

Table 1. Characteristics of diet only intervention studies.

Author, year	N	Sample	Mean age (SD ^a ; range), years	Overweight or obese n (%)	Study design, duration	Group
Ford, 2010 [21]	106	Children	12.6 (2.3; 9-17.5)	106 (100)	RCT ^b , 12 months	IG ^c : mandometer training CG ^d : standard care
Mummah, 2016 [22]	17	Adults	42.0 (7.3; 18-50)	17 (100)	RCT, 12 weeks	IG: vegethon mobile app CG: waitlist control
Pedersen, 2016 [23]	1488 ^e	Children	12.9 (NR ^f ; 11-16)	NR	Clustered RCT ^g , 11 weeks	IG1: text message feedback IG2: text message feedback + nutrition education CG: minimal intervention control

^aSD: standard deviation.

^bRCT: randomized controlled trial.

^cIG: intervention group.

^dCG: control group.

^eRefers to completers or analytical sample.

^fNR: not reported.

^gRandomization occurred at a group level (school, medical practice, team, or hospital).

Table 2. Characteristics of PA or sedentary behavior only intervention studies.

Author, year	N	Sample	Mean age (SD ^a ; range), years	Overweight or obese n (%)	Study design, duration	Group
Adams, 2013 [24]	20	Inactive adults	36.9 (9.2; 18-65)	20 (100)	RCT ^b (pilot), 6 months	IG ^c 1: adaptive goals + performance feedback IG2: static goals + encouraging messages
Bond, 2014 [25]	35	Adults	47.5 (13.5; 21-70)	35 (100)	Within-subjects counter-balanced experimental trial, 3-, 7-day periods	IG1: 3-min activity break after 30 min sedentary IG2: 6-min activity break after 60 min sedentary IG 3: 12-min activity break 120 min sedentary
Chapman, 2016 [26]	64	Adults	45 (NR; 23-69)	NR ^e	RCT, 2 weeks	IG: step tracking + feedback CG ^d : step tracking only
Choi, 2016 [27]	30	Pregnant, inactive women	33.7 (2.6; 18-40)	Not applicable	RCT (pilot), 12 weeks	IG: blinded FitBit + feedback CG: Blinded FitBit

Hooke, 2016 [28]	17	Children in acute lymphoblastic leukemia maintenance	8.7 (3.1; 6-15)	6 (37)	Within-subjects, single-arm intervention, 2 weeks	IG: FitBit + emails
King, 2008 [29]	37	Inactive adults	60.2 (7.2; ≥50)	NR	RCT (pilot), 8 weeks	IG: PDA ^f -based intervention CG: waitlist control
Martin, 2015 [30]	48	Inactive patients from an ambulatory cardiology center	58 (8; 18-69)	26 (54) ⁱ	RCT with sequential randomization, 4 weeks	IG1: unblinded tracking (phase 1) + texts (phase 2) IG2: unblinded tracking (phase 2) without texts (phase 2) CG: blinded digital activity tracking (phases 1 and 2)
McManus, 2008 [31]	210	Children in 4th and 5th grades	10.4 (0.9; 9-11)	NR	Clustered RCT ^g , 4 weeks with 6-month follow-up	IG1: education + feedback school IG2: no education + feedback school CG: control school
Patel, 2016 [32]	288	Adults	41.0 (11.9; ≥50)	NR	Clustered RCT ^g , 13 weeks with 13-week follow-up	IG1: comparison to top quartile + incentive IG2: comparison to mean performance + incentive IG3: comparison to top quartile only IG4: comparison to mean performance only
Paul, 2016 [33]	23	Adults with stroke	56 (10; NR)	NR	RCT (pilot), 6 weeks	IG: STARFISH program CG: usual care control
Prestwich, 2016 [34]	124	Inactive adults	23.8 (11.0; NR)	NR	RCT, 2 weeks	IG1: goal setting + self-monitoring + feedback IG2: goal setting + self-monitoring IG3: goal setting only
van der Weegen, 2015 [35]	199	Inactive, adults with type 2 diabetes or chronic obstructive pulmonary disease	57.9 (7.6; 40-70)	NR	Clustered RCT ^g , 4-6 months with 3-month follow-up	IG1: self-management support program + activity monitor IG2: self-management support program only

