

Combined Diet and Physical Activity Promotion Programs to Prevent Type 2 Diabetes Among People at Increased Risk

Quality Assessment of Studies

Author, Year, PMID [†]	Study Design	1a*	1b*	2a*	2b*	2c*	3a*	3b*	4*	5a*	5b*	5c*	6*
Absetz, 2007, 17586741	Before-After	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Ackermann, 2008, 18779029	RCT	Yes	Yes	Yes	Yes	NA	Yes	Yes	Yes	No	Yes	Yes	Yes
Ackermann, 2014, 24740868	RCT	No	No	Yes	Yes	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Admiraal, 2013, 23894322	RCT	Yes	Yes	Yes	Yes	NA	Yes	Yes	Yes	No	Yes	Yes	Yes
Alibasic, 2013 [‡] , 24082827	nRCS	No	No	Yes	No	No	Yes	No	Yes	No	No	Yes	No
Bhopal, 2014, 24622752	nRCS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cezaretto, 2012, 21538199	RCT	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes
Cole, 2013, 23589326	RCT	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Author, Year, PMID†	Study Design	1a*	1b*	2a*	2b*	2c*	3a*	3b*	4*	5a*	5b*	5c*	6*
Costa, 2012, 22322921	nRCS	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
De la Rosa, 2008, No PMID	RCT	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes
Dunbar, 2010, No PMID	RCT	No	Yes	Yes	Yes	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Eriksson, 1991, 1778354	nRCS	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes
Gagnon, 2011, 21489843	RCT	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Gilis-Januszcwaska, 2011, No PMID	Before-After	No	Yes	Yes	Yes	Yes	NA	Yes	Yes	Yes	Yes	Yes	Yes
Gillison, 2015, 25592314	RCT	Yes	Yes	Yes	Yes	NA	No	Yes	Yes	Yes	No	Yes	Yes
Iqbal Hydrie, 2012, 22888411	RCT	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes
Islam, 2014, 24852392	nRCS	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	NA	Yes	Yes	Yes
Janus, 2012, 22929458	RCT	Yes	Yes	Yes	Yes	NA	Yes	Yes	Yes	No	Yes	Yes	Yes
Jiang, 2013, 23275375	Before-After	Yes	Yes	No	Yes	Yes	NA	Yes	Yes	No	Yes	Yes	Yes
Kanaya, 2012, 22698027	RCT	Yes	Yes	Yes	Yes	NA	No	Yes	Yes	Yes	Yes	Yes	Yes

Author, Year, PMID[†]	Study Design	1a*	1b*	2a*	2b*	2c*	3a*	3b*	4*	5a*	5b*	5c*	6*
Katula, 2011, 23498294	RCT	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Knowler, 2002, 11832527	RCT	Yes	Yes	Yes	Yes	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Knowler, 2009, 19878986	nRCS	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kosaka, 2005, 15649575	RCT	No	No	Yes	Yes	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kulzer, 2009, 19509014	RCT	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kyrios, 2009, 19351299	Before-After	No	Yes	Yes	Yes	Yes	NA	Yes	Yes	Yes	Yes	Yes	Yes
Laatikainen, 2007, 17877832	Before-After	No	Yes	Yes	Yes	Yes	NA	Yes	Yes	Yes	Yes	Yes	Yes
Liao, 2002, 12196418	RCT	No	No	Yes	Yes	NA	No	Yes	Yes	Yes	Yes	Yes	Yes
Ma, 2013, 23229846	RCT	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Makrilakis, 2010, 20536519	Before-After	No	Yes	Yes	Yes	NA	NA	Yes	Yes	No	Yes	Yes	Yes
Moore, 2011, 20945253	RCT	No	Yes	Yes	Yes	NA	No	Yes	Yes	No	Yes	Yes	Yes
Nilsen, 2011, 22117618	RCT	No	Yes	Yes	Yes	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Author, Year, PMID†	Study Design	1a*	1b*	2a*	2b*	2c*	3a*	3b*	4*	5a*	5b*	5c*	6*
Ockene, 2012, 22390448	RCT	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Oldroyd, 2006, 16297488	RCT	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Pan, 1997, 9096977	RCT	No	No	Yes	Yes	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Patrick, 2013, 23759410	RCT	No	No	No	Yes	NA	Yes	Yes	Yes	No	Yes	Yes	Yes
Penn, 2009, 19758428	RCT	No		Yes	Yes	NA	Yes	Yes	Yes	No	Yes	Yes	Yes
Penn, 2013, 24227871	Before-After	Yes	Yes	Yes	Yes	NA	No	Yes	Yes	NA	Yes	Yes	Yes
Ramachandran, 2006, 16391903	RCT	Yes	No	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Ramachandran, 2009, 19277602	Before-After	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ramachandran, 2013, 24622367	RCT	Yes	Yes	Yes	Yes	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Roumen, 2008, 18445174	RCT	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Saaristo, 2010, 20664020	Before-After	No	No	Yes	Yes	Yes	NA	Yes	Yes	Yes	Yes	Yes	Yes

