**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 1  Tertile 2  Tertile 3  *p for trend* | 176  121  98 | 265  266  266 | 1.00  **0.72**  **0.45** | 0.53-0.99  0.32-0.65 | 0.048  <0.001  <0.001 |
| Luteolin  Tertile 1  Tertile 2  Tertile 3  *p for trend* | 191  110  94 | 265  266  266 | 1.00  **0.60**  **0.40** | 0.44-0.83  0.28-0.57 | 0.002  <0.001  <0.001 |
| Apigenin  Tertile 1  Tertile 2  Tertile 3  *p for trend* | 119  111  165 | 265  266  266 | 1.00  0.94  1.13 | 0.67-1.33  0.79-1.63 | 0.746  0.492  0.501 |
| **Flavonols**  Tertile 1  Tertile 2  Tertile 3  *p for trend* | 89  140  166 | 265  265  267 | 1.00  **1.62**  **1.72** | **1.15-2.29**  **1.20-2.47** | 0.006  0.003  0.005 |
| Quercetin  Tertile 1  Tertile 2  Tertile 3  *p for trend* | 97  125  173 | 266  264  267 | 1.00  **1.41**  **1.74** | **0.99-1.99**  **1.21-2.50** | **0.054**  **0.003**  **0.003** |
| Myricetin  Tertile 1  Tertile 2  Tertile 3  *p for trend* | 124  100  171 | 267  263  267 | 1.00  0.88  1.27 | 0.62-1.25  0.91-1.78 | 0.475  0.154  0.136 |
| Kaempferol  Tertile 1  Tertile 2  Tertile 3  *p for trend* | 148  113  134 | 267  265  265 | 1.00  0.76  0.79 | 0.54-1.05  0.55-1.14 | 0.105  0.214  0.194 |
| **Flavanols**  Tertile 1  Tertile 2  Tertile 3  *p for trend* | 119  99  177 | 267  266  264 | 1.0  0.83  1.34 | 0.59-1.17  0.97-1.86 | 0.291  0.080  0.056 |
| (+)-Catechin  Tertile 1  Tertile 2  Tertile 3  *p for trend* | 102  119  174 | 267  266  264 | 1.0  1.11  1.47 | 0.79-1.55  1.05-2.04 | 0.558  0.022  0.019 |
| (-)-Epicatechin 3-O-gallate  Tertile 1  Tertile 2  Tertile 3  *p for trend* | 145  146  104 | 267  267  263 | 1.0  1.05  0.72 | 0.77-1.44  0.51-1.01 | 0.757  0.061  0.068 |
| (-)-Epicatechin  Tertile 1  Tertile 2  Tertile 3  *p for trend* | 120  72  203 | 267  265  265 | 1.0  0.64  1.61 | 0.44-0.92  1.16-2.23 | 0.017  0.004  0.001 |
| (-)-Epigallocatechin  Tertile 1  Tertile 2  Tertile 3  *p for trend* | 136  130  129 | 267  267  263 | 1.0  1.01  0.83 | 0.73-1.39  0.59-1.15 | 0.960  0.254  0.243 |
| (-)-Epigallocatechin 3-O-gallate  Tertile 1  Tertile 2  Tertile 3  *p for trend* | 147  132  116 | 267  267  263 | 1.0  0.99  0.84 | 0.72-1.35  0.55-1.06 | 0.935  0.112  0.116 |
| (+)-Gallocatechin  Tertile 1  Tertile 2  Tertile 3  *p for trend* | 164  147  84 | 267  267  263 | 1.0  1.00  0.49 | 0.73-1.36  0.34-0.71 | 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