**S1 Table Association between single lifestyle factors and cognitive impairment stratified by *APOE* genotype**

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| --- | --- | --- |
| **Independent variable** | **Adjusted OR of cognitive impairment, (95% CI)** | ***P* for Interaction**  |
| **APOE ε4 carriers** | ***APOE* ε4 non-carriers** |
| **Smoking** |  |  |  |
|  Current | *Reference* |  |
|  Former | 0.97 (0.70, 1.34) | 0.94 (0.48, 1.84) | 0.80 |
|  Never | 1.10 (0.84, 1.43) | 0.96 (0.57, 1.64) | 0.83 |
| **Drinking** |  |  |  |
|  Heavy | *Reference* |  |
|  Moderate  | 0.74 (0.50, 1.11) | 1.31 (0.50, 3.41) | 0.44 |
|  Never | 0.98 (0.75, 1.27) | 1.59 (0.85, 2.97) | 0.36 |
| **Physical activity** |  |  |  |
|  Never | *Reference* |  |
|  Former | 0.93 (0.69, 1.24) | 0.58 (0.30, 1.13) | 0.27 |
|  Current | 0.69 (0.56, 0.84) | 0.49 (0.32, 0.77) | 0.19 |
| **Dietary pattern** |  |  |  |
|  Unfavorable | *Reference* |  |  |
|  Intermediate | 0.68 (0.60, 0.85) | 0.44 (0.30, 0.67) | 0.078 |
|  Favorable | 0.41 (0.69, 0.54) | 0.36 (0.22, 0.58) | 0.52 |
| **Body weight** |  |  |  |
|  <38 | *Reference* |  |
|  38-50 | 1.01 (0.82, 1.24) | 0.80 (0.35, 1.28) | 0.37 |
| >50 | 0.88 (0.69, 1.13) | 0.99 (0.56, 1.75) | 0.77 |

Cognitive impairment: cognitive impairment was defined by Mini-Mental State Examination scores less than 18.

Model adjusted for age, sex, residence, education level, marital status, *APOE* genotype, lifestyle factors (smoking, alcohol consumption, physical activity, body weight and dietary pattern), activity of daily living, and seven kinds of self-reported disease (chronic obstructive pulmonary disease, tuberculosis, cancer, diabetes, hypertension, stroke and cardiovascular disease).