Table S1
Search syntax for electronic databases

Walking interventions	Cycling interventions
walk* OR stair use OR activ* commut* OR activ* travel* OR green* commut* OR green* transport* OR green* travel* OR ecological commut* OR ecological transport* OR ecological travel* OR non-motorised OR non-motorized OR physical* activ* OR exercis*	bicycl* OR bike* OR biking* OR cycle hire OR cycling OR cyclist* OR active* OR green* OR transport* OR travel*OR ecological commut* OR ecological travel* OR non-motorised OR non-motorized OR non-auto
AND	**AND**
campaign* OR encourag* OR habit* OR impact* OR increase* OR intervention* OR pattern* OR policy OR policies OR program* OR program* OR project* OR promot* OR scheme* OR shift* OR start* OR Health behaviour* OR Health education* OR Health promotion* OR Patient education	campaign* OR encourag* OR habit* OR impact* OR increase* OR intervention* OR pattern* OR policy OR policies OR program* OR program* OR project* OR promot* OR scheme* OR shift* OR start* OR Health behaviour* OR Health education* OR Health promotion* OR Patient education

Note. * = Truncation wildcard.

Table S2

Sample characteristics of studies of walking and cycling interventions

Study (a)	N (b)	Setting	Year	Age (M)	Country	Gender M / F	Population (c)	Target behavior (d)
Interventions reported to have a statistically significant effect								
Hemmingsson	120	Community	2009	48.2	Sweden	0 / 120	Overweight women	Total W/C
Butler	110	Community	2009	63.75	Australia	83 / 27	CVD patients $	Total W
Coull	319	Community	2004	67.6	USA	191 / 128	IHD patients *	Total W
Halbert (2000)	299	Community	2000	67.6	Australia	155 / 144	Sedentary adults	Total W
Mutrie	295	Workplace	2002	38	Scotland	109 / 186	Motivated adults	W/C for T
Kerse	267	Community	1999	73.55	Australia	123 / 144	Elderly adults	Total W
Calfas	255	Community	1996	39	USA	41 / 214	Sedentary adults	Total W
Prestwich*	149	Community	2010	23.44	England	54 / 95	Adults	Total W
Baker	79	Community	2008	49.2	Scotland	16 / 63	Sedentary adults	Total W
Gilson *	70	Workplace	2006	42.2	Australia	7 / 63	Adults	Total W
Napolitano	65	Workplace	2003	42.8	USA	9 / 56	Sedentary adults	Total W
Fisher	582	Community	2004	74	USA	182 / 400	Elderly adults	W for R
Merom*	369	Community	2007	49.1	Australia	284 / 170	Sedentary adults	W for R
Kriska	229	Community	1988	57.6	USA	0 / 229	Elderly women	Total W
Nies	197	Community	2003	44.4	USA	0 / 197	Sedentary women	Total W
Jarvis	85	Community	1997	66.9	USA	0 / 85	Elderly women	Total W
Pal	30	Community	2009	43	Australia	0 / 30	Overweight women	Total W
Shoup	1694	Workplace	1997	N/R	USA	N/R	Adults	W/C for T
Interventions reported to have a statistically insignificant effect								
Norris	847	Community	2000	54	USA	407 / 440	Workplace HMO employees	Total W
Pereira	229	Community	1998	70	USA	0 / 229	Post-menopausal	Total W
Halbert (2001)	69	Community	2001	69	USA	28 / 41	Sedentary with osteoarthritis	Total W
Talbot	36	Community	2003	70	USA	9 / 27	Osteoarthritis	Total W
Ferreira *	64	Community	2005	61.9	Brazil	0 / 64	Physically active	Total W
Tudor-Locke	47	Community	2004	52.7	USA	26 / 21	Overweight, sedentary with type II diabetes	Total W
Croteau	15	Community	2004	80	USA	1 / 14	Assisted living facility	Total W
Brownson (2005)	1531	Community	2005	45-64	USA	360 / 1171	Rural residents	Total W
Brownson (2004)	1232	Community	2004	45-64	USA	303 / 929	Rural residents	Total W
Cervero	298	Community	2002	30-39	USA	N/R	City CarShare members	W for T
Interventions for which the statistical significance of the effect was not reported								
Marinelli	N/R	Community	2002	N/R	Australia	N/R	Households	W/C for T
Socialdata (Perth)	2578	Community	2004	N/R	Australia	N/R	Households	W/C for T
Socialdata (Melville)	3090	Community	2001	N/R	Australia	N/R	Households	W/C for T
Sustrans (Lancashire)	2262	Community	2006	N/R	England	N/R	Households	W/C for T
Sustrans (Nottingham)	2057	Community	2004	N/R	England	N/R	Households	W/C for T

