18
Physical activity				0.04				0.11
less or never	9(22.5)	11(27.5)	15(37.5)		9(22.5)	11(27.5)	15(37.5)	
moderate	12(30.0)	21(52.5)	16(40.0)		13(32.5)	20(50.0)	16(40.0)	
high	19(47.5)	8(20.0)	9(22.5)		18(45.0)	9(22.5)	9(22.5)	
Antihyperlipidemic drug user(%)	5(12.5)	2(5.0)	5(12.5)	0.44	5(12.5)	1(2.5)	6(15.0)	0.14
Antihypertensive drug user(%)	8(20.0)	9(22.5)	15(37.5)	0.16	9(22.5)	6(15.0)	17(42.5)	0.02
Aspirin user (%)	8(20.0)	11(27.5)	6(15.0)	0.38	9(22.5)	8(20.0)	8(20.0)	0.12

- PRAL, potential renal acid load; NEAP, net endogenous acid production; BMI, body mass index.
- \*\* Unemployed participants were retired or jobless individuals.
- <sup>a</sup>Data are presented as mean ± SD or number (percent).
- <sup>b</sup>P values are from one way analysis of variance (ANOVA) test for quantitative and Chi-square or Fischer exact tests for qualitative variables comparisons across tertiles of dietary acid load, respectively.

**Table 1.** General characteristics of participants across tertiles of PRAL and NEAP scores among 60 prostatic cancer cases and 60 hospital-based controls<sup>a</sup>.

**Table 2. Dietary intakes of participants across tertiles of PRAL and NEAP scores among 60 prostatic cancer cases and 60 hospital based controls<sup>a</sup>.**

Variables	PRAL				NEAP			
	Tertile 1 (N=40)	Tertile 2 (N=40)	Tertile 3 (N=40)	P-value <sup>b</sup>	Tertile 1 (N=40)	Tertile 2 (N=40)	Tertile 3 (N=40)	P-value
<b>Carbohydrate (gr/day)</b>	363.22 ± 13.87	316.94 ± 13.80	331.69 ± 13.71	0.06	362.87 ± 13.80	323.12 ± 13.74	325.86 ± 13.83	0.08
<b>Protein (gr/day)</b>	106.92 ± 3.07	104.56 ± 3.05	126.44 ± 3.03	<0.001	105.37 ± 3.08	106.66 ± 3.07	125.80 ± 3.09	<0.001
<b>Total fat (gr/day)</b>	60.12 ± 4.44	57.24 ± 4.42	68.30 ± 4.39	0.18	80.30 ± 4.35	54.88 ± 4.33	70.48 ± 4.36	0.04
<b>Dietary fiber (gr/day)</b>	27.96 ± 0.76	20.98 ± 0.75	18.96 ± 0.75	<0.001	27.67 ± 0.77	21.26 ± 0.77	18.98 ± 0.77	<0.001
<b>Vitamin A (RAE/day)</b>	3317.38 ± 206.04	2424.26 ± 205.01	3002.92 ± 203.70	0.01	3185.07 ± 207.16	2492.39 ± 206.17	3067.10 ± 207.56	0.04
<b>Vitamin E (mg/day)</b>	5.40 ± 0.20	4.05 ± 0.20	3.97 ± 0.20	<0.001	5.39 ± 0.20	4.09 ± 0.20	3.94 ± 0.20	<0.001
<b>Vitamin K (µg/day)</b>	152.70 ± 7.70	109.27 ± 7.66	109.83 ± 7.62	<0.001	150.75 ± 7.72	113.12 ± 7.68	107.93 ± 7.73	<0.001
<b>Vitamin D (µg/day)</b>	1.74 ± 0.37	1.56 ± 0.36	1.48 ± 0.36	0.88	1.75 ± 0.36	1.21 ± 0.36	1.83 ± 0.36	0.43
<b>Vitamin C (mg/day)</b>	221.67 ± 8.05	163.70 ± 8.01	135.23 ± 7.96	<0.001	220.62 ± 8.09	163.31 ± 8.05	136.67 ± 8.10	<0.001
<b>Vitamin B1 (mg/day)</b>	2.46 ± 0.08	2.29 ± 0.08	2.41 ± 0.08	0.29	2.45 ± 0.08	2.33 ± 0.08	2.38 ± 0.08	0.56
<b>Vitamin B2 (mg/day)</b>	2.32 ± 0.14	2.18 ± 0.14	2.74 ± 0.14	0.02	2.30 ± 0.14	2.24 ± 0.14	2.71 ± 0.14	0.05
<b>Vitamin B3 (mg/day)</b>	28.35 ± 1.10	28.66 ± 1.09	33.11 ± 1.08	0.003	28.14 ± 1.08	28.76 ± 1.08	33.23 ± 1.09	0.002
<b>Vitamin B5 (mg/day)</b>	7.06 ± 0.24	6.39 ± 0.24	7.17 ± 0.24	0.05	7.02 ± 0.24	6.50 ± 0.24	7.11 ± 0.24	0.15
<b>Vitamin B6 (mg/day)</b>	2.95 ± 0.18	2.27 ± 0.17	2.33 ± 0.17	0.01	2.93 ± 0.18	2.28 ± 0.17	2.34 ± 0.18	0.02
<b>Vitamin B9 (µg/day)</b>	401.88 ± 12.27	316.47 ± 12.21	317.08 ± 12.13	<0.001	397.63 ± 12.39	321.68 ± 12.32	316.12 ± 12.41	<0.001
<b>Vitamin B12 (µg/day)</b>	7.49 ± 2.60	8.75 ± 2.59	20.38 ± 2.57	0.001	6.85 ± 2.59	9.44 ± 2.57	20.32 ± 2.59	0.001
<b>Potassium (mg/day)</b>	5544.70 ± 154.99	4094.10 ± 154.21	3888.35 ± 153.23	<0.001	5493.94 ± 156.91	4160.38 ± 156.16	3865.63 ± 157.21	<0.001
<b>Calcium (mg/day)</b>	1280.50 ± 36.32	1051.64 ± 36.14	1063.23 ± 35.91	<0.001	1277.21 ± 36.06	1097.82 ± 35.89	1050.34 ± 36.13	<0.001
<b>Iron (mg/day)</b>	24.38 ± 1.51	22.67 ± 1.50	27.57 ± 1.49	0.06	23.69 ± 1.50	23.32 ± 1.49	27.61 ± 1.50	0.09
<b>Magnesium (mg/day)</b>	454.75 ± 12.46	358.39 ± 12.40	341.26 ± 12.32	<0.001	448.73 ± 12.71	364.13 ± 12.65	341.54 ± 12.74	<0.001
<b>Zinc (mg/day)</b>	11.81 ± 0.37	11.03 ± 0.37	12.63 ± 0.37	0.01	11.61 ± 0.37	11.16 ± 0.37	12.70 ± 0.37	0.01
<b>Phosphorous (mg/day)</b>	1511.73 ± 38.08	1379.47 ± 37.88	1476.19 ± 37.64	0.04	1502.47 ± 38.36	1410.48 ± 38.18	1454.43 ± 38.43	0.24
<b>Fruits (gr/day)</b>	637.78 ± 35.03	468.35 ± 34.39	345.34 ± 34.16	<0.001	639.18 ± 35.02	455.65 ± 34.39	356.67 ± 34.63	<0.001
<b>Vegetables (gr/day)</b>	812.68 ± 31.04	604.28 ± 30.89	548.17 ± 30.69	<0.001	800.50 ± 31.50	612.12 ± 31.35	552.51 ± 31.56	<0.001
<b>Dairy (gr/day)</b>	441.27 ± 25.33	400.38 ± 35.20	378.46 ± 25.04	0.21	451.44 ± 24.84	404.57 ± 24.72	364.10 ± 24.89	0.05
<b>Nut/Legumes (gr/day)</b>	56.34 ± 2.69	55.69 ± 2.68	51.57 ± 2.66	0.39	54.67 ± 2.65	58.23 ± 2.64	50.70 ± 2.66	0.14
<b>Grains (gr/day)</b>	367.97 ± 13.78	414.07 ± 13.71	429.46 ± 13.63	0.01	371.38 ± 13.81	416.23 ± 13.75	423.88 ± 13.84	0.02
<b>Fish/Poultry (gr/day)</b>	91.08 ± 7.51	99.50 ± 7.47	131.66 ± 7.43	<0.001	89.86 ± 7.57	104.48 ± 7.53	127.90 ± 7.58	0.002
<b>Red/processed meats (gr/day)</b>	65.38 ± 7.60	74.59 ± 7.56	112.80 ± 7.51	<0.001	61.30 ± 7.33	74.79 ± 7.29	116.67 ± 7.34	<0.001

