

Supplementary Materials

Search Strategy

PubMed and Scopus' search strategy: ("Pregnant Women"[Title/Abstract]) OR (pregnancy[Title/Abstract] OR Pregnant Women[Title/Abstract] OR Pregnancy[Title/Abstract] OR pregnancy OR Prenatal Care[Title/Abstract] OR Maternal Health[Title/Abstract]) AND (Diet[Title/Abstract] OR dietary[Title/Abstract]) AND (Microbiota[Title/Abstract] OR microbiome OR Gastrointestinal Microbiome[Title/Abstract] OR "Gut Flora" OR "Gut Bacteria" OR "Intestinal Bacteria") AND (Maternal outcomes OR maternal health OR "pregnancy outcomes" OR "Pregnancy Complications"[Title/Abstract]).

Embase's search strategy: ('diet'/exp OR 'diet' OR 'dietary intake'/exp OR 'dietary intake')AND('microflora'/exp OR microflora OR 'microbiome'/exp OR 'microbiome' OR 'intestine flora'/exp OR 'intestine flora') AND ('pregnant woman'/exp OR 'pregnant woman' OR 'pregnancy'/exp OR pregnancy OR 'prenatal care'/exp OR 'prenatal care' OR 'perinatal period'/exp OR 'perinatal period') AND ('maternal outcome'/exp OR 'maternal outcome' OR 'maternal welfare'/exp OR 'maternal welfare' OR 'pregnancy outcome'/exp OR 'pregnancy outcome' OR 'pregnancy complication'/exp OR 'pregnancy complication' OR 'pregnancy disorder'/exp OR 'pregnancy disorder' OR 'adverse pregnancy outcome'/exp OR 'adverse pregnancy outcome' OR 'perinatal outcome'/exp OR 'perinatal outcome').

Table 3 - ROB2 bias assessment

	D1	D2	D3	D4	D5	Overall
Urwin, 2014	●	●	●	●	●	●
Sugino, 2022	●	●	●	●	●	●

Green: Low risk. Blue: Unclear . Yellow: Some concerns for bias. Red: High risk.

Supplementary material 2: domains for the ROB2 assessment:

D1: Bias arising from the randomization process

D2: Bias due to deviation from intended intervention

D3: Bias due to missing outcome data

D4: Bias in measurement of the outcomes

D5: Bias in selection of the reported results

CASE CONTROL STUDIES

Note: A study can be awarded a maximum of one star for each numbered item within the Selection and Exposure categories. A maximum of two stars can be given for Comparability.

Selection

- 1) Is the case definition adequate?
 - a) yes, with independent validation *
 - b) yes, eg record linkage or based on self reports
 - c) no description
- 2) Representativeness of the cases
 - a) consecutive or obviously representative series of cases *
 - b) potential for selection biases or not stated
- 3) Selection of Controls
 - a) community controls *
 - b) hospital controls
 - c) no description
- 4) Definition of Controls
 - a) no history of disease (endpoint) *
 - b) no description of source

Comparability

- 1) Comparability of cases and controls on the basis of the design or analysis
 - a) study controls for _____ (Select the most important factor.) *
 - b) study controls for any additional factor * (This criteria could be modified to indicate specific _____ control for a second important factor.)

Exposure

- 1) Ascertainment of exposure
 - a) secure record (eg surgical records) *
 - b) structured interview where blind to case/control status *
 - c) interview not blinded to case/control status
 - d) written self report or medical record only
 - e) no description
- 2) Same method of ascertainment for cases and controls
 - a) yes *
 - b) no

3) Non-Response rate

- a) same rate for both groups *
- b) non respondents described
- c) rate different and no designation

**NEWCASTLE - OTTAWA QUALITY ASSESSMENT SCALE
COHORT STUDIES**

Note: A study can be awarded a maximum of one star for each numbered item within the Selection and Outcome categories. A maximum of two stars can be given for Comparability

Selection

1) Representativeness of the exposed cohort

- a) truly representative of the average _____ (describe) in the community *
- b) somewhat representative of the average _____ in the community *
- c) selected group of users eg nurses, volunteers
- d) no description of the derivation of the cohort

2) Selection of the non exposed cohort

- a) drawn from the same community as the exposed cohort *
- b) drawn from a different source
- c) no description of the derivation of the non exposed cohort

3) Ascertainment of exposure

- a) secure record (eg surgical records) *
- b) structured interview *
- c) written self report
- d) no description

4) Demonstration that outcome of interest was not present at start of study

- a) yes *
- b) no

Comparability

1) Comparability of cohorts on the basis of the design or analysis

- a) study controls for _____ (select the most important factor) *
- b) study controls for any additional factor * (This criteria could be modified to indicate specific _____ control for a second important factor.)

Outcome

1) Assessment of outcome

a) independent blind assessment *

b) record linkage *

c) self report

d) no description

2) Was follow-up long enough for outcomes to occur

a) yes (select an adequate follow up period for outcome of interest) *

b) no

3) Adequacy of follow up of cohorts

a) complete follow up - all subjects accounted for *

b) subjects lost to follow up unlikely to introduce bias - small number lost - > ____ %

(select an adequate %) follow up, or description provided of those lost) *

c) follow up rate < ____% (select an adequate %) and no description of those lost

d) no statement

REFERENCES - APA 7

1. Wells, G., Shea, B., O'Connell, D., Peterson, J., Welch, V., Losos, M., Tugwell, P. (2013) The Newcastle-Ottawa Scale (NOS) for assessing the quality of nonrandomised studies in meta-analyses. http://www.ohri.ca/programs/clinical_epidemiology/oxford.asp