Sustrans (Sheffield)	1517	Community	2004	N/R	England	N/R	Households	W/C for T
Sustrans (Gloucester)	1367	Community	2004	N/R	England	N/R	Households	W/C for T
Sustrans (Bristol)	1360	Community	2004	N/R	England	N/R	Households	W/C for T
Sustrans (Cramlington)	1061	Community	2004	N/R	England	N/R	Households	W/C for T
Sustrans (Doncaster)	977	Community	2004	N/R	England	N/R	Households	W/C for T
Wilmink	2000	Community	1987	N/R	Netherlands	N/R	Adults	W/C for T
TAPESTRY	1299	Community	2003	N/R	Germany	N/R	City residents	W/C for T
Haq	242	Community	2004	N/R	England	115 / 127	Households	W/C for T

Note. N/R = not reported, (a) * = study incorporating two or more interventions, (b) N = at baseline, (c) $ = Cardiovascular disease, * = ischemic heart disease, (d) Total W = total walking, Total W/C = total walking and cycling, W for R = walking for recreation, W for T = walking for transport, W for R/T = walking for recreation or transport, W/C for R/T = walking or cycling for recreation or transport, W/C for T = walking or cycling for transport.

Table S3
Study and intervention design components

Study (a)	Design (b)	Theoretical framework (c)	Delivery (d)	Number / frequency (e)	Intervention duration (weeks)	Follow- up (f)	Process evaluation (g)
Interventions reported to have a statistically significant effect							
Hemmingsson	RCT	TTM	Group counseling	5 / various	52	18 months	N/A
Butler	RCT	N/A	One-to-one	4 / various	6	6 months	N/A
Coull	RCT	CC	One-to-one	12 / monthly	52	-	N/A
Halbert (2000)	RCT	SCT	Group counseling	1 / N/A	24	12 months	N/A
Mutrie	RCT	TTM	Print-based	N/A	52	12 months	N/A
Kerse	RCT	N/A	One-to-one	5 / various	8-12	-	N/A
Calfas	Q	TTM	One-to-one	1 / N/A	1	6 weeks	Long et al. and Pender et al.
Prestwich (Plan)	RCT	N/A	Telephone-based	1 / N/A	4	-	N/A
Prestwich (Goal)	RCT	N/A	Telephone-based	1 / N/A	4	-	N/A
Baker	RCT	TTM	One-to-one	12 / weekly	12	-	Fitzsimmons et al
Gilson (Routes)	RCT	N/A	Internet-based	10 / weekly	10	-	N/A
Gilson (Tasks))	RCT	N/A	Internet-based	10 / weekly	10	-	N/A
Napolitano	RCT	SCT	Internet-based	12 / weekly	12	3 months	N/A
Fisher	RCT	N/A	Group exercise	192 / 3x weekly	24	-	Fisher et al.
Merom (WPP)	RCT	SCT	Print-based	6 / weekly	6	-	N/A
Merom (WP)	RCT	SCT	Print-based	6 / weekly	6	-	N/A
Kriska	RCT	N/A	Group counseling and exercise	16 / biweekly	32	24 months	N/A
Nies	RCT	SCT	One-to-one	16 / various	24	-	N/A
Jarvis	RCT	TTM	One-to-one	12 / weekly	12	-	U/K
Pal	RCT	N/A	Print-based	12 / weekly	12	-	N/A
Shoup	CR-CS	N/A	Financial incentive	N/A	52-156	-	N/A
Interventions reported to have a statistically insignificant effect							
Norris	RCT	N/A	Group counseling	2 / monthly	4	6 months	N/A
Pereira	RCT	N/A	Telephone-based	N/R	104	10 years	Kriska et al.
Halbert (2001)	RCT	N/A	Group counseling	72 / (3 x weekly)	24	12 months	N/A
Talbot	RCT	N/A	Print-based	12 / weekly	12	6 months	N/A
Ferreira (N)	RCT	N/A	Group counseling	12 / weekly	12	-	N/A
Ferreira (N/PA)	RCT	N/A	Group counseling	12 / weekly	12	-	N/A
Ferreira (PA)	RCT	N/A	Group counseling	12 / weekly	12	-	N/A
Tudor-Locke	RCT	N/A	Group counseling / print-based	4 / weekly	6	6 months	N/A
Croteau	RCT	SCT	Group counseling	4 / weekly	4	-	N/A
Brownson (2005)	Q	TTM	Group exercise / print-based / one-to-one	6 / monthly	4	-	N/A

