THE NUTRITION EVIDENCE LIBRARY BIAS ASSESSMENT TOOL

General instruction for completing the Nutrition Evidence Library (NEL) Bias Assessment Tool (BAT)

1. If a research article includes interventions or exposures and outcomes that are within *and* outside of the scope of the systematic review question, only consider those that are within the scope of the systematic review when answering NEL BAT items. For example, one NEL BAT item asks whether valid and reliable measures were used. This question should be understood to ask whether valid and reliable measures were used to assess variables within the scope of the systematic review and not variables outside of the scope of the systematic review.

2. For each NEL BAT question, select one of four response choices:
   - Yes - information provided in the article is adequate to answer "yes"
   - No - information provided in the article is adequate to answer "no"
   - Can't Determine - no information or insufficient information is provided in the article, so an answer of "yes" or "no" is not possible
   - NA - the question is not applicable

3. If information necessary to answer a NEL BAT item is not directly reported in the article, but a citation is provided for additional information, access the cited information (or request it from NEL staff) to answer the NEL BAT item.

Nutrition Evidence Library (NEL) Bias Assessment Tool (BAT)

Risk of Bias Questions	Study Designs	Type of Bias
Were the inclusion/exclusion criteria similar across study groups?	Controlled trials Observational studies	Selection Bias
Was the strategy for recruiting or allocating participants similar across study groups?	Controlled trials Observational studies	Selection Bias
Was the allocation sequence randomly generated?	RCTs	Selection Bias
Was the group/condition allocation concealed (so that assignments could not be predicted)?	RCTs	Selection and Performance Bias

Risk of Bias Questions	Study Designs	Type of Bias
Was distribution of health status, demographics, and other critical confounding factors similar across study groups at baseline? If not, does the analysis control for baseline differences between groups?	RCTs Controlled trials Observational studies	Selection Bias
Did the investigators account for important variations in the execution of the study from the proposed protocol or research plan?	RCTs Controlled trials Observational studies	Performance Bias
Was adherence to the study protocol similar across study groups/conditions?	RCTs Controlled trials Observational studies	Performance Bias
Did the investigators account for the impact of unintended/unplanned concurrent interventions or exposures that were differentially experienced by study groups/conditions and might bias results?	RCTs Controlled trials Observational studies	Performance Bias
Were participants blinded to their intervention or exposure status?	RCTs Controlled trials	Performance Bias
Were investigators blinded to the intervention or exposure status of participants?	RCTs Controlled trials	Performance Bias
Were outcome assessors blinded to the intervention or exposure status of participants?	RCTs Controlled trials Observational studies	Detection Bias
Were valid and reliable measures used consistently across study groups to assess inclusion/exclusion criteria, interventions/exposures, outcomes, participant health benefits and harms, and confounding?	RCTs Controlled trials Observational studies	Detection Bias
Was the length of follow-up similar across study groups/conditions?	RCTs Controlled trials Observational studies	Attrition Bias

Risk of Bias Questions	Study Designs	Type of Bias
In cases of high or differential loss to follow-up, was the impact assessed (e.g., through sensitivity analysis or other adjustment method)?	RCTs Controlled trials Observational studies	Attrition Bias
Were other sources of bias taken into account in the design and/or analysis of the study (e.g., through matching, stratification, interaction terms, multivariate analysis, or other statistical adjustment such as instrumental variables)?	RCTs Controlled trials Observational studies	Attrition, Detection, Performance, and Selection Bias
Were the statistical methods used to assess the primary outcomes adequate?	RCTs Controlled trials Observational studies	Detection Bias