**Supplementary Table 1.** Baseline characteristics of study population by quintiles of dietary carbohydrates (% of energy intake)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Quintile 1 (N=644) | Quintile 2 (N=630) | Quintile 3 (N=637) | Quintile 4 (N=639) | Quintile 5  (N=634) | p-value |
| Clinical Characteristics | Percentage/  Mean(SD) | Percentage/  Mean(SD) | Percentage/  Mean(SD) | Percentage/  Mean(SD) | Percentage/  Mean (SD) |  |
| Age (y) | 53.2(9.5) | 53.8(9.2) | 53.8(10.0) | 55.4(9.9) | 55.4(9.8) | <0.0001 |
| Female (%) | 45.1% | 51.4% | 54.6% | 57.4% | 56.6% | <0.0001 |
| Education (y) | 14.0(2.6) | 14.1(2.8) | 14.0(2.5) | 14.3(2.7) | 14.0(2.5) | 0.3144 |
| Physical Activity | 35.1 (6.8) | 34.9(6.4) | 34.5(5.4) | 34.1(5.7) | 35.2(6.5) | 0.0137 |
| BMI (kg/m2)\* | 28.2(5.2) | 27.7(4.8) | 27.3(4.9) | 27.1(4.9) | 26.6(4.7) | <0.0001 |
| Waist Circumference  *Men*  *Women* | 39.7(4.5)  35.1(6.2) | 39.3(3.9)  34.5(5.9) | 39.0(4.5)  34.1(5.6) | 38.6(3.9)  34.3(5.5) | 38.4(4.1)  33.6(5.7) | 0.001  0.0238 |
| Smoking Status (%) |  |  |  |  |  |  |
| *Current Smoker* | 27.0% | 22.3% | 16.4% | 12.7% | 14.9% | <0.0001 |
| *Former Smoker* | 30.6% | 44.3% | 48.3% | 42.3% | 39.1% |  |
| *Never Smoker* | 42.3% | 33.3% | 35.3% | 45.0% | 46.0% |  |
| Antioxidant use(%) | 32.1% | 31.8% | 38.3% | 36.0% | 42.9% | <0.0001 |
| Postmenopausal (%) | 57.6% | 9.4% | 60.9% | 67.2% | 71.9% | 0.0006 |
| HT use (%)\* | 6.4% | 6.4% | 12.5% | 11.8% | 12.0% | 0.0014 |
| Diet | Percentage  Mean (SD) | Percentage  Mean (SD) | Percentage  Mean (SD) | Percentage  Mean (SD) | Percentage  Mean (SD) |  |
| Total Calories (kcal) | 1845.2(645.4) | 1818.6(615.3) | 1886.0(620.7) | 1880.4(617.6) | 1911.1(620.5) | 0.0716 |
| Total Carbohydrates (%kcal) | 39.2(3.8) | 46.4(1.5) | 50.9(1.2) | 55.2(1.4) | 62.7(4.5) | <0.0001 |
| Total Protein (%kcal) | 18.0(3.9) | 17.5(3.1) | 17.1(3.0) | 16.4(2.8) | 14.9(2.9) | <0.0001 |
| Total Fat (%kcal) | 32.3(6.2) | 30.0(4.7) | 28.0(4.0) | 25.8(3.5) | 21.0(4.2) | <0.0001 |
| Glycemic Index | 53.2(3.7) | 54.3(3.1) | 54.7(3.1) | 55.2(3.3) | 56.0(3.5) | <0.0001 |
| Glycemic Load | 94.6(35.6) | 112.9(38.9) | 129.6(43.6) | 141.4(47.6) | 165.9(57.3) | <0.0001 |
| Fruits and Vegetables (servings/d) | 2.8(1.8) | 3.2(2.0) | 3.7(2.1) | 4.0(2.2) | 4.7(2.9) | <0.0001 |
| Legumes (servings/wk) | 2.1(1.7) | 2.4(1.9) | 2.3(1.9) | 2.5(2.0) | 2.8(2.4) | <0.0001 |
| Whole Grains (oz eq/d) | 0.8(0.9) | 1.0(1.0) | 1.3(1.2) | 1.3(1.2) | 1.6(1.6) | <0.0001 |
| Red and Processed Meat (servings/wk) | 7.8(6.0) | 6.2(4.2) | 5.2(3.3) | 4.4(3.3) | 2.9(2.6) | <0.0001 |
| Alcohol (oz/wk) | 5.03(5.6) | 3.0(3.7) | 2.0(2.9) | 1.5(2.3) | 1.2(2.0) | <0.0001 |

\*BMI, body mass index; HT, hormone therapy