Brownson (2004)	Q	TTM	Group exercise / print-based	6 / monthly	4	-	N/A
Cervero	CR-CS	N/A	Car share scheme	N/A	12 - 16	-	N/A
Interventions for which the statistical significance of the effect was not reported							
Marinelli	CR-CS	N/A	'Indi-mark'	N/A	24	6 months	N/A
Socialdata (Perth)	CR-CS	N/A	'Indi-mark'	N/A	36	8 months	N/A
Socialdata (Melville)	CR-CS	N/A	'Indi-mark'	N/A	40	6 months	N/A
Sustrans (Lancashire)	CR-CS	N/A	'Indi-mark'	N/A	52	9 months	N/A
Sustrans (Nottingham)	CR-CS	N/A	'Indi-mark'	N/A	4	6 months	N/A
Sustrans (Sheffield)	CR-CS	N/A	'Indi-mark'	N/A	52	9 months	N/A
Sustrans (Gloucester)	CR-CS	N/A	'Indi-mark'	N/A	54	9 months	N/A
Sustrans (Bristol)	CR-CS	N/A	'Indi-mark'	N/A	12	9 months	N/A
Sustrans (Cramlington)	CR-CS	N/A	'Indi-mark'	N/A	36	9 months	N/A
Sustrans (Doncaster)	CR-CS	N/A	'Indi-mark'	N/A	12	6 months	N/A
Wilmink	CR-CS	CT	Infrastructure change	N/A	156	-	N/A
TAPESTRY	CR-CS	N/A	'Indi-mark'	N/A	52	12 months	N/A
Haq	CR-CS	N/A	'Indi-mark'	N/A	24	6 months	N/A

Note. (a) (WP) = walking program, (WPP) = walking with pedometer, (Routes) = walking in routes, (Tasks) = walking in tasks, (N) = nutrition, (N/PA) = nutrition and physical activity, (PA) = physical activity, (b) RCT = Randomized controlled trial, CR-CS = Controlled repeat cross-sectional, Q = Quasi-experimental, C-C = Controlled-cohort, N/A – not applicable (c) Theoretical Framework: TTM = Transtheoretical Model, SCT = Social Cognitive Theory, CC =Client-Centered Approach, CT = Choice Theory, N/A = not applicable, (d) 'Indi-mark' = individualized marketing approach, (e) number and frequency of sessions, (f) Follow-up: - = follow-up measure taken immediately following the end of the intervention, (g) Process evaluation: references for intervention studies which provided additional information on intervention methods or content, N/A = not applicable.

Table S4
Post-intervention walking and cycling outcomes

Study (a)	Measurement	Outcome (b)	Effect size (*CI*) (c)
Interventions reported to have a statistically significant effect			
Hemmingsson	Self-report	Walking target of 10,000 steps/day (NS) Cycling target of >2km/day ($p < .001$)	N/R
Butler	Pedometer	+ 87 minutes/week	0.14 (95% *CI* -0.26 to 0.53)
Coull	Self-report	+ 73 minutes/week (95% *CI* 1 to 137)	N/R
Halbert (2000)	Self-report	+ 30minutes/week ($p < .05$)	N/R
Mutrie	Self-report	+ 64 walking minutes/week ($p < .05$)~ + 0 cycling minutes/week ($p < .05$)~	N/R
Kerse	Self-report	+ 44 minutes/week (95% *CI* 8-168)	N/R
Calfas	Self-report	+ 34 minutes/week ($p < .025$)	N/R
Prestwich (Plan)	Self-report	+1.38 days W/week	0.49 (95% *CI* 0.05 to 0.94)
Prestwich (Goal)	Self-report	+1.42 days W/week	0.45 (95% *CI* 0.04 to 0.88)
Baker	Pedometer	+ 22,225 steps/week ($p < .001$)	0.75 (95% *CI* 0.29 to 1.20)
Gilson (Routes)	Pedometer	+ 6482 steps/week ($p < .002$)	N/R
Gilson (Tasks)	Pedometer	+6979 steps/week ($p < .005$)	N/R
Napolitano	Self-report	+ 62 minutes/week ($p < .05$)	0.41 (95% *CI* 0.15 to 0.97)
Fisher	Self-report	ES = 0.35 (95% *CI* 0.15 to 0.54)	0.35 (95% *CI* 0.15 to 0.54)
Merom (WPP)	Self-report	+ 66 minutes/week ($p < .001$)	N/R
Merom (WP)	Self-report	+ 64 minutes/week ($p < .001$)	N/R
Kriska	Self-report	+ 7 miles per week ($p < .05$)	0.73 (95% *CI* 0.46 to 0.99)
Nies	Self-report	+ 32 minutes/week ($p < .01$)	0.30 (95% *CI* 0 to 0.59)
Jarvis	Self-report	+ 50 minutes/week ($p < .02$)	N/R
Pal	Pedometer	+ 24,227 steps/week ($p < .04$)	N/R
Shoup	Self-report	+ 1.1% walking trips ($p < .01$) + 1.1% cycling trips (SSNR)	N/R
Interventions reported to have a statistically insignificant effect			
Norris	Self-report	+1 minutes/week (NS)	N/R
Pereira	Self-report	+7.3 miles/week (NS)	N/R
Halbert (2001)	Self-report	+0 sessions/week (NS)	N/R

