**Supplementary 1.** Beta coefficients (β) and 95% confident intervals (CI) for Telomere Length by quintiles of adherence to Western and Mediterranean Dietary Patterns.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Dietary Patterns | Q1 | Q2 | Q3 | Q4 | Q5 | P for trend |
| *n* | 178 | 177 | 177 | 177 | 177 |  |
| *Western* |  |  |  |  |  |  |
| TL (mean±SD) | 0.020±0.225 | -0.026±0.189 | 0.016±0.197 | -0.008±0.195 | -0.001±0.173 |  |
| Crude Model | 0 (ref.) | -0.046 (-0.087, -0.005) | -0.005 (-0.045, 0.036) | -0.028 (-0.069, 0.013) | -0.021 (-0.062, 0.019) | 0.618 |
| Model 1 | 0 (ref.) | -0.043 (-0.084, -0.001) | 0.007 (-0.035, 0.049) | -0.015 (-0.059, 0.029) | -0.007 (-0.057, 0.042) | 0.849 |
| Model 2 | 0 (ref.) | -0.041 (-0.083, -0.000) | 0.004 (-0.039, 0.047) | -0.024 (-0.069, 0.020) | -0.021 (-0.070, 0.029) | 0.750 |
| Model 3 | 0 (ref.) | -0.049 (-0.09, -0.006) | -0.007 (-0.054, 0.039) | -0.041 (-0.092, 0.009) | -0.043 (-0.106, 0.019) | 0.320 |
| *Mediterranean* |  |  |  |  |  |  |
| TL (mean±SD) | -0.000±0.209 | -0.008±0.166 | -0.006±0.190 | -0.013±0.186 | 0.027±0.227 |  |
| Crude Model | 0 (ref.) | -0.008 (-0.049, 0.033) | -0.006 (-0.047, 0.031) | -0.013 (-0.054, 0.028) | 0.027 (-0.014, 0.068) | 0.213 |
| Model 1 | 0 (ref.) | -0.005 (-0.047, 0.038) | -0.004 (-0.048, 0.041) | -0.012 (-0.059, 0.035) | 0.029 (-0.025, 0.082) | 0.327 |
| Model 2 | 0 (ref.) | 0.000 (-0.042, 0.042) | -0.002 (-0.046, 0.043) | -0.006 (-0.053, 0.041) | 0.038 (-0.016, 0.092) | 0.191 |
| Model 3 | 0 (ref.) | 0.007 (-0.035, 0.050) | 0.011 (-0.036, 0.058) | 0.013 (-0.039, 0.066) | 0.067 (0.003, 0.130) | **0.043** |

Model 1: adjusted for ﻿age, sex, year of cohort entry (1999-2001, 2002-2004, 2005-2007, 2008) and energy intake (continuous).

Model 2: additionally adjusted body mass index (≤20, 20-21, 22-25, ≥25 kg/m2 and a quadratic term for body mass index), smoking status (never/ever), alcohol intake (abstainer, <5 g/d or <10 g/d, 5-25 g/d or 10-50 g/d, >25 g/d or >50 g/d for women and for men respectively), leisure-time physical activity (Mets-h/w, continuous), average daily time of television watching (h/d, continuous), average daily time spent sitting (h/w, continuous), following special diet at baseline (yes/no), weight gain in the past 5 years previous to entering the cohort (<3 kg /≥3 kg), years of education (continuous), prevalence of dyslipidemia and cardiovascular disease (yes/no).

Model 3: additionally adjusted for dietary fiber intake, monounsaturated fatty acid (MUFA) intake, polyunsaturated fatty acid (PUFA) intake, saturated fatty acid (SFA) intake and trans fat intake (continuous).

**Supplementary 2.** Odds Ratios (OR) and 95% confident intervals (CI) of short Telomere Length (<20th percentile) by quintiles of adherence to Western and Mediterranean Dietary Patterns.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Dietary Patterns | Q1 | Q2 | Q3 | Q4 | Q5 | P for trend |
| *n* | 178 | 177 | 177 | 177 | 177 |  |
| *Western* |  |  |  |  |  |  |
| Participants with TL < P20 (%) | 17 | 25 | 13 | 27 | 18 |  |
| Crude Model | 1 (ref.) | 1.57 (0.94, 2.63) | 0.71 (0.39, 1.27) | 1.71 (1.03, 2.86) | 1.05 (0.61, 1.80) | 0.886 |
| Model 1 | 1 (ref.) | 1.61 (0.95, 2.71) | 0.68 (0.37, 1.25) | 1.71 (0.98, 2.97) | 1.11 (0.58, 2.12) | 0.772 |
| Model 2 | 1 (ref.) | 1.65 (0.97, 2.82) | 0.71 (0.38, 1.32) | 1.89 (1.06, 3.35) | 1.21 (0.61, 2.37) | 0.515 |
| Model 3 | 1 (ref.) | 1.58 (0.90, 2.75) | 0.67 (0.35, 1.29) | 1.80 (0.94, 3.43) | 1.08 (0.47, 2.47) | 0.793 |
| *Mediterranean* |  |  |  |  |  |  |
| Participants with TL < P20 (%) | 22 | 20 | 20 | 20 | 18 |  |
| Crude Model | 1 (ref.) | 0.88 (0.53, 1.47) | 0.91 (0.55, 1.52) | 0.91 (0.55, 1.52) | 0.76 (0.45, 1.28) | 0.357 |
| Model 1 | 1 (ref.) | 0.88 (0.52, 1.50) | 0.94 (0.54, 1.64) | 0.95 (0.53, 1.72) | 0.81 (0.41, 1.61) | 0.643 |
| Model 2 | 1 (ref.) | 0.84 (0.49, 1.43) | 0.90 (0.51, 1.59) | 0.88 (0.48, 1.61) | 0.73 (0.36, 1.47) | 0.453 |
| Model 3 | 1 (ref.) | 0.85 (0.49, 1.47) | 0.91 (0.50, 1.67) | 0.93 (0.47, 1.84) | 0.79 (0.34, 1.83) | 0.673 |

Model 1: adjusted for ﻿age, sex, year of cohort entry (1999-2001, 2002-2004, 2005-2007, 2008) and energy intake (continuous).

Model 2: additionally adjusted body mass index (≤20, 20-21, 22-25, ≥25 kg/m2 and a quadratic term for body mass index), smoking status (never/ever), alcohol intake (abstainer, <5 g/d or <10 g/d, 5-25 g/d or 10-50 g/d, >25 g/d or >50 g/d for women and for men respectively), leisure-time physical activity (Mets-h/w, continuous), average daily time of television watching (h/d, continuous), average daily time spent sitting (h/w, continuous), following special diet at baseline (yes/no), weight gain in the past 5 years previous to entering the cohort (<3 kg /≥3 kg), years of education (continuous), prevalence of dyslipidemia and cardiovascular disease (yes/no).

Model 3: additionally adjusted for dietary fiber intake, monounsaturated fatty acid (MUFA) intake, polyunsaturated fatty acid (PUFA) intake, saturated fatty acid (SFA) intake and trans fat intake (continuous).