**Supplementary Table 8.** OR and 95%CI for theassociation between conditional changes of serum 25(OH)D concentrations and the number of depression symptoms across three waves (n=1512)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Overall sample adjusted for sex | | Males | | Females | |
| Unadjusted | Adjusted | Unadjusted | Adjusted | Unadjusted | Adjusted |
| None | Reference | Reference | Reference | Reference | Reference | Reference |
| One type of depression symptoms | 1.02(1.00, 1.05) | 1.02(0.99, 1.02) | 1.01(0.98, 1.04) | 1.01(0.98, 1.05) | 1.05(1.00, 1.10) | 1.04(0.99, 1.10) |
| Two types of depression symptoms | 1.01(0.98, 1.04) | 1.01(0.98, 1.04) | 1.01(0.97, 1.04) | 1.02(0.98, 1.05) | 1.01(0.96, 1.06) | 0.99(0.95, 1.05) |
| Three types of depression symptoms | 1.02(0.99, 1.05) | 1.02(0.99, 1.06) | 1.02(0.98, 1.06) | 1.02(0.98, 1.07) | 1.02(0.97, 1.07) | 1.02(0.97, 1.08) |

Adjusted model included covariates: age at wave 1, only child status, family structure, self-perceived family economic status, BMI at wave 1, physical activity at wave 1 and self-perceived puberty timing at wave 1.