Talbot	Self-report / pedometer	+687 steps/day (NS)	N/R
Ferreira (N)	Self-report	+0 change in minutes/week (NS)	N/R
Ferreira (N/PA)	Self-report	+0 change in minutes/week (NS)	N/R
Ferreira (PA)	Self-report	+0 change in minutes/week (NS)	N/R
Tudor-Locke	Self-report / pedometer	+1367 steps/day (NS)	N/R
Croteau	Self-report / pedometer	-1124 steps/week (NS)	N/R
Brownson (2005)	Self-report	+5.2 minutes/week (NS)	N/R
Brownson (2004)	Self-report	-1.4 minutes/week (NS)	N/R
Cervero	Self-report	-3.4% walking trips (NS)	N/R
Interventions for which the statistical significance of the effect was not reported			
Marinelli	Self-report	+18 trips/year (SSNR)	N/R
Socialdata (Perth)	Self-report	+3 minutes/day (SSNR)	N/R
Socialdata (Melville)	Self-report	+5 minutes/day (SSNR)	N/R
Sustrans (Lancashire)	Self-report	+1 minute/day (SSNR)	N/R
Sustrans (Nottingham)	Self-report	+2 minutes/day in one area, +3 minutes/day in another (SSNR)	N/R
Sustrans (Sheffield)	Self-report	+2 minutes/day (SSNR)	N/R
Sustrans (Gloucester)	Self-report	+25 trips/year (SSNR)	N/R
Sustrans (Bristol)	Self-report	+2 minutes/day (SSNR)	N/R
Sustrans (Cramlington)	Self-report	+1 minute/day (SSNR)	N/R
Sustrans (Doncaster)	Self-report	+0 minutes/day (SSNR)	N/R
Wilmink	Self-report	+2 trips/year (SSNR)	N/R
TAPESTRY	Self-report	+16 trips/year (SSNR)	N/R
Haq	Self-report	+0.1 km/wk (SSNR)	N/R

Note. (a) (WP) = walking program, (WPP) = walking with pedometer, (Routes) = walking in routes, (Tasks) = walking in tasks, (N) = nutrition, (N/PA) = nutrition and physical activity, (PA) = physical activity, (b) Outcome: ~ = tabulated effect size is that observed in most sedentary subgroup, not across whole study population, NS = Interventions reported to have a statistically insignificant effect, SSNR = statistical significance not reported, ES = effect size, days W/week = days walked, per week. (c) Effect size (if more than one follow-up result, effect size calculated from data reported furthest from baseline data), N/R = not reported.