						CG: standard care
van Nimwegen, 2013 [36]	586	Inactive adults with Parkinson's disease	65.5 (7.6; 40-75)	NR	Clustered RCT ^g , 24 months	IG: ParkFit program CG: general physiotherapy program
Walsh, 2016 [37]	55	Young adults	20.6 (2.1; 17-26)	NR	RCT (pilot), 5 weeks	IG: pedometer + feedback CG: pedometer only
Wijsman, 2013 [38]	235	Inactive adults	64.8 (40.8; 60-70)	NR	RCT, 13 weeks	IG: DirectLife activity program CG: waitlist control

^aSD: standard deviation.

^bRCT: randomized controlled trial.

^cIG: intervention group.

^dCG: control group.

^eNR: not reported.

^fPDA: personal digital assistant.

^gRandomization occurred at a group level (school, medical practice, team, or hospital).

Table 3. Characteristics of diet and PA or sedentary behavior intervention studies.

Author, year	N	Sample	Mean age (SD ^a ; range), years	Overweight or obese n (%)	Study design, duration	Group
Burke, 2012 [39]	210	Adults	46.8 (9.0; ≤59)	210 (100)	RCT ^b , 24 months	IG ^c 1: PDA ^e + feedback IG2: PDA only IG3: paper diary
Collins, 2012 [40]	309	Adults	42 (10.2; 18-60)	309 (100)	RCT, 3 months	IG1: enhanced weight loss IG2: basic weight loss CG ^d : waitlist control
Fassnacht, 2015 [41]	49	Children in 4th grade	9.6 (0.4; 8-10)	14 (29)	RCT (pilot), 8 weeks with 4-week follow-up	IG: short message service (SMS) monitoring + feedback CG: educational sessions only
Fujii, 2009 [42]	650	Employed adults	40.2 (10.1; NR ^f)	Men: 144 (36.8) Women: 26 (10.0)	Within-subjects, single-arm intervention, 4 months	IG: computer-based, tailored lifestyle modification support (Health up Navi)
Jakicic, 2016 [43]	471	Adults	30.9 (27.8-33.7 ^g ; 18-35)	471 (100)	RCT, 24 months	IG1: enhanced program + feedback IG2: standard intervention
Khanna, 2014 [44]	75	Spanish-speaking adults with type 2 diabetes	52.0 (12; NR)	NR	RCT, 12 weeks	IG: automated telephone nutrition support counseling CG: waitlist control with standard care
Lim, 2016 [45]	100	Adults with type	65.1 (5.0; ≥60)	NR	RCT, 6 months	IG1: u-healthcare IG2: self-monitored

		2 diabetes				blood glucose
Nollen, 2014 [46]	51	Low-income, minority girls	11.3 (1.6; 9-14)	30 (59)	RCT (pilot), 12 weeks	IG: mobile technology CG: educational materials only
Sacks, 2009 [47]	811	Adults	52 (9; 30-70)	811 (100)	RCT, 24 months	IG1: low fat, average protein diet IG2: low fat, high protein diet IG3: high fat, average protein diet IG4: high fat, high protein diet
Shapiro, 2008 [48]	58	Children	8.7 (2.3; 5-13)	54 (93)	RCT (pilot), 8 weeks	IG1: SMS + feedback IG2: paper diaries CG: no-monitoring control
Shuger, 2011 [49]	197	Inactive adults	46.9 (10.8; 18-64)	197 (100)	RCT, 9 months	IG1: group-based weight loss program and armband IG2: armband alone IG3: group-based weight loss program alone CG: weight loss program
Steinberg, 2013 [50]	50	Women	38.3 (8.2; 25-50)	50 (100)	RCT (pilot), 6 months	IG: Shape Plan CG: educational materials
Willey, 2016 [51]	10	Adults	43.5 (NR; 30-50)	10 (100)	Within-subjects, single-arm intervention (pilot), 12 weeks	IG: YouPlus Health mobile coaching platform

^aSD: standard deviation.

^bRCT: randomized controlled trial.

^cIG: intervention group.

^dCG: control group.

^ePDA: personal digital assistant.

^fNR: not reported.

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