## Supplementary Table S-F2-10. Summary of Systematic Reviews and Meta-analyses on Sedentary Behavior and Type 2 Diabetes, Weight Status, Cardiovascular Disease (CVD) and Cancer (N = 11)

Reference	Year of Publication	Dates Covered	Type of Publication	Definition of Sedentary	Number of Studies	Results	
Type 2 Diabetes							
Thorp et al. 2011	2011	1996 to January 2011	Systematic review	Sitting time; TV viewing time	3	Based on three prospective studies there was limited but consistent evidence that sedentary behavior was related to increased risk of type 2 diabetes.	
Proper et al. 2011	2011	1989 to February 2010	Systematic review	Sitting time; TV viewing time	2	Based on consistent findings from two prospective studies, there was moderate evidence for a significant positive relationship between sedentary time and incident type 2 diabetes.	
Grontved & Hu 2011	2011	1970 to March 2010	Meta-analysis	TV viewing time	4	The pooled RR per 2 hours of TV viewing per day was 1.20 (95% CI: 1.14-1.27) for type 2 diabetes incidence.	
Wilmot et al. 2012	2012	Inception to January 2012	Meta-analysis	Daily sitting time; TV viewing time	10	The summary RR for diabetes was 2.12 (95% CI: 1.61-2.78) for highest versus lowest sedentary time. Five studies were cross-sectional and 5 were prospective.	
Biswas et al. 2015	2015	Inception to August 2014	Meta-analysis	TV viewing time	5	The summary HR for type 2 diabetes incidence = 1.91 (95% CI: 1.64-2.22).	
				Weight Status			
Thorp et al. 2011	2011	1996 to January 2011	Systematic review	TV viewing; Accelerometry	10	There was limited evidence that sedentary behavior was related to weight gain in adults. Six of ten studies reported adverse changes in BMI or waist circumference associated with sedentary behavior.	
Proper et al. 2011	2011	1989 to February 2010	Systematic review	Daily sitting time; TV viewing time	10	This review found insufficient evidence for an association between sedentary behaviors and body weight/BMI gain, overweight/obesity, or waist gain.	
Cardiovascular Disease							
Thorp et al. 2011	2011	1996 to January 2011	Systematic review	Sitting time	1	One study reported a positive association between self-reported siting time and risk of cardiovascular disease in women.	

Grontved and Hu 2011	2011	1970 to March 2010	Meta-analysis	TV viewing time	4	The pooled RR per 2 hours of TV viewing per day was 1.15 (95% CI: 1.06-1.23) for fatal or nonfatal cardiovascular disease incidence.
Wilmot et al. 2012	2012	Inception to January 2012	Meta-analysis	Daily sitting time; TV viewing time	3	The summary RR for incidence of cardiovascular events was 2.47 (95% CI 1.44-4.24).
Biswas et al. 2015	2015	Inception to August 2014	Meta-analysis	Daily Sitting time; TV viewing time	3	All forms of sedentary behavior were combined in the meta-analysis and the summary HR for CVD incidence = 1.14 (95% CI: 1.00-1.30).
Pandey et al. 2016	2016	Inception to July 6, 2015	Meta-analysis	Daily sitting time	9	Compared with the lowest sedentary time category (median = 2.5 h/d), participants in the highest sedentary time category (median = 12.5 h/d) had an increased risk for CVD (HR = 1.14; 95% CI: 1.09-1.19). In continuous analyses, a nonlinear association between sedentary time and incident CVD was found (P for nonlinearity < .001)
				Cancer		
Lynch 2010	2010	1980 to June 2010	Systematic review	Daily Sitting time; TV viewing time	11	Statistically significant, positive associations between sedentary behavior and cancer were found in 8 of the 11 studies. The greatest risk increases were found for colorectal cancer (78%) followed by ovarian cancer (66%), prostate (39%), and endometrial (34%) cancer.
Moore et al. 2010	2010	Inception to December 2009	Systematic review	Daily sitting time	3	All three prospective cohort studies reported an increased risk of endometrial cancer in women who sat 5-7+ h/day versus women who sat for < 3-5 h per day.
Thorp et al. 2011	2011	1996 to January 2011	Systematic review	Daily Sitting time; TV viewing time	6	No association between sedentary time and overall cancer incidence was observed in one study; limited evidence for associations with ovarian, colon (in men only) and endometrial cancer.
Proper et al. 2011	2011	1989 to February 2010	Systematic review	Sitting time; TV viewing time	2	There is insufficient evidence for a relationship between sedentary behavior and endometrial cancer based on these two studies.

Schmid and Leitzmann 2014	2014	Inception to February 2014	Meta-analysis	Total sitting time; TV viewing time; Occupational sitting time	43	Comparing the highest vs lowest levels of sedentary time, the summary RRs were 1.28 (95% CI: 1.13-1.45) for colon cancer, 1.36 (95% CI: 1.15-1.60) for endometrial cancer, and 1.21 (95% CI: 1.03-1.43) for lung cancer. Sedentary behavior was unrelated to cancers of the breast, rectum, ovaries, prostate, stomach, esophagus, testes, renal cell, and non-Hodgkin lymphoma.
Shen et al. 2014	2014	Inception to March 2014	Meta-analysis	Sitting time, TV viewing time	17	All forms of sedentary behavior were combined in the meta-analysis and the summary RR for all-cancer incidence = 1.20 (95% CI: 1.12-1.28). A sub-analysis also revealed a significant association between TV viewing and all-cancer incidence (RR = 1.21; 95% C.I.: 1.08-1.35).  There were significant associations between sedentary time and endometrial cancer (RR = 1.28; 95% CI: 1.08-1.53), colorectal cancer (RR = 1.30; 95% CI: 1.12-1.49), breast cancer (RR = 1.17; 95% CI: 1.03-1.33) and lung cancer (RR = 1.27; 95% CI: 1.06-1.52).  There was no association between sedentary time and ovarian cancer, renal cell carcinoma or non-Hodgkin lymphoid neoplasms.
Biswas et al. 2015	2015	Inception to August 2014	Meta-analysis	Daily Sitting time; TV viewing time	7	All forms of sedentary behavior were combined in the meta-analysis and the summary HR for all-cancer incidence = 1.13 (95% CI: 1.05-1.21).
Zhou et al. 2015	2015	Inception to September 2014	Meta-analysis	Sitting time; TV viewing time	21	The pooled OR for breast cancer = 1.05 (95% CI: 0.99-1.11) for sitting time (9 studies) and 1.07 (0.96-1.20) for TV viewing time (6 studies). A greater effect was observed in occupational studies but these studies included a mix of sitting versus occupational physical activity as the exposure.

Legend: BMI=body mass index, CI=confidence interval, HR=hazard ratio, OR=odds ratio, RR=relative risk, TV=television

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