

Additional file 3: Quality appraisal rating procedure, full quality appraisal and appraisal ratings of included articles

First author	Year published	Representativeness of target population	Participation Rate	Selection Bias Quality	Study Design	Randomized	Randomized (Method Specified)	Randomized (Appropriate)	Study Design Quality	Group Differences Pre-Exposure	% Confounders Controlled	Over adjustment	Confounder Quality	Researcher Awareness	Participants Awareness	Blinding Quality	Data Collection Tool Validity	Data Collection Tool Reliability	Data Collection Methods Quality	Withdrawals and Drop-Outs Reported	Attrition	Method for dealing with withdrawals/drop-outs	Withdrawals and Drop-Outs Quality	% Participants in Exposure	Consistency of Exposure Measured	Contamination Co-Exposure	Exposure Integrity Quality	Unit of allocation	Unit of analysis	Appropriateness of Statistical Methods	Analysis Quality	Global Rating	
Amick, B	2005	1	5	2	3	1	1	3	2	3	1	2	2	2	2	2	1	1	1	1	4	3	3	3	1	2	2	1	1	1	1	2	
Barbadillo, P	2016	2	5	2	6	1	2	2	2	1	2	1	2	2	2	2	1	1	1	1	4	7	4	NA	3	1	2	2	1	1	3	2	
Barnett, R	1997	2	2	2	3	1	2	2	2	1	2	1	2	1	1	3	1	1	1	2	2	2	2	3	4	1	2	2	1	1	1	3	
Bender, K	2018	1	5	2	3	1	2	2	2	1	2	1	2	2	2	1	1	1	1	1	2	1	2	2	4	1	2	2	2	2	1	1	
Bunard, S	2017	1	2	2	3	1	2	2	2	1	2	1	2	2	2	1	1	1	1	1	1	3	2	3	1	2	2	1	1	1	1	1	
Bunard, S	2005a	1	2	2	3	1	2	2	2	1	1	1	1	2	2	1	1	1	1	1	2	1	2	2	3	1	2	2	1	1	1	2	
Bunard, S	2005b	1	2	2	3	1	2	2	2	1	1	1	1	2	2	1	3	3	3	2	2	2	3	3	3	2	2	3	1	1	1	3	
Burr, H	2015	1	2	2	6	1	1	3	3	1	2	1	2	2	2	1	3	3	2	2	4	7	4	NA	3	1	2	2	1	1	1	2	
Carivet, C	2017	1	3	3	3	1	2	2	2	1	3	2	3	2	2	2	1	1	1	1	3	3	2	3	1	2	2	1	1	3	3	3	
Coley, R	2014	2	1	2	3	1	2	2	2	1	2	1	2	2	2	1	2	2	1	2	1	3	1	2	3	1	2	2	1	1	1	1	
Cross, J	2009	1	1	1	3	1	2	2	2	1	1	2	2	2	2	1	1	1	1	1	6	1	3	4	1	2	2	1	1	1	1	2	
Dobson, K	2018	1	5	2	3	1	2	2	2	1	2	2	2	2	2	1	1	1	1	1	1	1	1	3	1	2	2	1	1	1	1	1	
Doolley, D	1998	1	1	1	3	1	2	2	2	3	3	2	3	2	2	1	1	1	1	1	1	3	2	2	3	1	2	2	1	1	1	2	
Emerson, E	2018	2	5	2	3	1	2	3	2	3	3	2	3	2	2	1	1	1	1	1	4	1	2	3	1	2	2	1	1	1	1	2	
Fernie, J	2002	1	5	2	3	1	1	2	2	1	3	2	2	2	2	1	1	1	1	1	2	3	2	3	1	2	2	1	1	1	1	1	
Fluri, F	2016	1	5	2	6	1	1	3	3	3	2	2	2	2	2	1	1	1	1	1	4	7	4	NA	4	1	2	2	1	1	1	2	
Gallo, W	2006	1	2	2	3	1	1	3	2	3	1	2	2	2	2	1	1	1	1	1	2	6	1	3	3	2	2	3	1	1	1	3	
Giraud, M	2016	1	1	1	3	1	1	3	2	3	3	2	3	2	2	1	1	1	1	1	4	7	4	NA	3	2	2	1	1	1	1	2	
Giudici, F	2019	1	1	1	3	1	2	2	2	1	2	1	2	2	2	1	1	1	1	1	1	1	1	3	1	2	2	1	1	1	1	1	
Glavin, P	2015	1	2	2	3	1	2	2	2	1	1	1	2	2	2	1	1	1	1	1	4	1	2	3	1	2	2	1	1	1	1	1	
