**Table I** Bivariate analysis of association between PSA levels and phytoestrogens

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Independent Variable | | Daidzein (URXDAZ) | | o-DMA (URXDMA) | | Equol (URXEQU) | | Genistein (URXGEN) | | Enterodiol (URXETD) | | Enterolactone (URXETL) | |
| Mean (S.D.) | p-value[[1]](#footnote-1)a | 406.973 (1704.209) | .893 | 52.209 (235.876) | .168 | 52.498  (449.697) | .801 | 212.791  (979.058) | .891 | 195.123  (1141.462) | .620 | 883.564  (2374.282) | .478 |

**Table II** Multivariate linear regression of associations between PSA levels and covariates

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Independent Variable** | ***n*** | **PSA** | | **Independent Variable** | ***n*** | **PSA** | | | **Independent Variable** | ***n*** | **PSA** | |
| **%[[2]](#footnote-2)b/Mean (S.D.)** | ***p*-value** | **%/Mean (S.D.)** | ***p*-value** | | **%/Mean (S.D.)** | ***p*-value** |
| **Age**  Less than or equal to 66  Greater than 66 | **Age**  **456 match**  **220** | **Age**  **67.5 match**  **32.5** | **<.000** | **Cotinine**  Smoker  Non-Smokers | **492**  **184** | **72.8**  **27.2** | | **.092** | **Total Cholesterol** | **--** | **189.0074 (59.712)** | **.002** |
| **Race/Ethnicity**  Mexican- American  Other Hispanic  Non-Hispanic White  Non-Hispanic Black  Other/Multiracial | **Race**  **113 Match**  **66**  **330 Match**  **133 Match**  **34** | **16.7 Match**  **9.8**  **48.8 Match**  **19.7 Match**  **5.0** | **.381** | **Education**  Less than 9th grade  9-11th  High School grad (or GED)  Some College  College Graduate or above  Don’t Know | **75 Match**  **103**  **180 Match Double**  **176 Match**  **130 Match Double**  **2** | **11.1 Match**  **15.2**  **26.6 Match Double**  **26.0 Match**  **19.2 Match Double**  **.3** | | **.298** | **PIR**c  1  2  3  4  5 | **m**  **108**  **165**  **100**  **75**  **175** | **16.0**  **24.4**  **14.8**  **11.1**  **25.9** | **.340** |
| **LDL** | **--** | **110.4350 (45.228)** | **.312** | **Triglyceride** | **--** | **134.9426 (100.682)** | | **.105** | **HDL** | **--** | **46.9601 (19.4659)** | **.130** |

**Table III** Multivariate linear regression of associations between PSA levels and independent variables

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Independent Variable | Model 1 (*R*2=.000) | | Model 2 (*R*2=.000) | | Model 3 (*R*2=.002) | | Model 4 (*R*2=.001) | | Model 5 (*R*2=.000) | | Model 6 (*R*2=.000) | |
| β[[3]](#footnote-3)d (S.E.) | *p*-value | β (S.E.) | *p*-value | β (S.E.) | *p*-value | β (S.E.) | *p*-value | β (S.E.) | *p*-value | β (S.E.) | *p*-value |
| *URXDAZ* | -4.178 x 10-6 (.0) | .930 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| *URXDMA* | -- |  | -5.145 x 10-5 (.0) | .882 | -- | -- | -- | -- | -- | -- | -- | -- |
| *URXEQU* | -- |  | -- | -- | .000 | .263 |  |  |  |  |  |  |
| *URXETD* | -- |  | -- | -- | -- | -- | -6.914 x 10-5 (.0) | .333 | -- | -- | -- | -- |
| *URXETL* | -- |  | -- | -- | -- | -- | -- | -- | -9.119 x 10-6 (.0) | .791 | -- | -- |
| *URXGEN* | -- |  | -- | -- | -- | -- | -- | -- | -- | -- | 3.031 x 10-5 (.0) | .716 |
| *Age* | -- |  | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| *Race/Ethnicity* | -- |  | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| *HDL* | -- |  | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| *Total Cholesterol* | -- |  | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

**Table III** Multivariate linear regression of associations between PSA levels and independent variables (cont.)

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Independent Variable | Model 7 (*R*2 = .07) | | Model 8 (*R*2=.006) | | Model 9 (*R*2=.002) | | Model 10 (*R*2 = .067) | | Model 11 (*R*2 = .063) | | Model 12 (*R*2 = .062) | |
| β (S.E.) | *p*-value | β (S.E.) | *p*-value | β (S.E.) | *p*-value | β (S.E.) | *p*-value | β (S.E.) | *p*-value | β (S.E.) | *p*-value |
| *URXDAZ* | 0.00 | .464 | 0.00 | .232 | -- | -- | -- | -- | -- | -- | -- | -- |
| *URXDMA* | 0.00 | .807 | 0.00 | .651 | -- | -- | -- | -- | -- | -- | -- | -- |
| *URXEQU* | 0.00 | .348 | 0.00 | .337 | -- | -- | -- | -- | -- | -- | -- | -- |
| *URXETD* | -8.124 x 10-5 (.000) | .290 | 7.905 x 10-5 (.000) | .318 | -6.932 x 10-5 (.000) | .332 | -9.504 x 10-5 (.000) | .171 | -9.181 x 10-5 (.000) | .187 | -9.564 x 10-5 (.000) | .169 |
| *URXETL* | -2.00 x 10-5 (.0) | .591 | 6.288 x 10-6 (.0) | .869 | -- | -- | -- | -- | -- | -- | -- | -- |
| *URXGEN* | 0.00 | .448 | 0.00 | .230 | 3.117 x 10-5 (.000) | .708 | 3.006 x 10-5 (.000) | .711 | 2.492 x 10-5 (.000) | .759 | 3.61 x 10-5 (.000) | .656 |
| *Age* | .037 (.007) | <.000 | -- | -- | -- | -- | .037 (.007) | .221 | .039 (.007) | <.000 | .035 (.006) | <.000 |
| *Race/Ethnicity* | .09 (.075) | .232 | -- | -- | -- | -- | .089 (.075) | .045 | .104 (.075) | .163 | .081 (.075) | .284 |
| *HDL* | . 008 (.005) | .09 | -- | -- | -- | -- | .008 (.005) | .071 | -- | -- | .012 (.004) | .003 |
| *Total Cholesterol* | .003 (.002) | .062 | -- | -- | -- | -- | .003 (.002) | .082 | .004 (.001) | .002 | -- | -- |

1. a p-values in the bivariate analysis were obtained from Pearson Chi-Square values. All p-values in the study are significant at .05 level. [↑](#footnote-ref-1)
2. b % of all participants. c Poverty-Income Ratio [↑](#footnote-ref-2)
3. d β = unstandardized coefficient; S.E. = standard error. [↑](#footnote-ref-3)