**SUPPLEMENTARY MATERIAL**

Supplemental table 1. Baseline characteristics of the participants\* according to the median of the baseline cognitive function

|  |  |  |
| --- | --- | --- |
|  | Median of the baseline cognitive function | |
|  | < p50  (n=442) | > p50  (n=364) |
| Sex (% female) | 30.3 | 30.4 |
| Total polyphenols (mg/d) | 860 (535) | 837 (529) |
| Age at recruitment (y) | 60.8 (5.6) | 60.8 (5.5) |
| Age at initial cognitive evaluation (y) | 66.6 (5.4) | 66.1 (5.0) |
| Age at final cognitive evaluation (y) | 72.6 (5.5) | 72.1 (5.1) |
| Baseline STICS-m score | 32.4 (1.7) | 36.1 (1.2) |
| Final STICS-m score | 34.6 (2.8) | 35.9 (2.3) |
| University education (y) | 5.2 (1.8) | 5.5 (1.9) |
| Cardiovascular disease (%)a | 7.4 | 6.6 |
| Hypertension (%) | 40.0 | 36.2 |
| Hypercholesterolemia (%) | 52.5 | 57.4 |
| Diabetes (%) | 8.0 | 8.0 |
| Body mass index (kg/m2) | 25.8 (3.2) | 25.6 (3.0) |
| Physical activity (METs-h/week) | 28.7 (23.4) | 27.3 (22.2) |
| Mediterranean dietary pattern (0-9 points)b | 4.4 (1.8) | 4.3 (1.7) |
| Energy intake (kcal/day) | 2384 (819) | 2322 (741) |
| Carbohydrate intake (% of energy) | 44.2 (8.8) | 43.9 (8.2) |
| Protein intake (% of energy) | 18.4 (3.8) | 18.6 (3.7) |
| Fat intake (% of energy) | 34.4 (7.1) | 34.8 (6.9) |
| Alcohol intake (g/day)c | 4.2 (8.1) | 3.8 (6.1) |
| Smoking status |  |  |
| Never (%) | 34.0 | 29.4 |
| Former (%) | 44.6 | 51.0 |
| Current (%) | 17.0 | 16.7 |
| *APOE* genotype (%)d | 18.7 | 21.8 |

\*Adjusted for inverse probability weight by sex and age at baseline questionnaire of the SUN project.

a Includes stroke, myocardial infarction, coronary heart disease, coronary artery surgery or angioplasty.

b Score proposed by Trichopoulou et al. (ref. 22).

c From sources other than wine.

d Presence of at least one *APOE* ε4 allele.

Supplemental table 2. Baseline characteristics of the participants\* across sex-specific energy-adjusted quintiles of lignans intake

