

Table S2. Overview of CpG sites associated with any of the tested physical activity and television viewing/sitting time variables at $P < 1.0 \times 10^{-4}$ in baseline or follow-up data of the Melbourne Collaborative Cohort Study, that were included within the pathway analysis.

Physical activity variables (172 CpG sites)						Television viewing/sitting time variables (102 CpG sites) ¹			
Some versus no leisure-time activity at baseline (24 CpG sites)		Total physical activity (MET-hours/week) at follow-up (39 CpG sites)		Leisure-time physical activity (MET-hours/week) at follow-up (109 CpG sites)		Television viewing time at follow-up (66 CpG sites)		Quintiles of television viewing and sitting time at follow-up (60 CpG sites)	
CpG site	P-value	CpG site	P-value	CpG site	P-value	CpG site	P-value	CpG site	P-value
cg19909036	1.70E-05	cg16363970	1.54E-06	cg10266336	5.95E-09	cg11337915	1.39E-06	cg26543333	1.50E-06
cg05597554	2.09E-05	cg17332422	6.13E-06	ch.4.134822993R	2.40E-07	cg26803216	1.40E-06	cg21354789	4.08E-06
cg25130381	2.19E-05	cg27283993	6.17E-06	cg00318606	1.09E-06	cg03439687	1.46E-06	cg24926589	4.11E-06
cg04369018	2.25E-05	cg05896042	6.23E-06	cg10868567	1.28E-06	cg07109745	1.48E-06	cg12444076	4.12E-06
cg22512531	2.94E-05	cg05467523	6.88E-06	cg00939211	1.62E-06	cg00855479	3.02E-06	cg05938001	8.11E-06
cg20613442	3.50E-05	cg11031064	8.72E-06	cg06104007	1.85E-06	cg04872848	5.06E-06	cg21639436	1.08E-05
cg02498120	3.59E-05	cg17757602	9.35E-06	cg00174845	2.78E-06	cg07141142	8.32E-06	cg18689504	1.19E-05
cg03814957	4.73E-05	cg01531388	1.07E-05	cg18954163	3.63E-06	ch.14.1202858F	9.59E-06	cg04483101	1.19E-05
cg26894484	5.28E-05	cg14334587	1.15E-05	cg09531019	4.12E-06	cg20114404	9.92E-06	cg03536334	1.39E-05
cg26841402	5.31E-05	cg03543533	1.82E-05	cg15543490	5.11E-06	cg18689504	1.01E-05	cg02200207	1.42E-05
cg22071344	5.63E-05	cg06144260	2.09E-05	cg19610267	6.56E-06	cg23484899	1.18E-05	cg03439687	1.94E-05
cg01262667	5.84E-05	cg16658496	2.28E-05	cg12819676	8.40E-06	cg22163056	1.22E-05	cg10785977	1.99E-05
cg04164538	5.95E-05	cg07092725	2.47E-05	cg27317150	8.58E-06	cg12524865	1.29E-05	cg16295156	2.07E-05
cg02276944	6.52E-05	cg07251197	2.66E-05	cg23177576	8.79E-06	cg21354789	1.61E-05	cg04952324	2.11E-05
cg01496136	6.67E-05	cg23406436	3.15E-05	cg26334299	8.84E-06	cg21790344	1.81E-05	cg21723486	2.78E-05
cg20256009	6.70E-05	cg01340542	3.64E-05	cg12457341	1.11E-05	cg21873741	1.82E-05	cg04872848	2.80E-05
cg25543578	7.84E-05	cg12733430	3.72E-05	cg02039276	1.17E-05	cg21237481	1.93E-05	cg12188416	2.89E-05
cg19964348	8.29E-05	cg12441052	3.93E-05	cg19889634	1.22E-05	cg02867216	2.07E-05	cg05650055	2.97E-05
cg13380511	8.53E-05	cg08951186	3.96E-05	cg07941953	1.35E-05	cg03536334	2.42E-05	cg01513307	3.04E-05
cg13920460	8.82E-05	cg03790745	4.09E-05	cg12243007	1.46E-05	cg05938001	2.46E-05	cg23676484	3.53E-05
cg07954885	9.81E-05	cg19779005	4.69E-05	cg11678039	1.52E-05	cg10785977	2.47E-05	cg01638735	3.57E-05
cg26234233	9.83E-05	cg11288092	4.75E-05	cg08265915	1.59E-05	cg03708188	2.77E-05	cg19829856	3.60E-05
cg27431761	9.88E-05	cg11452292	5.04E-05	cg17206850	1.88E-05	cg05453001	2.77E-05	cg05784157	3.70E-05
cg26059316	9.95E-05	cg24901811	5.16E-05	cg09398924	1.99E-05	cg13479898	2.92E-05	cg12021814	3.73E-05
		cg19959621	5.65E-05	cg24556080	2.00E-05	cg13470919	3.03E-05	cg22293140	4.20E-05
		cg01394007	5.91E-05	cg00626312	2.07E-05	cg27436190	3.09E-05	cg09595079	4.40E-05
		cg17476701	5.98E-05	cg03175771	2.15E-05	cg05784157	3.09E-05	cg00550673	4.43E-05
		cg10717714	6.53E-05	cg02389252	2.16E-05	cg07778290	3.30E-05	cg07257571	4.49E-05
		cg12270140	6.73E-05	cg13277940	2.18E-05	cg12410273	3.61E-05	cg07109745	4.50E-05
		cg13098621	7.57E-05	cg27428051	2.18E-05	cg24926589	3.73E-05	cg05508585	4.64E-05
		cg15541384	7.72E-05	cg24636327	2.28E-05	cg11125805	3.81E-05	cg15970666	4.69E-05
		cg17186163	7.78E-05	cg22964842	2.34E-05	cg01881255	3.97E-05	cg09881545	4.93E-05
		cg14315891	7.82E-05	cg19701879	2.42E-05	cg24847366	4.08E-05	cg12584590	5.02E-05

