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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Supplementary Table 1. Comparison of observed and simulated association between walnut consumption groups and trajectories of TICS scores from latent growth models, n = 3632. | | | | | | | | | | | | |
|  | Fully adjusted model - estimated | | | | | | Fully adjusted model – simulated | | | | | |
|  | Intercept | | | Slope | | | Intercept | | | Slope | | |
| *Walnut Consumption* | *b* | *SE* | *p* | *b* | *SE* | *p* | *b* | *SE* | 1-β | *b* | *SE* | 1-β |
| Low walnut consumption | 0.75 | 0.17 | 0.001 | -0.02 | 0.02 | 0.409 | 0.76 | 0.13 | >0.999 | -0.02 | 0.02 | 0.16 |
| Moderate walnut consumption | 0.93 | 0.23 | 0.000 | -0.03 | 0.03 | 0.349 | 0.92 | 0.19 | >0.999 | -0.03 | 0.04 | 0.13 |
| Estimated mean intercept | 11.55 | 2.16 | 0.000 | 0.18 | 0.19 | 0.341 | 11.49 | 1.03 | 1.00 | 11.49 | 1.03 | 1.00 |
| “Fully adjusted model- estimated” adjusted for the following covariates: gender, age, race/ethnicity, marital status, retirement status, education, longest occupational tenure, log transformed household income, log transformed household assets, BMI, vigorous physical activity, smoking status, alcohol consumption, number of doctor-diagnosed chronic conditions, and number of mobility limitations.  Estimated mean intercept in “Fully adjusted model – estimated” differs from that reported in Table 2, Model 2. The Monte Carlo models would not estimate when including the count of previous word recall test exposures as a time-varying covariate.  1-β: probability of correctly rejecting the null hypothesis, *p* < .05 | | | | | | | | | | | | |

Supplementary Figure 1. Estimated power to identify a statistically significant association between walnut consumption and change in TICS scores for samples sizes 1000-50000.