Table S5
Study quality assessment

Study (a)	Pre- and post-data (b)	Comparability (c)	Randomization (d)	Response rate (e)	Attrition rate (f)	Statistics (g)	Follow-up (h)	Total
Interventions reported to have a statistically significant effect								
Hemmingsson	YES	YES	YES	YES	YES	YES	YES	7
Butler	YES	YES	YES	YES	YES	YES	YES	7
Coull	YES	YES	YES	YES	YES	YES	-	6
Halbert (2000)	YES	YES	YES	YES	YES	YES	-	6
Mutrie	YES	YES	YES	YES	-	YES	YES	6
Kerse	YES	YES	YES	YES	YES	YES	-	6
Calfas	YES	YES	-	YES	YES	YES	YES	6
Prestwich*	YES	YES	YES	YES	YES	YES	-	6
Baker	YES	YES	YES	YES	YES	YES	-	6
Gilson *	YES	YES	YES	YES	YES	YES	-	6
Napolitano	YES	YES	YES	-	YES	YES	YES	6
Fisher	YES	YES	YES	YES	-	YES	-	5
Merom*	YES	YES	YES	-	YES	YES	-	5
Kriska	YES	YES	YES	-	YES	YES	-	5
Nies	YES	YES	YES	-	YES	YES	-	5
Jarvis	YES	YES	YES	-	YES	YES	-	5
Pal	YES	YES	YES	-	YES	YES	-	5
Shoup	YES	YES	-	-	YES	YES	-	4
Interventions reported to have a statistically insignificant effect								
Norris	YES	YES	YES	-	YES	YES	YES	6
Pereira	YES	YES	YES	-	YES	YES	YES	6
Halbert (2001)	YES	YES	YES	-	YES	YES	YES	6
Talbot	YES	YES	YES	YES	YES	YES	-	6
Ferreira *	YES	YES	-	YES	YES	YES	-	5
Tudor-Locke	YES	YES	YES	-	-	YES	YES	5
Croteau	YES	YES	YES	-	YES	YES	-	5
Brownson (2005)	YES	YES	-	-	-	YES	YES	4
Brownson (2004)	YES	YES	-	-	-	YES	YES	4
Cervero	YES	-	-	-	-	YES	-	2
Interventions for which the statistical significance of the effect was not reported								
Marinelli	YES	YES	-	YES	YES	-	YES	5
Socialdata (Perth)	YES	YES	-	YES	YES	-	YES	5
Socialdata (Melville)	YES	YES	-	-	YES	-	YES	4
Sustrans (Lancashire)	YES	-	-	YES	YES	-	YES	4
Sustrans (Nottingham)	YES	-	-	YES	YES	-	YES	4
Sustrans (Sheffield)	YES	-	-	YES	YES	-	YES	4
Sustrans (Gloucester)	YES	-	-	YES	YES	-	YES	4
Sustrans (Bristol)	YES	-	-	YES	YES	-	YES	4
Sustrans (Cramlington)	YES	-	-	YES	YES	-	YES	4
Sustrans (Doncaster)	YES	-	-	YES	YES	-	YES	4
Wilmink	YES	YES	-	YES	-	-	YES	4
TAPESTRY	YES	-	-	YES	-	-	YES	3
Haq	YES	-	-	-	-	-	-	1

Note. (a) * = study incorporating two or more interventions, (b) were data collected at baseline and post-intervention?, (c) were baseline characteristics of intervention and control groups, populations, or areas comparable, or, if there were important differences in potential confounders at baseline, were these appropriately adjusted for in analysis?, (d) were participants, groups, or areas randomly allocated to intervention and control groups?, (e) were study samples randomly recruited from

study population with response rate of at least 60%, or were they otherwise shown to be representative of study population? (f) were outcomes studied in cohort or panel of respondents with attrition rate of less than 30%, or were results based on repeated cross sectional design with minimum achieved sample of at least 100 participants in each wave in both intervention and control groups?, (g) was a test of statistical significance applied specifically to the observed net change in walking and/or cycling behavior?, (h) was there a follow-up?

Table S6
BCTs coded from walking and cycling interventions

Study (a)	Study quality (b)	Behavior change technique (c)												
		Health-behavior	Consequences	Others' approval	Intention formation	Barrier identification	General encouragement	Graded tasks	Instruction	Model/demonstrate behavior	Goal setting	Review behavioral goals	Self-monitoring	Feedback
Interventions reported to have a statistically significant effect														
Hemmingsson	7	YES	-	-	YES	YES	-	-	YES	_	-	-	YES	YES
Butler	7	YES	YES	_	YES	YES	YES	-	YES	_	-	-	YES	YES
Coull	6	YES	-	_	YES	-	-	-	-	_	-	-	-	-
Halbert (2000)	6	-	YES	_	_	YES	YES	YES	YES	_	YES	YES	YES	YES
Mutrie	6	_	YES	_	_	-	YES	-	-	_	-	-	YES	-
Kerse	6	-	-	_	_	-	-	-	-	_	-	-	-	-
Calfas	6	-	YES	_	YES	YES	YES	-	-	_	YES	-	YES	YES
Prestwich (Plan)	6	-	YES	_	YES	-	YES	-	-	_	YES	-	-	-
Prestwich (Goal)	6	-	YES	_	YES	-	YES	-	-	_	YES	-	-	-
Baker	6	-	YES	_	YES	YES	YES	YES	YES	_	YES	YES	YES	YES
Gilson (Routes)	6	-	-	_	_	-	-	_	-	_	YES	-	-	-
Gilson (Tasks)	6	-	-	_	-	-	-	-	-	_	-	-	-	-
Napolitano	6	YES	YES	_	YES	YES	-	_	YES	_	-	-	YES	-
Fisher	5	YES	YES	_	-	-	-	-	YES	_	-	-	YES	-
Merom (WPP)	5	YES	-	_	YES	-	YES	YES	YES	_	YES	-	YES	-
Merom (WP)	5	YES	_	_	YES	-	YES	YES	YES	_	YES	-	YES	-
Kriska	5	-	-	_	-	YES	YES	YES	YES	_	YES	-	YES	YES
Nies	5	-	YES	_	YES	YES	YES	YES	-	_	-	YES	-	-
Jarvis	5	-	YES	_	YES	-	-	-	YES	_	_	-	YES	-
Pal	5	YES	-	_	YES	-	-	YES	-	_	YES	-	YES	YES
Shoup	4	-	-	_	-	-	-	-	-	_	-	-	-	-
Total		8	11	0	13	8	11	7	10	0	10	3	13	7
Interventions reported to have a statistically insignificant effect														
Norris	6	-	YES	-	YES	YES	YES	-	-	-	-	-	YES	-
Pereira	6	-	-	-	YES	YES	YES	YES	YES	-	YES	-	YES	YES
Halbert	6	-	-	-	-	-	-	-	-	-	-	-	-	-

