|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table S1. Independent subgroup1 analysis of depression and handgrip strength** |  |  | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
| **Variables** | **Depression (PHQ-9 ≥5)** |
| **Handgrip strength of Male** |  | **Handgrip strength of Female** |
|  **High**  |  |  **Medium**  |  |  **Low**  |  |  **High**  |  |  **Mideum**  |  |  **Low**  |
| **OR** |  | **OR** | **95%CI** |  | **OR** | **95%CI** |  | **OR** |  | **OR** | **95%CI** |  | **OR** | **95%CI** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  **Age**  | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
| 60 ~ 64 | 1.00  | 　 | 1.58  | 0.67  | 3.73  | 　 | 0.79  | 0.22  | 2.86  | 　 | 1.00  | 　 | 1.34  | 0.77  | 2.35  | 　 | 1.69  | 0.63  | 4.60  |
| 65 ~ 69 | 1.00  | 　 | 0.68  | 0.29  | 1.61  | 　 | 1.23  | 0.37  | 4.03  | 　 | 1.00  | 　 | 2.23  | 1.34  | 3.73  | 　 | 1.18  | 0.56  | 2.50  |
| 70 ~ 74 | 1.00  |  | 1.43  | 0.56  | 3.67  |  | 0.91  | 0.25  | 3.24  | 　 | 1.00  |  | 1.05  | 0.56  | 1.98  |  | 1.74  | 0.84  | 3.62  |
| 75 ~ | 1.00  | 　 | 0.46  | 0.20  | 1.05  | 　 | 0.62  | 0.28  | 1.38  | 　 | 1.00  | 　 | 1.74  | 0.86  | 3.52  | 　 | 2.89  | 1.46  | 5.74  |
|  **BMI†**  | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
|  Obese(≥25)  | 1.00  | 　 | 0.86  | 0.39  | 1.88  | 　 | 0.51  | 0.17  | 1.53  | 　 | 1.00  | 　 | 1.45  | 0.91  | 2.32  | 　 | 1.54  | 0.84  | 2.83  |
|  Normal or under-weight(<25)  | 1.00  |  | 1.00  | 0.59  | 1.69  |  | 1.01  | 0.55  | 1.88  | 　 | 1.00  |  | 1.56  | 1.07  | 2.28  |  | 2.18  | 1.36  | 3.50  |
|  **Physical activity**  | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
|  Yes  | 1.00  | 　 | 0.88  | 0.45  | 1.73  | 　 | 0.75  | 0.30  | 1.84  | 　 | 1.00  | 　 | 1.71  | 1.06  | 2.77  | 　 | 2.24  | 1.14  | 4.38  |
|  No  | 1.00  |  | 1.02  | 0.56  | 1.86  |  | 0.95  | 0.48  | 1.92  | 　 | 1.00  |  | 1.46  | 1.01  | 2.11  |  | 1.84  | 1.17  | 2.89  |
| **Chronic disease\*** | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
| Yes | 1.00  | 　 | 0.82  | 0.46  | 1.46  | 　 | 0.75  | 0.40  | 1.41  | 　 | 1.00  | 　 | 1.66  | 1.16  | 2.38  | 　 | 2.41  | 1.52  | 3.80  |
| No | 1.00  |  | 1.11  | 0.57  | 2.14  |  | 1.38  | 0.59  | 3.20  | 　 | 1.00  |  | 1.35  | 0.83  | 2.19  |  | 1.24  | 0.67  | 2.27  |
| 1Each set of subgruop was stratified by selected variables and adjusted for other independent variables (handedness, age, region, education level, job, income, marital status, eating habit, lifetime smoking experience, frequency of drinking, stress, chronic disease)PHQ-9, Patient Health Questionnaire 9; BMI, Body Mass Index†Obesity status defined by BMI based on 2014 Clinical Practice Guidelines for Overweight and Obesity in Korea\*Chronic diseases include hypertension, diabetes mellitus and dyslipidemia |