

**Supplementary Table S-F2-6. Summary of Original Studies Published Between 2014-2017 on Sedentary Behavior and Cardiovascular Disease (CVD) Mortality**

Reference	Year of Publication	Population	Sample Size	Age	Definition of Sedentary Behavior	Mortality Follow-up Period	Main Results	Dose-Response
Matthews et al. 2015	2015	U.S. Adults; NIH-AARP Diet and Health Study	154,614	59-82 y	Daily sitting time	Mean of 6.8 y	<p>HR (95% CI) across levels of daily sitting time in fully adjusted models:</p> <p><u>Men:</u></p> <p>&lt;5 h/d: 1.00 (reference)            5-6.9 h/d: 1.13 (1.00-1.27)            7-8.9 h/d: 1.17 (1.02-1.34)            9-11.9 h/d: 1.32 (1.14-1.54)            ≥12 h/d: 1.40 (1.20-1.63)            P for trend &lt;0.01</p> <p><u>Women:</u></p> <p>&lt;5 h/d: 1.00 (reference)            5-6.9 h/d: 1.13 (0.97-1.33)            7-8.9 h/d: 1.05 (0.88-1.25)            9-11.9 h/d: 1.40 (1.17-1.69)            ≥12 h/d: 1.55 (1.29-1.86)            P for trend &lt;0.01</p> <p>In less active participants, replacing sitting time with physical activity including exercise and non-exercise activities (i.e., household chores) was significantly associated with lower CVD mortality (with stronger effect of higher intensity exercise). In contrast, only exercise activities and moderate-to-vigorous</p>	Yes

							activity had significant effects in more active participants	
Lee et al. 2016	2016	U.S. Women; Women's Health Initiative (WHI)	92,809	50-79 y	Daily sitting time	Mean of 10.8 y	HR (95% CI) across quartiles of total daily sitting time in fully adjusted models: ≤5 h/d: 1.00 (reference) 6-9 h/d: 1.02 (0.89-1.16) 10-13 h/d: 1.13 (0.96-1.34) ≥14 h/d: 1.16 (0.87-1.55) P for trend =0.02	Yes
Ikehara et al. 2015	2015	Japanese Adults; Japan Collaborative Cohort Study for Evaluation of Cancer Risk (JACC)	85,899	40-79 y	TV viewing time	1988-90 to 2009 Median of 19.2 y	HR (95% CI) across levels of TV viewing time (h/day): <2 h/d: 1.00 (reference) 2 h/d: 1.00 (0.92-1.08) 3 h/d: 0.95 (0.88-1.04) 4 h/d: 0.96 (0.87-1.05) 5 h/d: 1.03 (0.93-1.14) ≥6 h/d: 1.14 (1.02-1.28) P for trend = 0.14	No
Grace et al. 2016	2016	Australian Adults; Australian Diabetes, Obesity and Lifestyle Study (AusDiab)	8,907	≥25 y	TV viewing time	Median of 13.6 y	HR (95% CI) across levels of TV viewing time (h/day) in fully adjusted models: <u>Non-smokers:</u> <2 h/d: 1.00 (reference) 2-<4 h/d: 0.93 (0.69-1.26) ≥4 h/d: 1.04 (0.69-1.57) P for trend = 0.99 <u>Current Smokers:</u> <2 h/d: 1.00 (reference) 2-<4 h/d: 1.11 (0.46-2.63) ≥4 h/d: 2.02 (0.80-5.12) P for trend = 0.16	No

Evenson et al. 2016	2016	U.S. Adults; 2003-04 & 2005-06 National Health and Nutrition Examination Survey (NHANES)	3,809	≥40 y	Waist Accelerometry (<100 counts/min)  Self-reported screen time	2003-04 to 2011  Mean of 6.7 y	<p>HR (95% CI) across quartiles of sedentary time (min), adjusted for covariates and physical activity:</p> <p>Q1 (≤ 413.4): 1.00 (reference)</p> <p>Q2 (413.5-497.6):1.12 (0.54-3.21)</p> <p>Q3 (497.7-588.3):1.03 (0.50-2.12)</p> <p>Q4 (≥588.4): 1.44 (0.71-2.90)</p> <p>P for trend = 0.52</p> <p>HR (95% CI) across tertiles of screen time (h/day):</p> <p>T1 (≤ 2.0): 1.00 (reference)</p> <p>T2 (2.1-3.5) 0.85 (0.51-1.42)</p> <p>T3 (≥3.6): 0.90 (0.57-1.41)</p> <p>P for trend = 0.80</p>	No
Ensrud et al. 2014	2014	U.S. Men; Osteoporotic Fractures in Men (MrOS) Study	2,918	≥71 y	SenseWear Pro Armband Activity Monitor (awake sedentary time)	Mean of 4.5 y	<p>HR (95% CI) across quartiles of sedentary behavior (min/d):</p> <p>Q1 (&lt;772.2): 1.00 (reference)</p> <p>Q2 (772.2-844.6):1.59 (0.91-2.75)</p> <p>Q3 (844.7-914.9):1.12 (0.63-2.00)</p> <p>Q4: (≥915.0): 1.71 (0.99-2.97)</p> <p>P for trend = 0.16</p>	No

Schmid et al. 2016	2016	U.S. Adults; 2003-04 & 2005- 06 National Health and Nutrition Examination Survey (NHANES)	3,702	50-85 y	Waist Accelerometry (<100 counts/min)	2003-04 to 2011  Mean of 6.4 y	<p>HR (95% CI) across tertiles of sedentary time in fully adjusted model: Q1: 1.00 (reference) Q2: 1.13 (0.31-4.17) Q3: 1.46 (0.31-7.00) P for trend = 0.54</p> <p>HR (95% CI) for replacing 30 min/d of sedentary time with light activity = 0.88 (0.81-0.95).</p> <p>HR (95% CI) for replacing 30 min/d of sedentary time with moderate-to-vigorous activity = 0.36 (0.13-0.95).</p>	No
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Legend: CI=confidence interval, HR=hazard ratio, TV=television

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