(2001)														
Talbot	6	-	-	-	-	-	-	YES	YES	-	YES	-	YES	YES
Ferreira (N)	6	YES	-	-	-	-	-	-	-	-	-	-	-	-
Ferreira (N/PA)	6	YES	YES	-	-	YES	-	-	-	-	-	-	-	-
Ferreira (PA)	5	-	YES	-	-	YES	-	-	-	-	-	-	-	-
Tudor-Locke	5	-	-	-	YES	YES	YES	-	-	-	-	-	-	YES
Croteau	5	-	-	-	YES	-	-	YES	-	-	YES	YES	-	-
Brownson (2005)	5	-	-	-	-	-	YES	-	-	-	-	-	-	YES
Brownson (2004)	5	-	-	-	YES	-	YES	-	-	-	-	-	-	YES
Cervero	2	-	-	-	-	-	-	-	-	-	-	-	-	-
Total		2	3	0	5	5	5	3	2	0	3	1	3	5
Interventions for which the statistical significance of the effect was not reported														
Marinelli	5	YES	-	-	-	-	YES	-	-	-	-	-	-	-
Socialdata (Perth)	5	-	-	-	-	-	YES	-	-	-	-	-	-	-
Socialdata (Melville)	4	-	-	-	-	-	YES	-	-	-	-	-	-	-
Sustrans (Lancashire)	4	-	-	-	-	-	YES	-	-	-	-	-	-	-
Sustrans (Nottingham)	4	-	-	-	-	-	YES	-	-	-	-	-	-	-
Sustrans (Sheffield)	4	-	-	-	-	-	YES	-	-	-	-	-	-	-
Sustrans (Gloucester)	4	-	-	-	-	-	YES	-	-	-	-	-	-	-
Sustrans (Bristol)	4	-	-	-	-	-	YES	-	-	-	-	-	-	-
Sustrans (Cramlington)	4	-	-	-	-	-	YES	-	-	-	-	-	-	-
Sustrans (Doncaster)	4	-	-	YES	-	-	YES	-	-	-	-	-	-	-
Wilmink	4	-	-	-	-	-	-	-	-	-	-	-	-	-
TAPESTRY	3	-	-	-	-	-	YES	-	-	YES	-	-	-	-
Haq	1	YES	YES	-	-	-	YES	-	YES	-	-	-	-	-
Total		2	1	1	0	0	12	0	1	1	0	0	0	0

Table S6 (continued)