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Quintiles of total lignans intake | | | | |
|  | Q1  (n=161) | Q2  (n=161) | Q3  (n=161) | Q4  (n=161) | Q5  (n=161) | |
| Sex (% female) | 30.0 | 31.4 | 30.2 | 30.2 | 30.3 | |
| Total lignans (mg/d) | 0.35 (0.18) | 0.40 (0.21) | 0.51 (0.21) | 0.76 (0.21) | 1.28 (0.48) | |
| Age at recruitment (y) | 60.7 (6.2) | 61.0 (5.4) | 60.7 (6.2) | 60.8 (5.1) | 60.8 (5.5) | |
| Age at initial cognitive evaluation (y) | 66.8 (5.6) | 66.8 (5.3) | 66.3 (6.0) | 66.1 (4.9) | 66.2 (5.1) | |
| Age at final cognitive evaluation (y) | 72.7 (5.7) | 72.7 (5.3) | 72.3 (6.1) | 72.2 (4.9) | 72.4 (5.2) | |
| Baseline STICS-m score | 33.8 (2.4) | 34.0 (2.6) | 34.3 (2.2) | 34.1 (2.3) | 33.9 (2.5) | |
| Final STICS-m score | 34.7 (3.3) | 35.1 (2.3) | 35.4 (2.4) | 35.1 (2.7) | 35.3 (2.8) | |
| University education (y) | 5.3 (1.9) | 5.2 (1.7) | 5.2 (1.8) | 5.4 (1.9) | 5.4 (1.9) | |
| Cardiovascular disease (%)a | 4.3 | 6.4 | 7.3 | 9.4 | 10.5 | |
| Hypertension (%) | 44.9 | 38.2 | 36.3 | 35.9 | 34.3 | |
| Hypercholesterolemia (%) | 47.4 | 45.5 | 60.7 | 59.3 | 60.9 | |
| Diabetes (%) | 6.4 | 11.5 | 7.9 | 5.4 | 9.8 | |
| Body mass index (kg/m2) | 25.6 (2.9) | 26.1 (3.2) | 25.6 (2.7) | 25.5 (3.2) | 25.5 (3.3) | |
| Physical activity (METs-h/week) | 24.1 (22.0) | 26.4 (21.7) | 26.9 (22.5) | 28.9 (20.3) | 33.7 (26.1) | |
| Mediterranean dietary pattern (0-9 points)b | 3.7 (1.6) | 3.8 (1.7) | 4.0 (1.6) | 4.9 (1.7) | 5.5 (1.5) | |
| Energy intake (kcal/day) | 2750 (802) | 2185 (739) | 2122 (765) | 2331 (722) | 2466 (765) | |
| Carbohydrate intake (% of energy) | 46.5 (9.7) | 44.4 (8.8) | 44.5 (8.6) | 43.7 (8.3) | 41.8 (7.2) | |
| Protein intake (% of energy) | 18.7 (4.5) | 19.2 (3.5) | 19.0 (3.7) | 18.4 (3.6) | 16.8 (2.8) | |
| Fat intake (% of energy) | 32.6 (6.9) | 33.4 (7.0) | 33.3 (7.1) | 34.9 (6.5) | 38.1 (6.6) | |
| Alcohol intake (g/day)c | 4.1 (7.3) | 4.0 (6.8) | 3.9 (8.5) | 4.3 (7.4) | 3.4 (5.6) | |
| Smoking status |  |  |  |  |  | |
| Never (%) | 36.9 | 35.7 | 28.9 | 35.5 | 25.4 | |
| Former (%) | 43.1 | 45.2 | 49.2 | 42.3 | 55.1 | |
| Current (%) | 15.3 | 16.2 | 15.4 | 19.6 | 17.8 | |
| *APOE* genotype (%)d | 21.3 | 18.7 | 18.1 | 20.1 | 21.4 | |

\*Adjusted for inverse probability weight by sex and age at baseline questionnaire of the SUN project.

a Includes stroke, myocardial infarction, coronary heart disease, coronary artery surgery or angioplasty.

b Score proposed by Trichopoulou et al. (ref. 22).

c From sources other than wine.

d Presence of at least one *APOE* ε4 allele.

Supplemental table 3. Baseline characteristics of the participants\* across sex-specific energy-adjusted quintiles of stilbenes intake