cg23047825	7.85E-05	cg03109964	2.55E-05	cg26517831	4.17E-05	cg23484899	5.04E-05
cg25479082	8.04E-05	cg25967146	2.69E-05	cg22293140	4.32E-05	cg06307176	5.19E-05
cg10565187	8.38E-05	cg16275981	2.69E-05	cg25374854	4.33E-05	cg18429048	5.41E-05
cg09226786	8.82E-05	cg01845451	2.73E-05	cg25050565	4.55E-05	cg08660064	5.64E-05
cg08312191	9.08E-05	cg25513659	2.74E-05	cg14181908	4.70E-05	cg21237481	5.80E-05
cg08515841	9.10E-05	cg25456772	2.78E-05	cg16983588	5.82E-05	cg16983588	6.33E-05
		cg20504925	2.82E-05	cg20618076	5.83E-05	cg08822118	7.14E-05
		cg19506380	2.85E-05	cg03118854	5.84E-05	cg21185283	7.41E-05
		cg00496378	2.85E-05	cg16565294	5.85E-05	cg22774472	7.89E-05
		cg14854658	2.86E-05	cg09595079	5.98E-05	cg20722590	7.97E-05
		cg27281036	2.95E-05	cg10765212	5.99E-05	cg23461432	8.05E-05
		cg02133716	3.05E-05	cg03213775	6.07E-05	cg15478483	8.28E-05
		cg08215575	3.08E-05	cg21268653	6.22E-05	cg01487542	8.43E-05
		cg25644317	3.26E-05	cg03382564	6.85E-05	cg12631766	8.49E-05
		cg10194295	3.26E-05	cg15168615	6.88E-05	cg07991288	8.59E-05
		cg18155032	3.47E-05	cg18429048	6.96E-05	cg07256643	8.84E-05
		cg12119218	3.71E-05	cg18062721	7.35E-05	cg22294755	8.86E-05
		cg17211223	3.77E-05	cg01809170	7.36E-05	cg24430703	8.93E-05
		cg19384717	4.17E-05	cg04972436	7.77E-05	cg12410273	8.95E-05
		cg22713192	4.24E-05	cg10304637	8.04E-05	cg15168615	9.12E-05
		cg10348920	4.28E-05	cg08660064	8.10E-05	cg21107103	9.14E-05
		cg10466932	4.36E-05	cg15085805	8.24E-05	cg23651356	9.18E-05
		cg18395632	4.37E-05	cg03720611	8.37E-05	cg01396157	9.20E-05
		cg02768283	4.54E-05	cg18598152	8.43E-05	cg24318763	9.26E-05
		cg18696027	4.56E-05	cg05650055	8.77E-05	cg26467187	9.48E-05
		cg27285197	4.58E-05	cg08785166	8.86E-05	cg09236152	9.54E-05
		cg16797275	4.60E-05	cg20817228	9.04E-05	cg14635415	9.69E-05
		cg23121777	4.73E-05	cg00550673	9.05E-05		
		cg06143362	4.79E-05	cg22774472	9.23E-05		
		cg08711118	4.80E-05	cg18575811	9.27E-05		
		cg05233946	4.83E-05	cg19829856	9.27E-05		
		cg10468737	4.92E-05	cg06537201	9.61E-05		
		cg08449138	4.99E-05	cg12188416	9.83E-05		
		cg15194902	5.07E-05				
		cg03014622	5.16E-05				
		cg01081586	5.19E-05				
		cg25346972	5.21E-05				
		cg13414654	5.22E-05				
		cg06005559	5.29E-05				
		cg26261192	5.31E-05				

cg01864699	5.39E-05
cg13723576	5.52E-05
cg05581415	5.61E-05
cg00633520	5.88E-05
cg10641504	6.04E-05
cg26431815	6.06E-05
cg16535717	6.12E-05
cg23235832	6.27E-05
cg02880169	6.35E-05
cg11750396	6.35E-05
cg07614174	6.37E-05
cg06497848	6.44E-05
cg18451016	6.59E-05
cg21289397	6.59E-05
cg07792560	6.61E-05
cg02415029	6.66E-05
cg25403635	6.73E-05
cg07211292	6.79E-05
cg27050057	6.96E-05
cg15545468	6.99E-05
cg26306572	7.30E-05
cg02341264	7.32E-05
cg13901433	7.77E-05
cg00626466	8.27E-05
cg16286429	8.27E-05
cg14227032	8.30E-05
cg18086582	8.55E-05
cg07923717	8.69E-05
cg16133940	9.00E-05
cg13917023	9.05E-05
cg11507926	9.17E-05
cg13083260	9.36E-05
cg26707013	9.49E-05
cg20442994	9.78E-05
cg16521213	9.88E-05
cg08710469	9.96E-05

Abbreviations: MET, metabolic equivalent of task.

¹ 24 CpG sites (in bold) were associated with both the variables for television viewing time and quintiles of television viewing and sitting time.