BCTs coded from walking and cycling interventions

Study (a)	Study quality (b)	Behavior change technique (c)												
		Contingent rewards	Use prompts/cues	Behavioral contract	Practice	Follow-up	Social comparison	Social support	Role model	Self-talk	Relapse prevention	Stress management	Motivational interviewing	Time management
Interventions reported to have a statistically significant effect														
Hemmingsson	7	-	YES	-	-	-	YES	YES	-	-	YES	-	-	-
Butler	7	-	-	-	-	YES	YES	-	-	-	-	-	-	-
Coull	6	-	-	-	-	-	YES	-	-	-	-	-	-	-
Halbert (2000)	6	-	-	-	-	-	YES	YES	-	-	-	-	-	-
Mutrie	6	-	-	-	-	-	-	-	-	-	-	-	-	-
Kerse	6	-	-	-	-	-	-	-	-	-	-	-	-	-
Calfas	6	-	-	YES	-	YES	-	YES	-	-	YES	-	-	-
Prestwich (Plan)	6	-	YES	-	-	-	-	-	-	-	-	-	-	-
Prestwich (Goal)	6	-	YES	-	-	-	-	-	-	-	-	-	-	-
Baker	6	-	YES	-	-	-	-	YES	-	-	-	-	-	-
Gilson (Routes)	6	-	-	-	-	-	-	-	-	-	-	-	-	-
Gilson (Tasks)	6	-	YES	-	-	-	-	-	-	-	-	-	-	-
Napolitano	6	-	-	-	-	-	-	YES	-	-	YES	-	-	-
Fisher	5	-	-	-	YES	-	YES	-	-	-	-	-	-	-
Merom (WPP)	5	-	-	-	-	-	-	-	-	-	-	-	-	-
Merom (WP)	5	-	-	-	-	-	-	-	-	-	-	-	-	-
Kriska	5	YES	-	-	-	YES	YES	YES	-	-	-	-	-	-
Nies	5	YES	-	-	-	-	-	YES	-	-	YES	-	-	-
Jarvis	5	-	-	-	-	-	-	-	-	-	-	-	-	-
Pal	5	-	YES	-	-	-	-	-	-	-	-	-	-	-
Shoup	4	YES	-	-	-	-	-	-	-	-	-	-	-	-
Total		3	6	1	1	3	6	7	0	0	4	0	0	0
Interventions reported to have a statistically insignificant effect														
Norris	6	-	-	YES	-	-	-	YES	-	-	-	-	-	-
Pereira	6	YES	-	-	-	YES	YES	YES	-	-	-	-	-	-

Halbert (2001)	6	-	-	-	-	-	-	-	-	-	-	-	-	-
Talbot	6	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferreira (N)	6	-	-	-	-	-	YES	-	-	-	-	-	-	-
Ferreira (N/PA)	6	-	-	-	-	-	YES	-	-	-	-	-	-	-
Ferreira (PA)	5	-	-	-	-	-	YES	-	-	-	-	-	-	-
Tudor-Locke	5	-	-	-	-	-	YES	YES	-	-	-	-	-	-
Croteau	5	-	-	-	-	-	-	-	-	-	-	-	-	-
Brownson (2005)	5	-	-	-	-	-	YES	YES	-	-	-	-	-	-
Brownson (2004)	5	-	-	-	-	-	YES	YES	-	-	-	-	-	-
Cervero	2	-	-	-	-	-	-	-	-	-	-	-	-	-
Total		1	0	1	0	1	7	5	0	0	0	0	0	0
Interventions for which the statistical significance of the effect was not reported														
Marinelli	5	-	-	-	-	-	-	-	-	-	-	-	-	-
Socialdata (Perth)	5	-	-	-	-	-	-	-	-	-	-	-	-	-
Socialdata (Melville)	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Sustrans (Lancashire)	4	-	YES	-	YES	-	-	-	-	-	-	-	-	-
Sustrans (Nottingham)	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Sustrans (Sheffield)	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Sustrans (Gloucester)	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Sustrans (Bristol)	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Sustrans (Cramlington)	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Sustrans (Doncaster)	4	-	-	-	YES	-	-	-	-	-	-	-	-	-
Wilmink	4	-	-	-	-	-	-	-	-	-	-	-	-	-
TAPESTRY	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Haq	1	-	-	-	-	-	YES	-	-	-	-	-	-	-
Total		0	1	0	2	0	1	0	0	0	0	0	0	0

Note. (a) (WP) = walking program, (WPP) = walking with pedometer, (Routes) = walking in routes, (Tasks) = walking in tasks, (N) = nutrition, (N/PA) = nutrition and physical activity, (PA) = physical activity, (b) Study quality = studies scoring 6-7 were deemed 'higher' quality, 4-5 as 'medium', and 0-3 as 'lower' quality, (c) 1 = Provide information on the health-behavior link, 2 = provide information on consequences, 3 = provide information about others' approval, 4 = prompt intention formation, 5 = prompt barrier identification, 6 = provide general encouragement, 7 = set graded tasks, 8 = provide instruction, 9 = model/demonstrate behavior, 10 = prompt specific goal setting, 11 = prompt review of behavioral goals, 12 = prompt self-monitoring of behavior, 13 = provide feedback on performance, 14 = provide contingent rewards, 15 = teach to use

prompts/cues, 16 = agree behavioral contract, 17 = prompt practice, 18 = use of follow-up prompts, 19 = provide opportunities for social comparison, 20 = plan social support/social change, 21 = prompt identification as role model/position advocate, 22 = prompt self-talk, 23 = relapse prevention, 24 = stress management, 25 = motivational interviewing, 26 = time management.