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Quintiles of total lignans intake | | | | |
|  | Q1  (n=161) | Q2  (n=161) | Q3  (n=161) | Q4  (n=161) | Q5  (n=161) | |
| Sex (%female) | 30.2 | 30.3 | 30.2 | 30.6 | 30.3 | |
| Total stilbenes (mg/d) | 0.21 (0.2) | 0.20 (0.3) | 0.48 (0.5) | 2.05 (0.8) | 6.41 (4.0) | |
| Age at recruitment (y) | 60.8 (6.1) | 60.4 (5.5) | 60.8 (5.6) | 60.7 (5.4) | 60.8 (5.2) | |
| Age at initial cognitive evaluation (y) | 66.9 (5.8) | 66.6 (5.1) | 66.5 (5.3) | 66.0 (5.2) | 66.1 (5.0) | |
| Age at final cognitive evaluation (y) | 72.8 (5.8) | 72.6 (5.2) | 72.5 (5.4) | 72.0 (5.3) | 72.0 (5.0) | |
| Baseline STICS-m score | 34.2 (2.4) | 34.3 (2.0) | 34.1 (2.6) | 34.0 (2.5) | 33.8 (2.3) | |
| Final STICS-m score | 35.0 (2.8) | 35.3 (2.2) | 35.0 (3.0) | 35.3 (2.6) | 35.3 (2.6) | |
| University education (y) | 5.6 (2.1) | 5.0 (1.6) | 5.3 (1.9) | 5.2 (1.8) | 5.5 (1.9) | |
| Cardiovascular disease (%)a | 2.5 | 4.7 | 9.9 | 5.9 | 8.9 | |
| Hypertension (%) | 42.7 | 37.2 | 35.2 | 33.3 | 44.9 | |
| Hypercholesterolemia (%) | 46.9 | 54.8 | 57.8 | 56.1 | 59.5 | |
| Diabetes (%) | 6.7 | 6.5 | 10.5 | 8.8 | 6.0 | |
| Body mass index (kg/m2) | 25.7 (3.0) | 25.6 (3.1) | 25.9 (3.1) | 25.6 (3.0) | 25.5 (2.9) | |
| Physical activity (METs-h/week) | 28.6 (27.0) | 25.3 (19.5) | 25.6 (21.6) | 31.6 (23.7) | 28.8 (21.5) | |
| Mediterranean dietary pattern (0-9 points)b | 4.5 (1.8) | 3.9 (1.6) | 4.1 (1.6) | 4.4 (1.9) | 5.0 (1.7) | |
| Energy intake (kcal/day) | 3043 (666) | 2162 (510) | 1977 (732) | 2304 (755) | 2399 (751) | |
| Carbohydrate intake (% of energy) | 46.5 (8.4) | 46.0 (8.4) | 44.4 (9.4) | 42.4 (7.7) | 42.2 (8.6) | |
| Protein intake (% of energy) | 17.1 (3.3) | 18.2 (3.2) | 19.6 (4.4) | 18.9 (3.5) | 17.5 (3.4) | |
| Fat intake (% of energy) | 35.0 (7.0) | 34.4 (6.9) | 34.6 (7.7) | 35.4 (6.9) | 33.3 (6.7) | |
| Alcohol intake (g/day)c | 5.1 (10.6) | 3.5 (7.3) | 2.5 (4.3) | 4.2 (5.7) | 4.9 (7.6) | |
| Smoking status |  |  |  |  |  | |
| Never (%) | 36.5 | 30.1 | 37.8 | 27.0 | 21.7 | |
| Former (%) | 45.6 | 45.9 | 42.6 | 49.4 | 57.1 | |
| Current (%) | 14.2 | 20.7 | 17.9 | 18.7 | 16.3 | |
| *APOE* genotype (%)d | 23.5 | 15.9 | 24.7 | 18.4 | 16.8 | |

\*Adjusted for inverse probability weight by sex and age at baseline questionnaire of the SUN project.

a Includes stroke, myocardial infarction, coronary heart disease, coronary artery surgery or angioplasty.

b Score proposed by Trichopoulou et al. (ref. 22).

c From sources other than wine.

d Presence of at least one *APOE* ε4 allele.

Supplemental table 4. Cognitive function changes after 6 years and subtypes of lignans intake

