

## SUPPLEMENTARY FILE

**Supplementary Table 1: Search strategy and results in each database**

Databases	Search Terms	Identified Articles
Pubmed	((prediabetes) OR "prediabetic state" AND ("health behavior")) OR ("health lifestyle behaviors") AND (((factor*) OR (determinant*)) OR (predictor*))	743
Science Direct	((("prediabetes"[MeSH Terms]) AND ("health behavior")) OR ("health lifestyle")) AND (((factor) OR (determinant)) OR (predictor)) Research article. English	1590
Scopus	((prediabetes) AND (health behaviors)) AND (((factor) OR (determinant)) OR (predictor)) English	348
Citation searching		03

**Supplementary Table 2: Quality Assessment**

Primary studies	1	2	3	4	5	6	7	8	Overall appraisal	Quality
Chen&Lin, 2010	Yes	Yes	Yes	Unclear	Not applicable	Not applicable	Yes	Yes	5.8	Medium
Williams et al., 2010	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	8.8	High
Dorsey&Songer et al., 2011	Yes	Yes	Yes	Not applicable	Yes	Yes	Yes	Yes	7.8	High
Zhou et al., 2012	Yes	Yes	Yes	Yes	Yes	Yes	Unclear	Yes	7.8	High
Chen et al., 2015	Yes	Yes	Yes	Yes	Not applicable	Not applicable	Yes	Yes	6.8	High
Gopalan et al., 2015	Yes	Yes	Unclear	Yes	Yes	Yes	Yes	Yes	7.8	High
Rahmati-Najarkolaie et al., 2017	Yes	Yes	Unclear	Yes	Unclear	Unclear	Yes	Yes	5.8	Medium
Hansen et al., 2018	Yes	Yes	Yes	Yes	Not applicable	Yes	Yes	Yes	7.8	High
De Man et al., 2020	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	8.8	Hight
De Man et al., 2020	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	8.8	Hight
Luo et al., 2020	Yes	Yes	Yes	Yes	No	No	Yes	Yes	6.8	High
Li et al., 2021	Yes	Yes	Unclear	Yes	Yes	Yes	Unclear	Yes	6.8	High
Kwak et al., 2022	Yes	Yes	Unclear	Yes	No	No	Yes	Yes	5.8	Medium
McEwen et al., 2022	Yes	Yes	Yes	Yes	No	No	Yes	Yes	6.8	High

1. Were the criteria for inclusion in the sample clearly defines?
2. Were the study subjects and the setting described in detail?
3. Was the exposure measured in a valid and reliable way?
4. Were objective, standard criteria used for measurement of the condition?
5. Were confounding factors identified?
6. Were strategies to deal with confounding factors stated?
7. Were the outcomes measured in a valid and reliable way?
8. Was appropriate statistical analysis used