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| Supplementary Table S1: Longitudinal association of COVID-19 status with depressive symptomatology in the PREDIMED-Plus cohort - Results of supplementary analysis using minimal adjustment models and BDI-II ≥ 12 to describe elevated depression risk |
|  | Effect Size# | 95% CI | P value |
| Supplementary analysis 1  |  |  |  |
| Minimal adjustment Model A (β [95%CI]) # | 0.57 | (0.07 to 1.07) | 0.03 |
| Minimal adjustment Model B (OR [95%CI]) # | 1.59 | (1.13 to 2.19) | <0.01 |
| Supplementary analysis 2 (OR [95%CI]) # |  |  |  |
| Unadjusted Crude Model | 1.22 | (0.95 to 1.57) | 0.12 |
| Model 1 | 1.60 | (1.19 to 2.15) | <0.01 |
| Model 2 | 1.57  | (1.16 to 2.13) | <0.01 |
| Model 3 | 1.59 | (1.17 to 2.15) | <0.01 |

**Abbreviations: BDI-II scores, Beck Depression Inventory-II;** **COVID-19, coronavirus disease 2019, MMSE, Mini-Mental State Examination**

#Reference category for all analysis: COVID-19 negative status

**Supplementary analysis 1:** Uses a minimal adjustment set identified using directed acyclic graphs (supplementary figure 2)

Minimal adjustment model A uses linear regression with Post BDI-II scores as the outcome, COVID-19 infection as the exposure, adjusting for BDI-II scores pre-COVID-19. Effect size presented as β coefficients (95% CI).

Minimal adjustment model B uses logistic regression with post-COVID-19 elevated depression risk (BDI-II ≥ 14) as the outcome, COVID-19 status as exposure, adjusting for BDI-II scores pre-COVID-19. Effect size presented as Odds ratio (OR and 95% CI).

**Supplementary analysis 2:** Uses logistic regression with post-COVID-19 elevated depression risk (BDI-II ≥ 12) as the outcome, COVID-19 status as exposure. Effect size presented as Odds ratio (OR and 95% CI).

Crude model only uses COVID-19 status (Positive or negative) as the predictor variable in the model

**\*Model 1:** Adjusted for age, sex, education, marital status, intervention group, cluster randomisation, recruitment centre size, pre-COVID-19 BDI-II scores, time since infection for post-COVID-19 depression assessments

**\*Model 2:** Model 1, additionally adjusted for the presence of obesity, diabetes mellitus, hypertension, hypercholesterolemia, and baseline cognition (MMSE scores)

**\*Model 3:** Model 2, additionally adjusted for adherence to Mediterranean diet scores, smoking status, physical activity, and alcohol consumption