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Quintiles of lignans adjusted for energy intake | | | | | p for trend |
|  | Q1 | Q2 | Q3 | Q4 | Q5 |  |
| **Secoisolariciresinol** | | | | | | |
| *Crude* | 0 (ref.) | 0.26 (-0.37; 0.89) | -0.07 (-0.70; 0.55) | 0.15 (-0.48; 0.78) | 0.59 (-0.04; 1.22) | 0.056 |
| *Model 1* | 0 (ref.) | 0.13 (-0.49; 0.74) | -0.14 (-0.76; 0.48) | 0.03 (-0.59; 0.65) | 0.55 (-0.06; 1.17) | **0.045** |
| *Model 2* | 0 (ref.) | 0.20 (-0.45; 0.86) | 0.02 (-0.66; 0.71) | 0.14 (-0.51; 0.80) | 0.65 (0.00; 1.29) | **0.034** |
| *Model 3* | 0 (ref.) | 0.21 (-0.44; 0.87) | 0.04 (-0.65; 0.73) | 0.15 (-0.51; 0.81) | 0.64 (-0.01; 1.31) | **0.043** |
| **Matairesinol** | | | | | | |
| *Crude* | 0 (ref.) | -0.23 (-0.86; 0.40) | -0.01 (-0.64; 0.62) | 0.47 (-0.16; 1.10) | 0.39 (-0.24; 1.02) | 0.068 |
| *Model 1* | 0 (ref.) | -0.35 (-0.97; 0.26) | -0.10 (-0.72; 0.51) | 0.36 (-0.27; 0.98) | 0.32 (-0.31;0.95) | 0.088 |
| *Model 2* | 0 (ref.) | -0.31 (-0.96; 0.33) | -0.00 (-0.65; 0.65) | 0.44 (-0.21; 1.10) | 0.44 (-0.21; 1.09) | **0.049** |
| *Model 3* | 0 (ref.) | -0.33 (-0.98; 0.31) | -0.01 (-0.67; 0.64) | 0.43 (-0.22; 1.09) | 0.41 (-0.26; 1.07) | 0.060 |
| **Lariciresinol** | | | | | | |
| *Crude* | 0 (ref.) | -0.42 (-1.05; 0.21) | -0.61 (-1.23; 0.02) | -0.37 (-1.00; 0.26) | 0.03 (-0.59; 0.66) | 0.436 |
| *Model 1* | 0 (ref.) | -0.53 (-1.15; 0.08) | -0.65 (-1.26; -0.03) | -0.42 (-1.03; 0.20) | -0.06 (-0.68; 0.56) | 0.551 |
| *Model 2* | 0 (ref.) | -0.53 (-1.17; 0.12) | -0.68 (-1.35; -0.01) | -0.48 (-1.13; 0.18) | -0.06 (-0.70; 0.57) | 0.555 |
| *Model 3* | 0 (ref.) | -0.53 (-1.18; 0.11) | -0.70 (-1.37; -0.03) | -0.48 (-1.14; 0.17) | -0.10 (-0.75; 0.55) | 0.640 |
| **Pinoresinol** | | | | | | |
| *Crude* | 0 (ref.) | 0.03 (-0.60; 0.66) | 0.60 (-0.03; 1.23) | 0.17 (-0.46; 0.80) | 0.33 (-0.29; 0.96) | 0.347 |
| *Model 1* | 0 (ref.) | -0.05 (-0.66; 0.57) | 0.47 (-0.15; 1.09) | 0.15 (-0.48; 0.77) | 0.34 (-0.28; 0.97) | 0.276 |
| *Model 2* | 0 (ref.) | 0.06 (-0.56; 0.69) | 0.72 (0.05; 1.38) | 0.26 (-0.38; 0.89) | 0.53 (-0.12; 1.18) | 0.158 |
| *Model 3* | 0 (ref.) | 0.06 (-0.57; 0.69) | 0.72 (0.05; 1.39) | 0.27 (-0.37; 0.91) | 0.55 (-0.12; 1.23) | 0.163 |
| **Syringaresinol** | | | | | | |
| *Crude* | 0 (ref.) | 0.35 (-0.28; 0.98) | 0.10 (-0.53; 0.73) | 0.31 (-0.32; 0.94) | 0.41 (-0.22; 1.04) | 0.264 |
| *Model 1* | 0 (ref.) | 0.30 (-0.32; 0.92) | 0.03 (-0.59; 0.64) | 0.18 (-0.44; 0.80) | 0.33 (-0.28; 0.95) | 0.381 |
| *Model 2* | 0 (ref.) | 0.39 (-0.25; 1.03) | 0.09 (-0.55; 0.73) | 0.23 (-0.41; 0.86) | 0.37 (-0.26; 1.00) | 0.383 |
| *Model 3* | 0 (ref.) | 0.38 (-0.26; 1.02) | 0.06 (-0.58; 0.70) | 0.24 (-0.40; 0.88) | 0.36 (-0.27; 0.99) | 0.385 |
| **Medioresinol** | | | | | | |
| *Crude* | 0 (ref.) | -0.02 (-0.66; 0.62) | 0.01 (-0.63; 0.65) | -0.25 (-0.89; 0.39) | 0.28 (-0.36; 0.92) | 0.556 |
| *Model 1* | 0 (ref.) | -0.07 (-0.70; 0.57) | 0.11 (-0.52; 0.74) | -0.32 (-0.95; 0.31) | 0.20 (-0.43; 0.83) | 0.761 |
| *Model 2* | 0 (ref.) | 0.15 (-0.55; 0.84) | 0.33 (-0.38; 1.03) | -0.18 (-0.84; 0.48) | 0.36 (-0.32; 1.04) | 0.706 |
| *Model 3* | 0 (ref.) | 0.12 (-0.59; 0.82) | 0.31 (-0.40; 1.02) | -0.20 (-0.86; 0.46) | 0.33 (-0.37; 1.03) | 0.783 |
| **1-Acetoxypinoresinol** | | | | | | |
| *Crude* | 0 (ref.) | -0.15 (-0.79, 0.50) | 0.20 (-0.44; 0.84) | 0.16 (-0.48; 0.81) | 0.18 (-0.46; 0.82) | 0.272 |
| *Model 1* | 0 (ref.) | -0.30 (-0.59; 0.66) | 0.03 (-0.59; 0.66) | 0.10 (-0.54; 0.74) | 0.15 (-0.48; 0.79) | 0.226 |
| *Model 2* | 0 (ref.) | -0.19 (-0.86; 0.45) | 0.20 (-0.47; 0.88) | 0.20 (-0.45; 0.86) | 0.30 (-0.36; 0.96) | 0.127 |
| *Model 3* | 0 (ref.) | -0.21 (-0.86; 0.43) | 0.21 (-0.47; 0.89) | 0.20 (-0.46; 0.87) | 0.31 (-0.37; 0.99) | 0.129 |

