

**Supplementary Table 1. Modifiers**

**Gender.** Proportion (%) of the cohort that was reported as female.

**Years of follow-up.** Range: 6 months to 37 years. Median of 4 years; interquartile range: 2-8 years). Two studies less than one year: elderly six months after hospital discharge (Lee 2017, study 216), and cancer patients six months after diagnosis (Boyes 2013, study 9).

**Study Design.** Outcome assessment: [1] followed a single baseline exposure of physical activity, [2] a single baseline exposure of physical activity but increase in depression outcome, [3] increase in physical activity, [4] increase in both physical activity exposure and depression outcome.

**Exposure dose.** Physical activity exposure was: [1] binary or a correlation, [2] low, [3] moderate, or [4] high; based on study-defined levels.

**Recommended dose.** Physical activity exposure met public health guidelines for moderate or vigorous leisure time physical activity as reported or calculated as weekly metabolic equivalents (MET•minutes) or volume (frequency, time, and intensity).

**Physical activity measure.** Physical activity (defined as bodily movement produced by skeletal muscles that requires energy expenditure) was measured by single or multiple questions assessing participation in exercise, sports, or physical activity specified as [1] frequency, [2] time or distance covered, [3] as meeting public health guidelines for moderate or vigorous physical activity, [4] a validated measure that estimated total volume (i.e., frequency x time x intensity) or metabolic equivalents (METs) expended per unit of time.

**Depression measure.** Incident depression or change in depressive symptoms was the outcome: [1] depressive symptoms, assessed by a validated symptom questionnaire, [2] established cut-scores or tertiles, quartiles or quintile scores on validated screening tests for probable depression, [3] a self-report of depression diagnosis made by a physician, [4] a

depression diagnosis using a standardized, structured diagnostic interview.

**Physical activity domain.** Physical activity domains were categorized as leisure-time (excluding chores, occupational work, and active transport) and as total physical activity.