

## Supplementary Digital Content1

### Methods for Development of the Analytic Study Sample

Of the 318,713 participants that returned Follow-up Questionnaires, we excluded those indicating they were proxies for the intended respondents (n=19,244) and individuals that died before the Follow-up Questionnaire was received or that recorded no follow-up time (n= 4,234).

To minimize concerns about reverse causality, we also excluded those with major medical conditions at the time of the Follow-up Questionnaire, including those who that reported or were diagnosed with cancers other than basal-cell skin cancer (n=56,146), those who reported a previous heart attack, coronary by-pass, or stroke (n=50,549), emphysema (n=12,690), renal disease (n=400), or a degenerative neurological condition (n=1,530).

To ensure more complete exposure assessment for physical activity and sedentary behaviors we also excluded participants with largely incomplete information on our primary exposures, including missing information on 12 or more (of 16) physical activity questions (n= 3,196), missing information on all sitting items (11,096). Exclusions were also made for those reporting out of range values for overall physical activity ( $\geq 68$  hrs/week; n=2,340) or overall sitting ( $\geq 22.5$  hrs/d; n=2,674).

Our final analytic sample consisted of 154,614 participants.