**Supplementary table 1. Food sources of flavonoids that mainly contribute to dietary pattern consumption**

|  |
| --- |
| **Dietary Patterns** |
| **Gallate** | **Luteolin** | **Mixed** |
| **Food source** | **% contribution** | **Food source** | **% contribution** | **Food source** | **% contribution** |
| Cooked tomato with garlic | 4.15 | Cantaloupe | 0.35 | Apple | 27.24 |
| Onion | 0.15 | Orange juice |  |  |  |
| Garlic | 0.18 | Watermelon |  13.76 |  |  |
|  |  | Broccoli | 0.19 |  |  |
|  |  | Purslane | 0.62 |  |  |
|  |  | Carrot | 0.05 |  |  |
|  |  | Spinach | 4.33 |  |  |

**Supplementary table 2. Association between daily consumption of main flavonoid subgroups and their respective compounds, with total prostate cancer**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Flavonoid subgroups and compounds (mg/d)** | **Cases****(n= 395)** | **Controls****(n=797)** | **OR\*** | **95% CI** | ***p value*** |
| **Flavones**Tertile 1Tertile 2Tertile 3 *p for trend* | 17612198 | 265266266 | 1.00**0.72****0.45** | 0.53-0.990.32-0.65 | 0.048<0.001<0.001 |
|  LuteolinTertile 1Tertile 2Tertile 3 *p for trend* | 19111094 | 265266266 | 1.00**0.60****0.40** | 0.44-0.830.28-0.57 | 0.002<0.001<0.001 |
|  ApigeninTertile 1Tertile 2 Tertile 3 *p for trend* | 119111165 | 265266266 | 1.000.941.13 | 0.67-1.330.79-1.63 | 0.7460.4920.501 |
| **Flavonols**Tertile 1Tertile 2 Tertile 3 *p for trend* | 89140166 | 265265267 | 1.00**1.62****1.72** | **1.15-2.29****1.20-2.47** | 0.0060.0030.005 |
|  QuercetinTertile 1Tertile 2 Tertile 3 *p for trend* | 97125173 | 266264267 | 1.00**1.41****1.74** | **0.99-1.99****1.21-2.50** | **0.054****0.003****0.003** |
|  MyricetinTertile 1Tertile 2 Tertile 3 *p for trend* | 124100171 | 267263267 | 1.000.881.27 | 0.62-1.250.91-1.78 | 0.4750.1540.136 |
|  KaempferolTertile 1Tertile 2 Tertile 3 *p for trend* | 148113134 | 267265265 | 1.000.760.79 | 0.54-1.050.55-1.14 | 0.1050.2140.194 |
| **Flavanols**Tertile 1Tertile 2Tertile 3 *p for trend* | 11999177 | 267266264 | 1.00.831.34 | 0.59-1.170.97-1.86 | 0.2910.0800.056 |
|  (+)-CatechinTertile 1Tertile 2Tertile 3 *p for trend* | 102119174 | 267266264 | 1.01.111.47 | 0.79-1.551.05-2.04 | 0.5580.0220.019 |
|  (-)-Epicatechin 3-O-gallateTertile 1Tertile 2Tertile 3 *p for trend* | 145146104 | 267267263 | 1.01.050.72 | 0.77-1.440.51-1.01 | 0.7570.0610.068 |
|  (-)-EpicatechinTertile 1Tertile 2Tertile 3*p for trend* | 12072203 | 267265265 | 1.00.641.61 | 0.44-0.921.16-2.23 | 0.0170.0040.001 |
|  (-)-EpigallocatechinTertile 1Tertile 2Tertile 3 *p for trend* | 136130129 | 267267263 | 1.01.010.83 | 0.73-1.390.59-1.15 | 0.9600.2540.243 |
|  (-)-Epigallocatechin 3-O-gallateTertile 1Tertile 2Tertile 3 *p for trend* | 147132116 | 267267263 | 1.00.990.84 | 0.72-1.350.55-1.06 | 0.9350.1120.116 |
|  (+)-GallocatechinTertile 1Tertile 2Tertile 3 *p for trend* | 16414784 | 267267263 | 1.01.000.49 | 0.73-1.360.34-0.71 | 0.998<0.001<0.001 |

**\*** Adjusted by age, educational level, history of chronic disease, history of sexually transmitted disease, history of prostate cancer in first degree relatives, leisure physical activity smoking patterns throughout life, cooked tomato with garlic, green-yellow leafy vegetables & green-yellow non-leafy vegetables