Model 1: Adjusted for age, sex and years of university education (continuous).

Model 2: Model 1 + *APOE* genotype, physical activity (tertiles), baseline BMI (kg/m2) (continuous), follow-up time between baseline and cognitive evaluation (continuous), smoking status (current, former, never smoker), package-years among ever smokers (continuous), energy intake (quartiles), sweetened beverages consumption (continuous), prevalent hypertension, prevalent hypercholesterolemia, low HDL-c, prevalent diabetes, and prevalent CVD.

Model 3: Model 2 + adherence to the Mediterranean Diet (tertiles).

Supplemental table 5. Cognitive function changes after 6 years and subtypes of stilbenes intake

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Quintiles of stilbenes adjusted for energy intake | | | | | p for trend |
|  | Q1 | Q2 | Q3 | Q4 | Q5 |  |
| **Trans-Resveratrol** | | | | | | |
| *Crude* | 0 (ref.) | 0.10 (-0.52; 0.73) | 0.42 (-0.21; 1.04) | 0.01 (-0.62; 0.64) | 0.42 (-0.21; 1.05) | 0.268 |
| *Model 1* | 0 (ref.) | 0.06 (-0.56; 0.68) | 0.42 (-0.19; 1.04) | 0.05 (-0.57; 0.67) | 0.41 (-0.21; 1.04) | 0.270 |
| *Model 2* | 0 (ref.) | 0.30 (-0.37; 0.97) | 0.72 (0.04; 1.41) | 0.24 (-0.40; 0.89) | 0.66 (0.00; 1.32) | 0.146 |
| *Model 3* | 0 (ref.) | 0.29 (-0.38; 0.96) | 0.71 (0.02; 1.39) | 0.22 (-0.43; 0.87) | 0.63 (-0.04; 1.30) | 0.177 |
| **Trans-Resveratrol 3-O-glucoside** | | | | | | |
| *Crude* | 0 (ref.) | 0.10 (-0.52; 0.73) | 0.19 (-0.44; 0.82) | 0.47 (-0.16; 1.10) | 0.59 (-0.04; 1.22) | 0.053 |
| *Model 1* | 0 (ref.) | -0.01 (-0.64; 0.62) | 0.23 (-0.40; 0.85) | 0.45 (-0.17; 1.07) | 0.45 (-0.17; 1.07) | 0.062 |
| *Model 2* | 0 (ref.) | 0.26 (-0.45; 0.96) | 0.59 (-0.13; 1.32) | 0.69 (0.02; 1.36) | 0.84 (0.17; 1.52) | **0.032** |
| *Model 3* | 0 (ref.) | 0.25 (-0.45; 0.95) | 0.59 (-0.13; 1.32) | 0.67 (-0.00; 1.35) | 0.82 (0.15; 1.50) | **0.039** |
| **Piceatannol** | | | | | | |
| *Crude* | 0 (ref.) | 0.14 (-0.49; 0.77) | 0.28 (-0.34; 0.91) | 0.39 (-0.24; 1.02) | 0.60 (-0.03; 1.23) | 0.067 |
| *Model 1* | 0 (ref.) | 0.02 (-0.61; 0.66) | 0.28 (-0.35; 0.90) | 0.35 (-0.27; 0.97) | 0.56 (-0.06; 1.19) | 0.076 |
| *Model 2* | 0 (ref.) | 0.31 (-0.40; 1.02) | 0.67 (-0.05; 1.40) | 0.61 (-0.06; 1.28) | 0.86 (0.19; 1.54) | **0.039** |
| *Model 3* | 0 (ref.) | 0.30 (-0.41; 1.02) | 0.67 (-0.05; 1.40) | 0.59 (-0.10; 1.26) | 0.84 (0.16; 1.52) | 0.047 |