- PRAL, potential renal acid load; NEAP, net endogenous acid production.

- <sup>a</sup> Data are presented as mean ± SE.

- <sup>b</sup> Ancova test was used.

**Table 3. Risk of prostate cancer in relation to PRAL and NEAP among 60 prostatic cancer cases and 60 hospital-based controls<sup>a</sup>.**

Patterns	Categories of PRAL and NEAP scores			
	Tertile 1	Tertile 2	Tertile 3	P trend
<b>PRAL</b>	(<-14.28 mEq/d)	(-14.28 to 2.57 mEq/d)	(> 2.57 mEq/d)	
<b>No. cases/controls</b>	12/28	20/20	28/12	
<b>Crude</b>	1.00 (Ref )	2.33(0.93-5.84)	4.88(2.22-13.41)	0.001
<b>Model 1</b>	1.00 (Ref )	1.78(0.62-5.12)	3.94(1.37-11.31)	0.01
<b>Model 2</b>	1.00 (Ref )	1.72(0.89-5.04)	3.94(1.32-11.71)	0.01
<b>Model 3</b>	1.00 (Ref )	2.07(0.68-6.32)	3.42(1.11-8.65)	0.03
<b>NEAP</b>	(<38.09 mEq/d)	(38.09 to 49.97 mEq/d)	(> 49.97 mEq/d)	
<b>No. cases/controls</b>	12/28	20/20	28/12	
<b>Crude</b>	1.00 (Ref )	2.33(0.93-5.84)	5.44(2.09-14.17)	0.001
<b>Model 1</b>	1.00 (Ref )	1.64(0.59-4.58)	4.25(1.49-12.10)	0.01
<b>Model 2</b>	1.00 (Ref )	1.55(0.55-4.39)	4.29(1.45-12.71)	0.01
<b>Model 3</b>	1.00 (Ref )	1.63(0.56-4.79)	3.88(1.26-9.55)	0.02
<ul style="list-style-type: none"> <li>- PRAL, potential renal acid load; NEAP, net endogenous acid production.</li> <li>- <sup>a</sup> Multivariate logistic regression was used.</li> <li>- Data are presented as odds ratio (95% confidence interval).</li> <li>- Model 1: Adjusted for age, body mass index, energy intake, smoking, and physical activity.</li> <li>- Model 2: Adjusted for confounders in model 1 plus ethnicity, job, and education.</li> <li>- Model 3: Adjusted for confounders in model 2 plus drug usage (Antihyperlipidemic drugs, antihypertensive drugs, and aspirin).</li> </ul>				