Figure S1
Systematic review flowchart

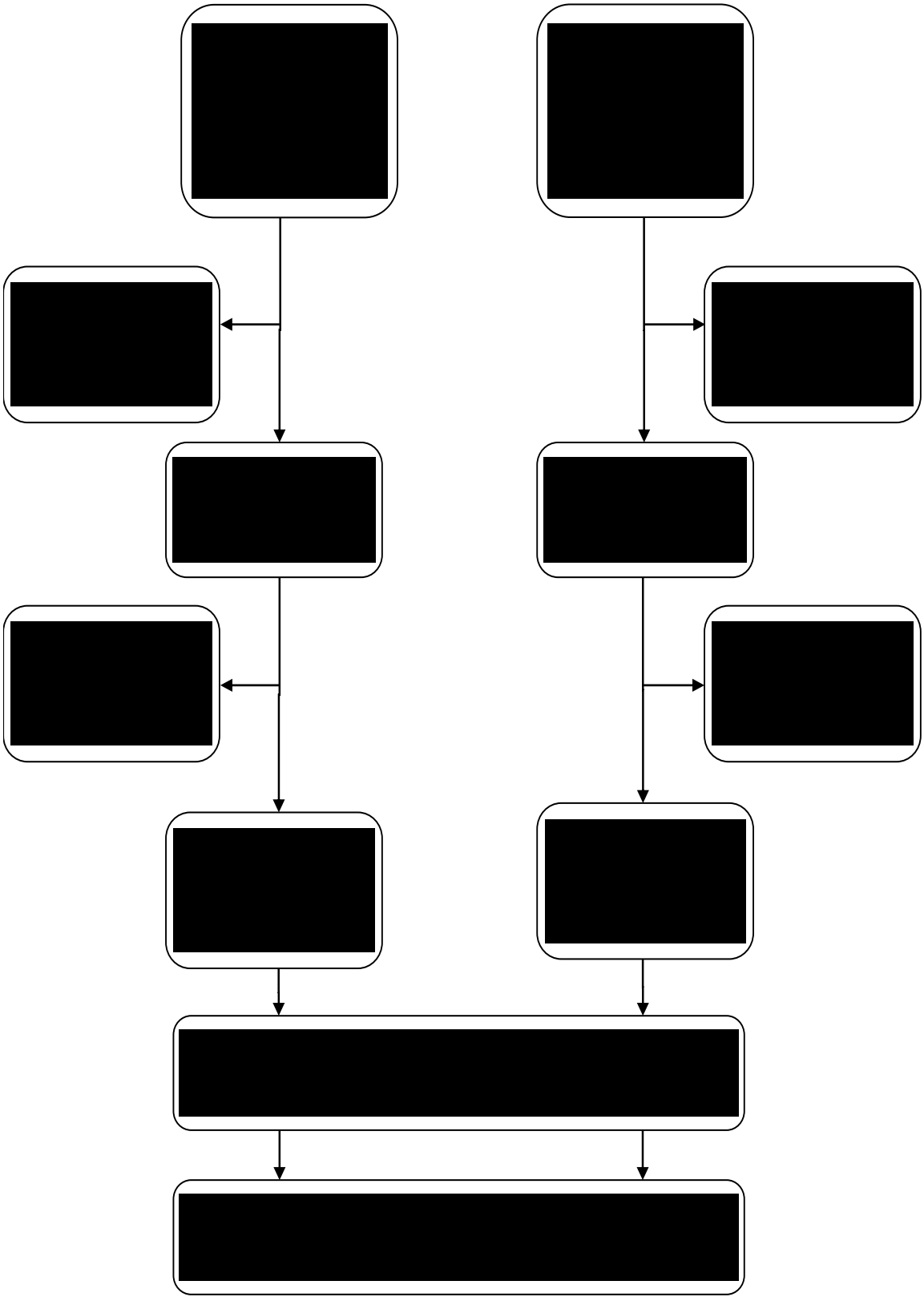

Figure S2

BCTs coded from walking and cycling interventions. Studies are ranked by study quality (number of criteria met, see Table S5), then sample size.