| **Cis-Resveratrol** | | | | | | |
| *Crude* | 0 (ref.) | 0.08 (-0.55; 0.71) | 0.22 (-0.41; 0.85) | 0.43 (-0.19; 1.06) | 0.59 (-0.03; 1.22) | 0.049 |
| *Model 1* | 0 (ref.) | -0.04 (-0.67; 0.59) | 0.25 (-0.37; 0.88) | 0.40 (-0.22; 1.02) | 0.57 (-0.06; 1.20) | 0.059 |
| *Model 2* | 0 (ref.) | 0.23 (-0.47; 0.93) | 0.62 (-0.11; 1.34) | 0.64 (-0.03; 1.31) | 0.85 (0.17; 1.52) | **0.030** |
| *Model 3* | 0 (ref.) | 0.22 (-0.48; 0.93) | 0.62 (-0.11; 1.35) | 0.62 (-0.05; 1.30) | 0.83 (0.15; 1.51) | **0.037** |
| **e-Viniferin** | | | | | | |
| *Crude* | 0 (ref.) | 0.18 (-0.45; 0.81) | 0.30 (-0.33; 0.93) | 0.41 (-0.22; 1.04) | 0.61 (-0.01; 1.25) | 0.066 |
| *Model 1* | 0 (ref.) | 0.06 (-0.57; 0.70) | 0.29 (-0.33; 0.92) | 0.37 (-0.25; 0.99) | 0.58 (-0.05; 1.20) | 0.075 |
| *Model 2* | 0 (ref.) | 0.36 (-0.35; 1.07) | 0.70 (-0.02; 1.42) | 0.63 (-0.04; 1.31) | 0.89 (0.21; 1.56) | **0.039** |
| *Model 3* | 0 (ref.) | 0.35 (-0.37; 1.06) | 0.70 (-0.03; 1.42) | 0.61 (-0.06; 1.29) | 0.87 (0.19; 1.54) | **0.047** |
| **d-Viniferin** | | | | | | |
| *Crude* | 0 (ref.) | 0.18 (-0.45; 0.81) | 0.30 (-0.33; 0.93) | 0.41 (-0.22; 1.04) | 0.62 (-0.01; 1.25) | 0.556 |
| *Model 1* | 0 (ref.) | 0.06 (-0.57; 0.70) | 0.29 (-0.33; 0.92) | 0.37 (-0.25; 0.99) | 0.58 (-0.05; 1.20) | 0.761 |
| *Model 2* | 0 (ref.) | 0.36 (-0.35; 1.07) | 0.70 (-0.02; 1.42) | 0.63 (-0.04; 1.31) | 0.89 (0.21; 1.56) | 0.706 |
| *Model 3* | 0 (ref.) | 0.35 (-0.37; 1.06) | 0.70 (-0.03; 1.42) | 0.61 (-0.07; 1.29) | 0.87 (0.19; 1.54) | 0.783 |
| **Cis-Resveratrol 3-O-glucoside** | | | | | | |
| *Crude* | 0 (ref.) | 0.22 (-0.41, 0.85) | 0.22 (-0.41; 0.85) | 0.45 (-0.18; 1.08) | 0.59 (-0.03; 1.22) | 0.073 |
| *Model 1* | 0 (ref.) | 0.12 (-0.38; 0.87) | 0.24 (-0.38; 0.87) | 0.47 (-0.15; 1.09) | 0.53 (-0.09; 1.16) | 0.107 |
| *Model 2* | 0 (ref.) | 0.39 (-0.31; 1.09) | 0.62 (-0.10; 1.34) | 0.71 (0.04; 1.38) | 0.84 (0.16; 1.52) | 0.052 |
| *Model 3* | 0 (ref.) | 0.38 (-0.31; 1.08) | 0.62 (-0.10; 1.34) | 0.70 (0.03; 1.37) | 0.81 (0.13; 1.50) | 0.065 |
| **Pallidol** | | | | | | |
| *Crude* | 0 (ref.) | 0.08 (-0.55, 0.71) | 0.24 (-0.39; 0.87) | 0.41 (-0.22; 1.04) | 0.59 (-0.03; 1.22) | 0.052 |
| *Model 1* | 0 (ref.) | -0.03 (-0.66; 0.60) | 0.27 (-0.36; 0.89) | 0.39 (-0.23; 1.01) | 0.56 (-0.06; 1.19) | 0.065 |