Author, Year, PMID[†]	Study Design	1a*	1b*	2a*	2b*	2c*	3a*	3b*	4*	5a*	5b*	5c*	6*
Saito, 2011, 21824948	RCT	No	Yes	Yes	Yes	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sakane, 2011, 21235825	RCT	No	Yes	Yes	Yes	NA	No	Yes	Yes	No	Yes	Yes	Yes
Savoie, 2014, 24062325	Pediatric RCT	Yes	Yes	Yes	Yes	NA	Yes	Yes	Yes	No	Yes	Yes	Yes
Sepah, 2014, 24723130	Before-After	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No	No	No	Yes
Swanson, 2012, 22068253	Before-After	No	Yes	Yes	Yes	Yes	NA	Yes	Yes	No	Yes	Yes	Yes
Tate, 2003, 12684363	RCT	No	Yes	Yes	Yes	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tuomilehto, 2001, 11333990	RCT	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vanderwood, 2010, 20805260	Before-After	No	Yes	Yes	Yes	NA	NA	Yes	Yes	No	Yes	Yes	Yes
Vermunt, 2011, 21775759	RCT	No	Yes	Yes	Yes	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vojta, 2013, 23498291	Before-After	No	Yes	Yes	No	Yes	NA	Yes	Yes	Yes	Yes	Yes	Yes
Weinstock, 2013, 23843020	RCT	Yes	Yes	Yes	Yes	NA	Yes	Yes	Yes	Yes	Yes	No	Yes

*Questions (Yes = “good quality”; No = “poor quality”):

1a.^A Description: Was the population well described (all features)?

- Socioeconomic status (or education)
- Sex
- Race/ethnicity
- Weight, baseline (eg, body mass index or % overweight)
- Glycemia, baseline (any glucose measure)

1b.^A Description: Was the intervention well described (all features)?

- Setting (ie, healthcare or community or worksite)
- Deliverers
- Individual or group sessions
- Number of sessions
- Duration of intervention

2a.^B Sampling: Is there a low risk of sampling bias due to a low enrollment of population of potentially eligible people and no other concern about “sampling frame”?

2b.^B Sampling: Were the eligibility criteria clear (did the authors specify the screening criteria for study eligibility)?

2c.^B Sampling: Nonrandomized studies only: Were the study participants a probability sample or equivalent (is the risk of selection bias low)?

3a.^C Measurement: Was an intention-to-treat analysis used or were there no dropouts or crossovers?

3c.^C Measurement: Were the outcome measures valid and reliable (consistent and reproducible)?

4.^C Data Analysis: Did the authors conduct appropriate statistical testing?
Ignore adjustment for confounders, this is included in 5b.

5a.^C Interpretation: Is the dropout rate <20% for diabetes incidence, reversion to normoglycemia, and weight change (if analyzed)?

5b.^C Interpretation: Were potential confounders properly accounted for (by adjustment)?
For our purposes “confounders” includes “Table 1” characteristics that were significantly different between groups.

5c.^C Interpretation: Are there no other potential biases or unmeasured or contextual confounders described by the authors or otherwise of concern?

6.^C Other: No other unique study issues?

^A “Major limitation” if either 1a or 1b answered “no”.

^B “Major limitation” if either 2a, 2b, or 2c answered “no”.

^C “Major limitation” if question answered “no”.

† Of primary study.

‡ Study excluded due to limited quality of execution.