Gustafsson, P	2012	1	5	2	3	1	2	2	2	1	2	2	2	2	2	1	1	1	1	1	2	3	2	2	3	1	2	2	1	1	1	1	
Heaney, C	1994	1	2	2	3	1	2	2	2	3	3	1	3	1	1	3	1	1	1	1	5	3	3	4	1	2	2	1	1	1	1	3	
Helgadóttir, B	2019	4	3	3	3	1	1	3	3	1	1	2	1	2	2	1	2	2	2	2	4	4	4	NA	3	2	2	1	1	1	1	3	
Jahn, L	1995	2	3	3	4	1	1	3	2	1	3	2	2	2	2	1	1	2	2	2	4	7	4	NA	3	2	2	1	1	1	1	3	
Jin-man, C	2015	1	5	2	3	2	1	3	2	3	2	2	2	2	2	1	1	1	1	1	1	3	2	4	1	2	2	1	1	1	1	1	
Johannessen, H	2013	2	2	2	3	1	1	3	3	3	2	2	2	2	1	3	1	1	1	1	3	2	3	4	1	2	2	1	1	1	1	3	
Kachi, Y	2014	1	1	1	3	1	2	2	2	1	1	2	1	2	2	1	1	1	1	1	1	3	2	3	1	2	2	1	1	1	1	1	
Kachi, Y	2018	1	3	3	3	1	2	2	2	1	1	2	1	2	2	1	1	1	1	1	3	3	3	3	1	2	2	1	1	1	1	3	
Kim, Y	2018	3	3	3	3	1	2	2	2	1	2	1	2	2	2	1	3	1	2	1	4	2	3	3	1	2	2	1	1	1	1	3	
Kivimäki, M	2003	2	5	2	3	1	2	3	2	3	3	2	3	2	2	1	1	1	1	1	4	1	4	1	3	1	2	2	1	1	1	2	
Lim, H	2015	2	5	2	3	1	2	2	2	1	3	1	3	2	2	1	3	1	2	1	5	3	3	3	3	1	2	3	1	1	1	3	
Lopez Gomez, M	2017	1	1	1	3	1	2	2	2	2	3	2	3	1	2	2	1	1	1	1	4	7	4	NA	2	1	2	1	1	1	1	2	
Magrussion Hanson, L	2015	1	2	2	3	1	2	2	2	1	2	1	2	2	2	1	1	1	1	1	4	1	2	3	1	2	2	1	1	1	1	1	
Metcalfe, C	2001	3	2	3	3	1	1	3	2	1	2	1	2	2	2	1	3	2	2	2	4	7	4	NA	3	2	2	1	1	1	1	3	
Metcalfe, C	2003	3	2	3	3	1	1	3	2	1	2	1	2	2	2	1	3	2	3	2	4	7	4	NA	3	2	2	1	1	1	1	3	
Moore, S	2004	2	2	2	3	1	2	2	2	3	3	2	3	1	1	3	1	1	1	1	3	3	2	2	2	1	1	1	1	1	1	3	
Moscone, F	2016	2	4	2	3	1	2	2	2	1	3	1	3	1	2	2	1	1	1	1	4	7	4	NA	4	1	2	2	1	1	1	1	2
Pensola, T	2004	1	1	1	3	1	2	2	2	1	2	1	2	2	2	1	1	1	1	1	4	7	4	NA	3	1	2	2	1	1	1	1	1
Pirani, E	2015	1	1	1	3	1	2	2	2	3	2	2	2	2	2	1	1	1	1	1	1	1	1	3	1	2	2	1	1	1	1	1	
Reine, I	2008	1	1	1	3	1	1	2	2	1	3	1	3	2	2	1	1	1	1	1	1	3	2	3	2	2	3	1	1	1	1	3	
Rodriguez, E	2002a	1	5	2	3	1	2	2	2	1	2	1	2	2	2	1	1	1	1	1	3	6	1	2	3	1	2	2	1	1	1	1	
Rodriguez, E	2002b	1	5	2	3	1	2	2	2	1	2	1	2	2	2	1	1	1	1	1	3	6	1	2	3	1	2	2	1	1	1	1	1
Ruquiles, R	2010	2	3	3	3	1	2	2	2	1	2	2	2	2	2	1	1	1	1	1	4	7	4	NA	3	1	2	2	1	1	1	1	2
Sato, Y	2018	1	3	3	6	1	2	2	2	1	1	2	1	2	2	1	1	1	1	1	4	7	4	NA	3	1	2	2	1	1	1	1	2
Scott-Marshall, H	2019	2	2	2	3	1	1	3	2	1	3	1	3	2	2	1	1	1	1	1	2	2	3	3	4	1	2	2	1	1	1	3	
Sivico, A	2012	1	2	2	3	1	1	3	2	1	3	1	3	2	2	1	3	3	3	1	2	3	2	3	3	3	3	1	1	1	1	1	3
Virtanen, P	2005	2	2	2	3	1	1	3	2	1	2	2	2	2	2	1	1	1	1	1	2	3	2	3	1	2	2	1	1	1	1	1	3
Virtanen, P	2008	1	3	3	3	1	1	3	2	1	3	2	2	2	2	1	1	1	1	1	1	1	3	2	3	1	2	2	1	1	1	1	2
Virtanen, P	2011	1	5	2	3	1	2	2	2	1	3	2	2	2	2	1	1	1	1	1	2	3	2	3	1	2	2	1	1	1	1	1	1
Virtanen, P	2018	2	2	2	3	1	1	2	2	3	3	2	3	2	2	1	1	1	1	1	5	3	3	3	1	2	2	1	1	1	1	1	3
Watson, B	2017	1	5	2	3	1	2	2	2	3	1	1	3	2	2	1	1	1	1	1	2	1	2	2	3	1	2	2	1	1	1	1	2
Yoo, K	2016	1	5	2	3	1	2	2	2	1	2	1	2	2	2	2	1	1	1	1	2	2	3	3	3	1	2	2	1	1	1	1	2