| *Model 2* | 0 (ref.) | 0.24 (-0.47; 0.94) | 0.65 (-0.08; 1.38) | 0.62 (-0.05; 1.29) | 0.85 (0.17; 1.52) | **0.036** |
| *Model 3* | 0 (ref.) | 0.23 (-0.47; 0.94) | 0.65 (-0.07; 1.38) | 0.61 (-0.06; 1.28) | 0.83 (0.15; 1.51) | **0.043** |
| **Piceatannol 3-O-glucoside** | | | | | | |
| *Crude* | 0 (ref.) | 0.08 (-0.55, 0.71) | 0.24 (-0.39; 0.87) | 0.41 (-0.22; 1.04) | 0.59 (-0.03; 1.22) | 0.052 |
| *Model 1* | 0 (ref.) | -0.03 (-0.66; 0.60) | 0.27 (-0.36; 0.89) | 0.39 (-0.23; 1.01) | 0.56 (-0.06; 1.19) | 0.065 |
| *Model 2* | 0 (ref.) | 0.24 (-0.47; 0.94) | 0.65 (-0.08; 1.38) | 0.62 (-0.05; 1.29) | 0.84 (0.17; 1.52) | **0.036** |
| *Model 3* | 0 (ref.) | 0.23 (-0.47; 0.94) | 0.65 (-0.07; 1.38) | 0.61 (-0.06; 1.28) | 0.83 (0.15; 1.51) | **0.043** |
| **Resveratrol** | | | | | | |
| *Crude* | 0 (ref.) | -0.28 (-0.91, 0.35) | 0.12 (-0.50; 0.75) | -0.01 (-0.63; 0.62) | 0.34 (-0.29; 0.97) | 0.126 |
| *Model 1* | 0 (ref.) | -0.28 (-0.90; 0.34) | 0.21 (-0.41; 0.82) | 0.04 (-0.57; 0.66) | 0.42 (-0.20; 1.04) | 0.077 |
| *Model 2* | 0 (ref.) | -0.10 (-0.76; 0.56) | 0.39 (-0.28; 1.06) | 0.17 (-0.48; 0.81) | 0.60 (-0.04; 1.25) | **0.039** |
| *Model 3* | 0 (ref.) | -0.11 (-0.77; 0.55) | 0.38 (-0.29; 1.05) | 0.15 (-0.50; 0.80) | 0.58 (-0.07; 1.24) | **0.045** |
| **Resveratrol 3-O-glucoside** | | | | | | |
| *Crude* | 0 (ref.) | 0.30 (-0.33, 0.93) | 0.07 (-0.56; 0.70) | 0.26 (-0.37; 0.89) | 0.56 (-0.06; 1.19) | 0.091 |
| *Model 1* | 0 (ref.) | 0.23 (-0.39; 0.85) | 0.06 (-0.56; 0.68) | 0.26 (-0.36; 0.88) | 0.52 (-0.11; 1.15) | 0.099 |
| *Model 2* | 0 (ref.) | 0.41 (-0.26; 1.09) | 0.35 (-0.35; 1.05) | 0.44 (-0.22; 1.09) | 0.76 (0.10; 1.43) | **0.044** |
| *Model 3* | 0 (ref.) | 0.40 (-0.27; 1.08) | 0.35 (-0.35; 1.05) | 0.42 (-0.24; 1.08) | 0.74 (0.08; 1.41) | 0.054 |

Model 1: Adjusted for age, sex and years of university education (continuous).

Model 2: Model 1 + *APOE* genotype, physical activity (tertiles), baseline BMI (kg/m2) (continuous), follow-up time between baseline and cognitive evaluation (continuous), smoking status (current, former, never smoker), package-years among ever smokers (continuous), energy intake (quartiles), sweetened beverages consumption (continuous), prevalent hypertension, prevalent hypercholesterolemia, low HDL-c, prevalent diabetes, and prevalent CVD.

Model 3: Model 2 + adherence to the Mediterranean Diet (tertiles).